วัตถุประสงค์

1. เพื่อเป็นวารสารตีพิมพ์เผยแพร่บทความวิชาการ บทความวิจัย บทวิจารณ์หนังสือ และบทความวิชาการประเภทอื่นๆ

2. เพื่อเป็นสื่อแลกเปลี่ยนเรียนรู้เชิงวิชาการของนักวิจัยและนักวิชาการทั้งในประเทศไทยและต่างประเทศ

3. เพื่อเป็นวารสารเสนอองค์ความรู้ที่เป็นประโยชน์ต่อการพัฒนามนุษย์ตามหลักการศึกษาเชิงพุทธศาสนาและศาสตร์ต่างๆ

4. เพื่อพัฒนาวารสารให้เป็นไปตามเกณฑ์มาตรฐานการประกันคุณภาพการศึกษาและเป็นการส่งเสริมการพัฒนาคุณภาพผลงานการวิจัยและบทความทางวิชาการทางพระพุทธศาสนาและศาสนาต่างๆ รวมทั้งปรัชญาให้เป็นไปตามเกณฑ์มาตรฐาน TCI

เจ้าของ

ศูนย์วิจัยธรรมศึกษา สำนักเรียนวัดอาวุธวิกสิตาราม (RESEARCH CENTER FOR DHAMMSUKSA PHRAPARIYATTIDHAMMA OF WATAWUTWIKASITARAM SCHOOL) กุฏิคุณแม่ขาลั้ง ห้อง 305 เลขที่ 137 วัดอาวุธวิกสิตาราม ถนนจรัญสนิทวงศ์ 71 บางพลัด กรุงเทพฯ 10700 โทร 0860864258

บทบรรณาธิการ

วารสารปารมิตา ฉบับที่ 1 ในปี พ.ศ. 2567 นี้ เป็นปีที่ 6 กองบรรณาธิการได้บริหารจัดการวารสารให้เป็นไปตามเกณฑ์ กล่าวคือมีผู้ทรงคุณวุฒิ 3 รูป/คน ตรวจประเมินผลงานวิชาการทุกเรื่อง เพื่อเป็นการรักษามาตรฐานทางวิชาการ ทั้งในเชิงคุณภาพและเชิงปริมาณ

วารสารปารมิตาฉบับนี้ ทางกองบรรณาธิการได้รับความไว้วางใจจากนักวิชาการจากหน่วยงานต่างๆ สนใจนำผลงานวิชาการที่มีคุณภาพและคุณค่ามาตีพิมพ์เผยแพร่ โดยบททั้งหมดที่นำมาตีพิมพ์เผยแพร่นั้นเป็นบทความภาษาไทยและภาษาอังกฤษ ซึ่งมาจากหลากหลายหน่วยงาน กล่าวคือมีนักวิชาการไม่น้อยกว่า 3 หน่วยงานได้นำผลงานวิชาการในรูปแบบบทความวิจัย บทความวิชาการ และบทปริทรรศน์หนังสือมาเผยแพร่ พร้อมกันนี้ บทความทั้งหมดดังกล่าวเป็นผลงานของนักศึกษาและนักวิชาการโดยทั่วไป จึงนับว่าการเผยแพร่ผลงานทางวิชาการเป็นตามหลักการที่นักวิชาการยึดถือปฏิบัติร่วมกันโดยทั่วไป

ดังนั้น ในนามบรรณาธิการและกองบรรณาธิการวารสารปารมิตาจึงขอขอบพระคุณและขอขอบคุณเจ้าของผลงานจากหน่วยงานต่าง ๆ ที่ได้นำผลงานอันทรงคุณค่าและมีคุณภาพมาเผยแพร่ จึงนับว่าเป็นการร่วมกันสร้างองค์ความรู้ดี ๆ ออกสู่สังคมไทยและสังคมโลกต่อไป

กองบรรณาธิการวารสาร

สารบัญ

Development of Art Design Teachers' Leadership
in Universities under Liaoning Province

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ABSTRACT

The objectives of this research were: To explore the components of art design teachers' leadership in universities under Liaoning Province; and to develop the guidelines for development of art design teachers' leadership in universities under Liaoning Province. The research was a mixed methodology research, including qualitative research and quantitative research. The population of the research consisted of 148 administrators and 1487 instructors in 41 universities under Liaoning Province, with a total of 1635. The sample size was determined by Krejcie and Morgan tables (1970), and obtained by stratified random sampling technique, totaling 340. The key informants were composed of 8 key informants, including 1 university administrator, dean, director of art design in universities, 5 art design professional teachers of art design major in universities, obtained by purposive sampling method. The instruments used for data collection were a semi-structured interview form, a five-point rating scale questionnaire, and a focus group discussion form. The statistics used for the data analysis were frequency, percentage, mean, Standard Deviation and Exploratory Factor Analysis, as well as the content analysis was employed.

The research findings revealed that: (1) there were five components of art design teachers' leadership in universities under Liaoning Province which consisted of Team leadership, Teaching and innovative leadership, Professional leadership, Governance and self-management, Leadership philosophy and non-power leadership; and (2) there were total of 69 guidelines of art design teachers' leadership in universities under Liaoning Province which

consisted of seventeen team leadership guidelines, fifteen teaching and innovative leadership, thirteen professional leadership, thirteen governance and self-management ability, and eleven leadership philosophy and non-power leadership.

Keywords: Leadership, Teachers' leadership, Art Design, Liaoning Province

1. Introduction

The key to the success of a series of educational reform measures in universities lies in teachers, and teachers have become the main force to reshape campus culture and promote the development of universities. Giving full play to the leading role of teachers is a common guideline for effective teaching. In the past ten years, research on the topic of teachers' leadership is still a vital research object in the field of education at home and abroad. In the process of educational reform practice in various countries, more and more scholars and experts are paying attention to the research of teachers' leadership. "Teachers' leadership" is considered to be a teacher's ability to adapt to the new situation of educational reform. It is an important ability, and it has gradually become a hot topic in the international education circle. Since the 1980s, some western countries have continued to improve schools and improve school efficiency, such as changing curriculum, strengthening teacher training, improving teaching methods, expanding educational resources, etc., but the results of reforms have been minimal, affected by the wave of school reconstruction carried out in Western countries, the focus of research has gradually been positioned on the process of leadership. Teachers' leadership first emerged in the context of the educational reform in the United States. The reform research report mentioned the development of teachers' leadership, the purpose is to make teachers become participants, participate in the management of schools and formulate related policies. The concept of "teacher's leadership" was first formally proposed in "Leadership: Ideology and practice" published by Lieberman in 1988, and then teachers' leadership began to attract the attention of various countries. Katzenmeyer, M & Moller, G mentioned: "The era of teachers' leadership has arrived, declaring a new peak in the professional development of teachers in the United States, and countries are developing teachers' leadership one after another." (David, Ft & Harris & A, 2003: 479). The United Kingdom began to implement "Improving the Quality of Education for All" (IQEA for short) in 1991. The famous British scholar Reynolds clearly pointed out when evaluating IQEA: "The key to the success of school improvement lies in the continuous attention to the teachers' leadership,

and regard it as an important force to promote educational change" (Reynolds, D, 1996: 133-158).

Throughout the world, since the 21st century, teachers' leadership has become an important topic of school reform. The United Kingdom, the United States, Canada, Australia and other countries have introduced different policies, implemented relevant educational measures to improve teachers' leadership, and issued relevant documents, to maximize the influence of teachers in school innovation. Tracing back to the origin, teachers' leadership has been paid attention to for more than 30 years in countries such as the United Kingdom and the United States, and its connotation has also changed with the development of education. In different backgrounds, at different stages, to promote the development of teachers' leadership for different institutions and organizations, and attach great importance to the cultivation and promotion of teachers' leadership, so as to promote the effective realization of the goals of educational reform. As Canadian scholar Michael Fullan said: "Teachers are the key to school reform, and leadership is the key to the success of an organization in the 21st century. To truly succeed in school reform, you cannot rely solely on the principal, but need the input of all teachers" (Michael Fullan, 2001: 1).

Teachers' leadership is in the ascendant in European and American countries, and the exploration in theory and practice continues unabated, but it started relatively late in China. The first literature on teachers' leadership appeared in 2007. It has been widely concerned, and has become a new force in the field of education management, and has become a new hot issue in China's education management research. With the rapid development of Chinese society, education is bound to undergo in-depth reforms. Teachers will face problems and tasks in the process of school innovation. Teachers, as the backbone of universities, are the primary human resources of universities. One of the basic qualities restricts the development of universities and directly affects the effectiveness of personnel training. Letting teachers become leaders is what the times need. In 2012, the Ministry of Education issued "Several Opinions on Comprehensively Improving the Quality of Higher Education" and proposed: to implement and expand the autonomy of universities in running schools, to promote academic research by professors, and to play the role of professors in teaching, academic research and school management. In 2020, with the convening of the National People's Congress of the People's Republic of China and the Chinese People's Political Consultative System, the issue of "de-administration" in universities has become the focus of the reform of the education management system in universities. The "Decision" also clearly stated that the administrative

level of schools should be phased out. In addition, the "National Medium and Long-Term Education Reform and Development Outline (2010-2020)" proposes that the foundation of education development is reform, focusing on system and mechanism reform, and accelerating the reform of important areas and key links; exploring and adapting to different types of education and talent growth Improve the school management system and school-running model, improve the school's target management and performance management mechanism; overcome the administrative tendency, cancel the actual administrative level and administrative management mode; transform the principal responsibility system into a collective responsibility system, so that teachers and staff can play their due roles Value, from bureaucratic management to democratic management, guide teachers to participate in school management and supervision. Then the Ministry of Education promulgated the "Regulations of the Academic Committee of Higher Institutions" to allow teachers to participate in the academic management of the school. The release of the above-mentioned policies will pave the guidelines for the development of higher education management reform that focuses on teachers' leadership.

As an extremely important old industrial base in China, Liaoning Province is supported by the national strategy of "rejuvenating the Northeast". The country and local governments attach great importance to the reform of the system and mechanism of universities under Liaoning Province. In 2021, the Liaoning Provincial Department of Education issued the "Implementation Opinions on Promoting the Opening of Universities and Strengthening Cooperation to Achieve High-Quality Development" based on the actual conditions of Liaoning Province. The key content covers strengthening inter-school exchanges between teachers and solving the problem of structural shortage of talents; Promote the professional development of teachers, improve the overall level of teaching team construction in universities in the province; deepen the innovation of the exchange system, and stimulate the endogenous motivation of high-level teachers to participate in inter-school exchanges. This undoubtedly enables teachers' leadership to be more deeply used and developed in the reform of university education. The Liaoning Provincial Department of Education requires that the revitalization of the Northeast should be centered on deepening system innovation. The role of art design majors in this process should not be underestimated. According to the statistics of researcher, there are 79 universities with art design majors under Liaoning Province. The opening and subsequent continuous reforms are all based on the economic and social development structure and overall needs, and the educational background and objects of art

design majors are completely different from other disciplines, so the work carried out needs to explore some new paths in education management. While implementing the principal responsibility system under the leadership of the party committee, various universities have gradually realized that teachers' leadership is an important force for school reform. The reform and development of schools cannot only rely on the principal, but should fully rely on teachers and their leadership. Decision-making ability to make decisions suitable for school development (Du Fangfang, 2010: 47-51), realizing that it is very urgent for teachers to understand and build their own leadership, some universities have begun to try to get more teachers to join the school management And decision-making, trying to cultivate teachers' leadership to improve the quality of personnel training, and promote the improvement of school effectiveness. Through the analysis of the current situation of art design teachers' leadership in universities under Liaoning Province, the researcher concluded the following points about the existing problems in art design teachers' leadership in universities under Liaoning Province. The concept of teachers' leadership is still a relatively new concept in the management system of universities, and its development is also in the initial stage. First of all, universities are greatly influenced by the government. The leadership system of universities is still biased towards a bureaucratic system managed by leaders with formal powers. The job levels and division of responsibilities are very clear. Teachers cannot become leaders, which hinders universities to a certain extent. The cultivation of leadership talents. Secondly, under the centralized leadership system of universities, only high-level leaders with actual powers hold power centrally, and teachers have no real management powers. To some extent, differences in ranks will lead to poor communication, and teachers lack decision-making and control over university management. With the understanding of implementation, teachers themselves are often hit and hindered by management, which leads to lack of enthusiasm for teachers to participate in the management of universities, which directly affects the cultivation and promotion of teachers' leadership.

In addition, teachers lack a comprehensive understanding of "leadership" and do not realize their own subjective initiative. The existing art design teachers in universities are relatively young, and even teachers with deep qualifications have never assumed the role of leaders. Thirdly, even in the process of implementing teachers' leadership, distributed leadership will also face the issue of the distribution of leadership authority. Whether the leadership with formal leadership authority is willing to delegate authority, and whether teachers are willing to accept newer additional identities, is determined by the traditional

leadership system. Influence, class boundaries between teachers and leaders, new and old teachers make it difficult to achieve decentralization among school members, which directly restricts the development of teachers' leadership. Finally, universities lack a common vision, and teachers tend to perform their own responsibilities. Teachers lack a common vision and goals. Schools pay more attention to the evaluation, inspection, and quantitative management of teachers, which will inevitably lead to "instrumental" teachers. Teachers focus on education, and teachers' innovative autonomy in professional development has been hindered. It can be seen that the reform challenges faced by universities cannot only rely on the transformation of organization and operation, and the key is to adjust the lack of motivation for internal teacher reform.

Existing research in domestic and foreign academic circles rarely discusses teachers' leadership in universities or practical arts. Most Chinese scholars research on teachers' leadership in primary and secondary schools, and focus on the principal's management and teachers' leadership. There is an urgent search for a precise definition of teachers' leadership, lack of a process of cultivating and developing teachers' leadership, and a lack of attention to the impact of teachers' leadership, an influencing mechanism, on the quality of education. In addition, there are very few Chinese scholars conducting research on universities, especially in the field of practical art, and no scholars have mentioned the field of teachers' leadership in detail. Therefore, from the perspective of developing teachers' leadership, it is a dual need of theory and practice to discuss art design teachers' leadership in universities under Liaoning Province. Theoretical significance: So far, Chinese academic circles have not yet constructed a relatively complete and systematic framework for teachers' leadership, and the theory is relatively scarce. The research questions and goals set by the subject research have enriched theories related to teachers' leadership and expanded the scope of leadership. The scope of the main body provides theoretical support for improving art design teachers' leadership in universities, and provides a little theoretical basis for scholars who research this field in depth.

Practical significance: practice is the foundation of theory, and practice has a decisive role in theory. The research on teachers' leadership should not be limited to the existing research. It should be directional to cultivate and improve the effective performance of teachers' leadership, and then guide practice, so that teachers can correctly understand the roles in school management and teaching, change the inertial state of teachers lacking autonomy and creativity due to external norms, and empower teachers to enhance the comprehensive strength of universities, which is conducive to enhancing communication and

cooperation among teachers in the reform of universities, and making teachers a catalyst for school leadership reform , and then cultivate the initiative of teachers to actively participate in the leadership process, form a community culture of shared organizations, and build a transformative force within universities. Only by strengthening the driving force of internal reforms in universities can continue to make in-depth improvements and boost university reforms and educational development. In addition, the research of the topic has practical significance. First of all, cultivating and improving art design teachers' leadership in universities is conducive to the development of teachers themselves. The internal motivation is improved, which directly affects teachers' self-efficacy and indirectly strengthens teachers' leadership potential. Secondly, it is conducive to the cultivation of high-quality talents. The focus of talent cultivation in China lies in the cultivation of leadership. The effect of pure theoretical output is better than nothing. Teachers can influence students in a subtle way, and teachers with leadership can usually lead students to actively and spontaneously Improve your own deficiencies. The improvement of the teachers' leadership in universities is helpful to indirectly cultivate the students' leadership. Finally, cultivating and improving art design teachers' leadership in universities will help improve the management efficiency of universities. The influence of teachers' leadership can improve the work performance of other teachers and the overall level and quality, thereby improving the overall effectiveness of universities.

The researcher has the basis of seven years of art design major learning under Liaoning Province. Through literature research, the researcher found that the research on art design teachers' leadership under Liaoning Province is currently in a vacant state. Through quantitative and qualitative research, explore the components of art design teachers' leadership under Liaoning Province and the effective factors that affect its development, explore the impact of art design teachers' leadership under Liaoning Province on the quality of education, and put forward guidelines and practical suggestions to realize the effective development of art design teachers' leadership universities under Liaoning Province Therefore, the research topic of "Development of art design teachers' leadership in universities under Liaoning province" was launched.

2. Research Questions

(1) What are the components of art design teachers' leadership in universities under Liaoning Province?

(2) What are guidelines for development of art design teachers' leadership in universities under Liaoning Province?

3. Research Objectives

(1) To explore the components of art design teachers' leadership in universities under Liaoning Province.

(2) To develop the guidelines for development of art design teachers' leadership in universities under Liaoning Province.

4. Research Method

4.1 Research Design

The research methodology was mixed methodology, including qualitative research and quantitative research. The quantitative data was collected through a survey questionnaire distributed to administrators and instructors of 41 universities of Art Design major under Liaoning Province. Descriptive statistics was used to classify and recognize the basic properties of samples. In addition, percentages and Standard Deviations was used for data analysis. Content analysis techniques will be employed to analyse the qualitative data. The findings from data analyses were integrated to develop the guidelines for development of art design teachers' leadership in universities under Liaoning Province.

4.2 Population and Sample

Population consisted of administrators and instructors in art design major in universities under Liaoning Province. The researcher determined the sample size with Krejcie and Morgan's Table (1970). The sample was administrators and instructors, a total of 340 people, using stratified sampling techniques.

4.3 Research Instruments

Step (1) Qualitative research: semi-structured interview form.

Step (2) Quantitative research: five-point rating scale questionnaire.

Step (3) Qualitative research: focus Group Discussion form.

4.4 Data Collection

The steps for data collection will be as follow: Request permission to collect data for research from Bangkokthonburi University to 41 universities under Liaoning Province, then carry

out data collection with the selected samples by sending questionnaires to the coordinator teachers who will help for collecting data with the randomized samples.

4.5 Data Analysis

The data for this research of demographic variables were analysed by descriptive statistics, frequency, and percentage. The variables for art design teachers' leadership in universities under Liaoning Province were analysed using descriptive statistical methods; mean, standard deviation (S.D.). Exploratory Factor Analysis (EFA) was used to analyse the components of art design teachers' leadership in universities under Liaoning Province.

5. Research Results

(1) There were 5 components of art design teachers' leadership in universities under Liaoning Province which consisted of Team leadership, Teaching and innovative leadership, Professional leadership, Governance and self-management, Leadership philosophy and non-power leadership.
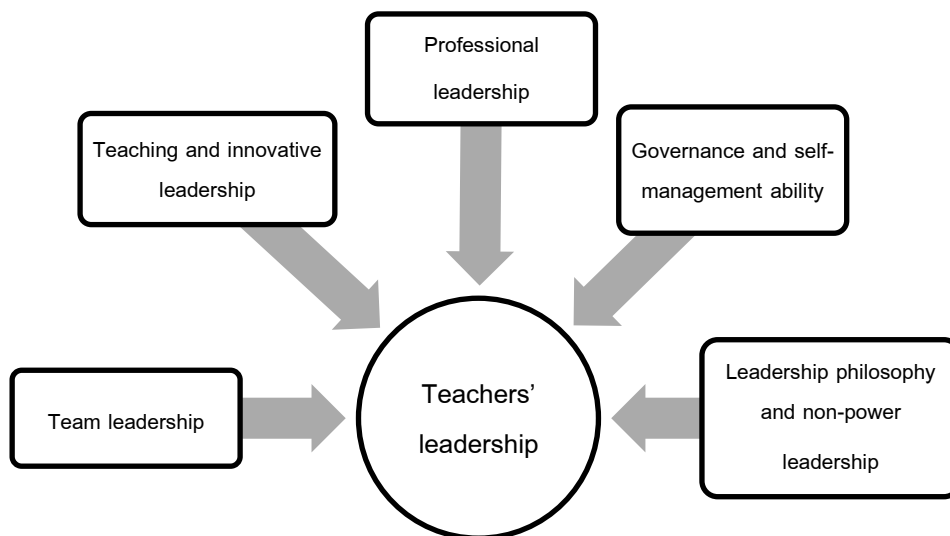
Figure 1 Shows the components of art design teachers' leadership in universities under Liaoning Province

Table 1 Shows Data Analysis Result on Questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	30.009	41.678	41.678	30.009	41.678	41.678	10.700	14.860	14.860
2	6.951	9.654	51.332	6.951	9.654	51.332	10.177	14.135	28.996
3	3.532	4.905	56.237	3.532	4.905	56.237	10.139	14.082	43.078
4	3.371	4.681	60.919	3.371	4.681	60.919	8.478	11.775	54.853
5	1.772	3.851	64.769	1.772	3.851	64.769	7.140	9.917	64.769

Extraction Method: Principal Component Analysis.

From Figure 1 and Table 1 shows the number of components of art design teachers' leadership in universities under Liaoning Province. Through analysis, it can be seen that,There were a total of 5 eigenvalues greater than 1. When rotating the axis, the total variance of 64.769 was explained, and all 5 meet the criteria. Specifically, the maximum eigenvalue of component 1 was 10.700, which could explain that the total variance of each component was 14.860; The maximum eigenvalue of component 2 was 10.177, which could explain that the total variance of each component was 14.135; The maximum eigenvalue of component 3 was 10.139, which could explain that the total variance of each component was 14.082; The maximum eigenvalue of component 4 was 8.478, which could explain that the total variance of each component was 11.775; The maximum eigenvalue of component 5 was 7.140, which could explain that the total variance of each component was 9.917.Component 1-5 can explain the total variance of 64.769.

It explained that the components of art design teachers' leadership in universities under Liaoning Province consisted of five components:

Component Ⅰ "Team leadership";

Component Ⅱ "Teaching and innovative leadership";

Component Ⅲ "Professional leadership";

Component Ⅳ "Governance and self-management";

Component Ⅴ "Leadership philosophy and non-power leadership";

(2) There were total of 69 guidelines of art design teachers' leadership in universities under Liaoning Province which consisted of seventeen team leadership guidelines, fifteen teaching and innovative leadership, thirteen professional leadership, thirteen governance and self-management ability, and eleven leadership philosophy and non-power leadership.

6. Discussion

The discussion will be presented as follows:

6.1 Discussion about major findings of objective 1

The first objective of the research was to explore the components of art design teachers' leadership in universities under Liaoning Province. The major findings revealed five components of art design teachers' leadership: Team leadership, Teaching and innovative leadership, Professional leadership, Governance and self-management, Leadership philosophy and non-power leadership.

The major findings were revealed as such because these five guidelines can promote the generation and development of teachers' leadership. Moreover, teachers' leadership was considered to be the new situation that teachers can adapt to the educational reform. Teachers have become the main force to promote the development of universities. It was a common guidelines for effective teaching and school development to give full play to teachers' leadership.

These research findings were in accordance with the theories or research of Gong Yuting (2020:14-15),Weng Conger (2016:62-63),Wang Jiajia (2020:113), Sun Jie & Cheng Jinkuan (2019:124-128)which was found that teachers' leadership is a kind of relationship between people and people, which will have a significant impact on both the generation and development of teachers' leadership and the development of schools. Also, the findings were in the same direction with Chen Dan (2017:158-159). Moreover, from the research of Chen Xin & Zhou Fan (2020:51-52), Shangguan Dandan (2014:23-45), it was found that teaching and innovative leadership, Showed that teachers' teaching leadership can produce teaching effectiveness. However, the research of Tan Min (2013:181-182), it was found that professional leadership which was different from Tang Xin (2020:37-40), Xiang Min, Zhu Ying, Wang Lin, Hu Ying & Wang Dehua (2018:27-29), Ye Juyan & zhu xudong (2018:8-15), Chen Dan (2017:158-159), Yang qi (2014:158) , the former more inclined to teachers' professional leadership ability to the teacher's own charisma, other acting lies in the teacher's professional knowledge and skills,

and the construction of the classroom and the teaching practice, participate in scientific research creation, class management, ethics, become the leader. In terms of governance and self-management ability, the results were consistent with Ye Shuyan & Zhu Xudong (2018:8-15). In terms of leadership concept and non-power leadership, the results were consistent wit Gong Yuting (2020:14-17), Hu Changcui & Zhao Wei (2020:97-99) and Wang Jiajia (2020:113).

6.2 Discussion about major findings of objective 2

The second objective of the research was to develop the guidelines for development of art design teachers' leadership in universities under Liaoning Province. The guidelines put forward a more comprehensive and practical guidelines to develop the guidelines for development art design teachers' leadership in universities under Liaoning Province.

Development of art design teachers' leadership in universities, there were total 69 guidelines. The major findings were revealed as such because the cultivation of team leadership ability must strengthen the cooperation between teachers and students in the art design major, and promote the implementation of teachers' leadership, covering the ability of communication and coordination, the ability of decision-making and execution, and the ability of overall planning. Team leadership was an indispensable part of the development of teachers' leadership. No matter what situation teachers appear, as long as they have strong team leadership, they will continue to bring value to the organization, stimulate collective achievements, and achieve common vision and goals. For teaching and innovative leadership, in order to improve the effectiveness of education teaching, must be in the art design professional education development teaching and innovative leadership, its advantage was that the development of art design professional teachers' teaching and innovative leadership was to keep pace, advancing with The Times, and the professional development goals, will be in the process of teaching innovation, combined with a variety of culture or field, emphasizes the unique innovation consciousness and teaching reform, improve the teaching quality. For professional leadership, this was an essential part of the teacher's leadership, in order to improve the quality of talent training, must highlight the teachers' professional leadership, attaches great importance to the teachers' professional growth, the specialty of art design was very professional and very different, must emphasize the characteristics of art design professional teachers professional leadership, namely in the field of comprehensive, wide field to learn experience, and the use of time, regional, campus characteristics to optimize the professional ability. Art design teachers' leadership needs to be unique and

diversified. Only to sustain the development of professional leadership, to make teachers be self-drive, enhance teachers' professional guidance, strengthen professional knowledge and skills, and promote the discipline construction and development of the school. In terms of governance and self-management ability, in order to implement teachers' leadership , firstly, we must promote teachers to participate in the governance of schools, improve the leadership efficiency, and make teachers become real decision makers and executors. Only when art design teachers actively participate in the governance system of schools, can they improve the rationality and scientificity of the formulation of regulations in universities. On the other hand, art design teachers should not only use appropriate governance means and skills to improve their leadership, but also be subject to self-restraint and management. Through self-reflection, they should adjust the concept of school and teaching governance, standardize the behavior of governance, and promote the improvement of school governance system. Only by doing so, can we effectively play the management ability of teachers. For leadership concept and non-power leadership, most of the art design professional teachers lack of leadership concept, leadership is administrative leadership, so must cultivate art design professional teachers leadership concept, form a unique leadership style of leadership, in order to effective leadership, achieve effective leadership, should have a diversified view of leadership, and the influence of the power factors. Effective leadership was achieved by strengthening teachers' leadership awareness, involving teachers in all aspects of the school, and by empirical guidance.

These findings were in accordance with the theories or research of Chen Xin & Zhou Fan (2020:51-52), Gong Yuting (2020:14-15), Nie Yujing (2016:122-126), Shangguan Dandan (2014:15-16), Weng Conger (2016:62-63), Li Xiaoyan & Pei Miao (2017:105-114) which was found that their guidelines to the development of teachers' leadership. Also, the findings were in the same direction with Liu Yi (2019:226), Zhao Xuanye (2019:56-58), Ji'an Shengyu (2019:70-76), Miao Honghui (2019:240-244), Yang Weidong (2020:20), and Lai Yang (2020:181). Moreover, from the research of Miyan (2010:79-80), it was found that in terms of teaching and innovative leadership corresponding to the research of Jiao Ruixin (2019:104-105). Yu Jiefang (2015:232) and Wang Fangguan (2015:8), mainly focused on professional leadership. However, the research of Miao Honghui (2019:240-244), it was found that female teachers' leadership was closely related to the class atmosphere which was different Mazhar (2018： 91-104). Cui Lijing (2016:20-28) found that there was no significant difference in the creativity of art design teachers in universities in terms of teaching experience, gender, university background and age.

Therefore, the 69 guidelines in the research findings were important in developing the guidelines for development of art design teachers' leadership in universities under Liaoning Province. The guidelines put forward a more comprehensive and practical guidelines to develop the guidelines for development of art design teachers' leadership in universities under Liaoning Province.

7. Recommendations

Based on the research findings, the following recommendations were proposed in three key aspects:

7.1 Recommendation for Policies Formulation:

Development of art design teachers' leadership cannot be separated from the policy support. First of all, in order to give better play to art design teachers' leadership, teachers' leadership should be placed in relevant documents when making policies, so that the school can truly empower teachers and let teachers take leading roles. Through the cooperation between teachers, we can promote the improvement of teachers' all-round ability and all-round development of teachers. Secondly, teachers' leadership system should be formulated, the reward and punishment system and evaluation system should be defined, and the responsibilities of teachers' leadership roles should be defined to promote the orderly development of teachers' leadership.

7.2 Recommendation for Practical Application:

To facilitate the development of art design teachers' leadership in universities under Liaoning Province, the following strategies can be explored:

For teachers' leadership, universities in the practical application of professional art design, should further build and improve teachers' leadership platform and policy, build the leadership environment, improve teachers' leadership consciousness, through the school internal harmonious relationship, build common values, in teachers and schools, teachers and teachers, communication and collaboration between teachers and students, to arouse the enthusiasm of education teaching reform and talent training, at the same time, increase the relevant training of teachers, establish conform to the art design professional connotation development pattern.

7.3 Recommendation for Further Research:

In order to comprehensively identify the components of art design teachers' leadership in universities under Liaoning Province and develop more scientific development guidelines, researcher recommend the following:

(1) To realize the characteristic development of art design teachers' leadership.

Generally speaking, the characteristic development of art design major can not be separated from the general characteristics of The Times. However, due to the different regions, some local organizations have a strong cultural, economic and policy specificity. This allows the characteristic development to behave differently in different regions. From a macro point of view, art design needs to walk in the forefront of The Times and develop novel art education and research with the consciousness of The Times. However, from a micro-scale perspective, different organizations have different cultural and economic resources. Therefore, some local organizations will have different understandings of the interpretation of The Times and cannot fully achieve the unity of strategy. This is why organizations implement diversification strategies. Therefore, for a specific organization, it should make full use of its advantages according to its own advantages and the actual situation of the environment, take advantage of its advantages, avoid weaknesses, and implement its own characteristic development.

(2) To improve and test the training countermeasures of the development of art design teachers' leadership.

Further improve the questionnaire design and data collection, in the future research, expand the number and scope of the questionnaire, make the research more convincing, build effective art design teachers' leadership development countermeasures, and improve the components and structure, validation to promote the university art design of professional teachers in the development of leadership factors.

(3) To realize the cooperation between art design professional teachers and managers.

The administrative management of any organization often has a role that can not be ignored, and its protagonist was often pure administrative personnel. However, the main practitioners of leadership are usually administrative teachers, and most managers have a natural gap in understanding professional knowledge and mastery of the laws of professional development. Therefore, professional teachers and administrative personnel should adopt a collaborative approach, with professional teachers as the core and administrative personnel

as the auxiliary, so that professional teachers can better and effectively play teachers' leadership

BIbliography

Gong Yuting. (2020). **New Exploration on Music Teachers' Leadership under the Concept of Teachers' Professional Development.** Master's Thesis, Hunan Normal University.

Weng Conger. (2016:62-64). **The components of teachers' leadership and their manifestations.** Science and Education Guide (China) (17) .

Wang Jiajia & Wang Shengping. (2020:26-29). **Teachers' leadership development in school improvement: meaning, barriers, and strategies.** Teacher Education Forum (02).

Sun Jie & Cheng Jinkuan. (2019:124-128). **The transformation from leadership behaviour to leadership thinking Based on the analysis of foreign teachers' leadership theory.** Exploration of Higher Education (12).

Chen Dan. (2017:158-159). **Improve teachers' leadership and promote teacher professional development.** Western Quality Education (17).

Chen Xin, Zhou Fan. (2020:51-52). **Discussion on the leadership construction of teachers in art professional colleges and universities.** Education and Teaching Forum (44).

Shangguan Dandan. (2014:23-45). **Research on the influencing factors for the effective realization of university teachers' leadership**. Master's dissertation, Yunnan Normal University.

Ye Shuyan & Zhu Xudong. (2018:8-15). **On the value, connotation and cultivation of teachers' leadership in educational collaborative reform.** Teacher Education Research (02).

Hu Changcui & Zhao Wei. (2020:97-99). **Research on the construction mechanism of university teachers' leadership from the perspective of organizational reform.** Journal of Yanbian Education College (06).

Nie Yujing. (2016:122-126). **Current status of teachers' leadership research abroad.** Modern Education Science (04).

Li Xiaoyan & Pei Miao. (2017:105-114). **Overview of foreign teachers' leadership research topics.** Research on Teacher Development (02).

The Enhancement of Self-Image among Adolescents through Sports dance

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ABSTRACT

This study aims 1) to compare self – image of experimental group before and after participating Sports dance 2.) to compare self – image between experimental group and control group. The sample subjects were 20 second -year undergraduate students of the Dance Department of the Art School. All students had lower 25 percentiles than Self -Image mean are assigned as experimental group and control group. Research Instruments were 1) Body self -image questionnaire (David A Rowe, 2005) and 2) sports dance program. The statistics were Mean, Standard Deviation, and t -test for dependent sample and t -test for independent sample. The results showed that 1) After participating sports dance program, self -image score of experimental group is not higher than before participating program significantly 2) after participating sports dance program, experimental group of had higher self -image overall score than those in the control group significantly at level .05.

Keywords: Sports dance, College student, Self -image

1. Introduction

With the in-depth evolution of social culture, young people have gradually shown a higher degree of emphasis on the shaping and expression of self-image. Dance, as a charming art form, with its unique body language and aesthetic connotation, has a non-negligible impact on improving the self-image of young people. In the psychological development process of adolescents, the formation of self-image is the core element of their self-evaluation and cognitive construction. During this critical period, sports dance, as an art form that integrates

physical and mental activities, can not only exercise young people's physical coordination, but also promote their emotional expression, imagination and creativity during dance. Through dance training and performance, young people can better know themselves, understand themselves, and show confidence, elegance and unique charm on the stage.

Self-image refers to a person's own cognition and view, which has an important impact on personal mental health. Self-image is crucial to a person's mental health, behavior performance and growth and development. Attach importance to the shaping and maintenance of self-image, and constantly improve their self-confidence and self-esteem, so as to better face the challenges and opportunities in life.

The concept of self-image was initially introduced by William James (1890) and has since been studied from various perspectives, including self-perception, self-evaluation, and self-concept Researchers have demonstrated that self-image is malleable and can be shaped by internal processes (e.g., self-perception) and external factors (e.g., social comparisons, feedback from others). Moreover, one's self-image has been found to be closely linked to psychological well-being, interpersonal relationships, and life outcomes (Taylor & Brown, 1988; Swann & Bosson, 2010). Several theories have been proposed to explain the formation and maintenance of self-image For instance, James's (1890) theory of self-enhancement posits that individuals have a natural tendency to perceive themselves favorably In contrast, self-verification theory (Swann & Bosson, 2010) suggests that people strive for coherence between their self-image and their actual behaviors, traits, and circumstances Additionally, sociocultural factors have been shown to play a significant role in shaping self-image, particularly during childhood and adolescence (Rosenberg, 1965).

There are many reasons for students' lack of self-image, mainly including the following aspects :1) family environment: family environment has a significant impact on the formation of an individual's self-image Lack of care, excessive protection, or overly harsh family environments can lead to children not being able to correctly understand themselves, thereby affecting the formation of their self-image 2) Social impact: Factors such as social culture, media, and peer pressure can all have an impact on an individual's self-image Especially for teenagers, they are easily influenced by peer pressure, leading to negative evaluations of themselves 3) Personal experience : Some negative personal experiences, such as bullying, failure, or setbacks, may also lead to damage to an individual's self-image. The lack of self-image is an urgent issue that needs to be addressed in individual growth and development by analyzing the reasons in depth, we can adopt corresponding strategies to help individuals

establish a good self-image Only when we have a correct understanding of ourselves can we better cope with the challenges in life and achieve personal growth.

Adolescence is a critical period for self-image formation, but many teenagers face self-image issues during this stage. These problems may stem from family circumstances, social influences, and personal experiences. Lack of a good self-image can lead to mental health problems, interpersonal problems, relationship difficulties, and career advancement difficulties in teens. Adolescents should Develop confidence by learning new skills in sports dance, completing challenging tasks, and gaining successful experience. In the face of difficulties and challenges, believe that you have the ability to overcome them. To improve my self-image by mastering basic dance steps, focusing on body posture, cultivating a sense of rhythm, increasing physical training, learning dance etiquette, attending dance training courses and maintaining a positive attitude.

Currently, more and more teenagers have the opportunity to come into contact with and learn sports dance, which provides rich practical materials and data support for research on the impact of sports dance on teenagers' self-image. Research shows that by participating in dance training, teenagers' body posture, temperament and appearance have been significantly improved, and their self-confidence and social skills have also been enhanced to a certain extent.

As a unique art form, dance has a positive role in promoting the self-image of young people. Through the study and practice of dance, young people can not only exercise their bodies and improve their skills, but also find and express themselves in the world of dance, thereby establishing a more positive and healthy self-image. We should further promote the popularization and development of dance education so that more young people can enjoy the benefits of dance.

2. Research Objectives

The objectives of this study are: 1) to compare self-image of experimental group before and after participating Sports dance and 2) to compare self-image between experimental group and control group.

3. Research Hypothesis

This study will use a combination of qualitative and quantitative research methods, including questionnaires, interviews and observations. First, a questionnaire survey was used to collect the changes in self-image of teenagers before and after participating in sports dance.

Second, some teenagers were interviewed to gain an in-depth understanding of their views and experiences on the relationship between sports dance and self-image. Finally, by observing the dance teaching process and teenagers' participation to further verify the research hypotheses.

Based on existing research and practical experience, this study proposes the following hypotheses:

1. Sports dance can significantly improve the physical self-image of teenagers, allowing them to have a more positive evaluation of their body shape, coordination and physical fitness;

2. Sports dance can help improve adolescents' psychological self-image, enhance their self-esteem, confidence and self-efficacy, thereby improving their mental health;

3. The social attributes of sports dance can help improve teenagers' social self-image, enhance their ability in interpersonal communication, and improve the quality of interpersonal relationships.

4. Population and Sample

Population is 120 students of sports dance professional classroom from the Art College of Chongqing Mechanical and Electrical Vocational and Technical University. gender, grade, major is not limited, corrected vision is normal, voluntary participation The publicity methods used to recruit participants included posters, WeChat, QQ publicity, and telephone registration, recruiting a total of 120 students.

The samples of this study are 20 second year undergraduate students in the Dance Department of the Art School, who do the preliminary the Body Self-Image Questionnaire – Short Form and have lower 25 percentile than Self-Image mean. The 20 students were selected from population students and divided 10 students in the experimental group and 10 students in the control group.

5. Research Design

In quasi-experiment pre-test post-test control group research design, the experimental group and control group was used to test before and after. In the stage of Sports dance, experimental group participating in the auxiliary intervention course of sports dance in the form of a class. Participants in the control group were not treated in the study. The sports dance intervention was pre-curricular, with the dependent variable being adolescent self–image as table 1.

Table1: Pretest -Posttest Control Group Design

Group	Pretest	Experiment	Post -test
E	O_{1E}	X	O_{2E}
C	O_{1C}	-	O_{2C}

6. Research Instruments

1. Body self - image questionnaire

Body self-image questionnaire-short form (BSIQ-SF) is developed to measure body image perceptions. The development and cross -validation of the BSIQ -SF was reported in a poster presentation at the 2005 ACSM Annual Meeting by Rowe, D A .(2005).Factorial validity and cross -validation of the Body Self -Image Questionnaire (Short Form) in young adults Medicine and Science in Sports and Exercise, 37, S148; or Rowe, D .(2005, June).Subscales are OAE = Overall Appearance Evaluation; HFI = Health Fitness Influence; II = Investment in Ideals; HFE = Health -Fitness Evaluation; AG = Attention to Grooming; HD = Height Dissatisfaction; FE = Fatness Evaluation; NA = Negative Affect; SD = Social Dependence .Items are scored on a 1-5 point scale, with a =1, b =2, c =3, d =4, and e =5The BSIQ should not be used for a summed "total body image " score Each subscale score ranges from a minimum of 3 to a maximum of 15Note : Item 1 should be reverse -scored, i .e ., a =5, b =4, c =3, d =2, and e =1. Body self -image questionnaire -short form (BSIQ-SF) had the Index of Objective Congruence: (IOC) = 1.00.

2. Sports dance program

Sports dance is also known as "international standard ballroom dance ".One of the sports programs It is a walking pas de deux competition for men and women Divided into two categories, ten dance types The modern dance group includes waltz, Viennese waltz, tango, foxtrot and fast step, while the Latin dance group includes rumba, chacha, samba, cowboy and bullfighting Each dance genre has its own dance music, steps and styles According to the music and movement requirements of each dance type, they are combined into their own set of movements. Standard social dance originated from ancient folk dances. It has gone through the evolution process of duet dance, circle dance, line dance, and group dance, and has become a widely circulated dance. Social dance.

There are 10 links in the sports dance project, and its skills include dance and group assistance skills, group discussions, group competitions, game interactions, question and answer interactions, on-site test methods, prop methods, forming a link between the past and

the next, and summarizing. The goal congruence index of the sports dance project is between 0.67-1.

7. Data collection

Before the start of the experiment, the researcher predicts the confidence level of the experimental and control groups and establish the baseline data and ensure the accuracy and anonymity of data and protect the privacy of participants. Data processing and analysis methods were developed using SPSS program. The experimental group conducted 10 sports dance program sessions, and the control group were not treated in the study.

The researcher collects confidence data for the experimental and control groups at the end of the experiment and use SPSS program to calculate and analyze the data, including descriptive statistics and hypothesis testing, to determine the scientific accuracy of the experimental results.

8. Statistics

In this study, descriptive statistics are Mean and Standard Deviation (S.D.) and Hypothesis testing statistics are t-test for dependent sample and t-test for independent sample.

9. Research Results

1. After participating sports dance program, self-image score in OAE, HFI, II, and HFE subscale of experimental group is higher than before participating program significance at level .01. At the same time, after participating sports dance program, self-image score in HD and FE subscale is higher than before participating program significance at level .05. Meanwhile, self-image overall score is not significant ad table 2.

Table 2: Comparison of pre-test and post-test in the experimental group.

Self-Image	Pretest		Posttest			
	M	S.D.	M	S.D.	t	Sig
OAE	3.56	1.16	3.89	1.56	14.17**	.000
HFI	3.56	1.16	3.89	1.56	13.34**	.000
II	3.50	1.05	3.85	1.50	11.43**	.000
HFE	3.62	1.07	4.06	1.62	13.10**	.007

Self -Image	Pretest		Posttest			
	M	S.D.	M	S.D.	t	Sig
SD	3.50	1.21	3.62	1.50	0.10	.488
HD	3.23	1.02	3.44	1.23	-0.70*	.014
FE	3.56	1.16	3.85	1.56	-2.01*	.011
NA	3.50	1.05	3.56	1.50	-.98	.153
AG	3.62	1.73	3.62	1.62	-.76	.592
overall	3.52	1.18	3.81	1.52	5.30	.141

* significance at level .05

** significance at level .01

2. After participating sports dance program, experimental group of had higher self - image overall score than those in the control group significantly at level .05 as table 3.

Table 3: Comparison of posttest between experimental group and control group.

Self -Image	experimental group		control group			
	M	S.D.	M	S.D.	t	Sig
overall	3.74	3.52	3.34	1.35	5.683*	.011

* significant at level .05

10. Discussion

Through a series of rigorous questionnaire surveys and before-and-after comparative studies, we deeply explored the significant changes in the self-image of teenagers who participated in sports dance. The results showed that the self-image of these teenagers had significantly improved in multiple dimensions such as physical appearance, self-confidence and social ability.

When analyzing the impact of dance types on adolescents' self-image, we found that different types of sports dances have certain differences in their impact on adolescents. Among them, dance types with bright rhythms and graceful movements are particularly effective in improving the self-image of young people. These dances can not only exercise the body and create beautiful body lines, but also enhance young people's self-confidence and self-expression ability through the coordination and smoothness of movements.

These findings support the 2nd hypothesis. The study found that in the traditional teaching process, after a period of sports dance training, the self-image of the experimental group was significantly improved, while the students in the control group had a more serious learning atmosphere, lower initiative and less enthusiasm for learning. Students in the experimental group showed significant improvements in body image. They have a clearer understanding and positive evaluation of their shape, posture and body lines .Students in the experimental group also showed significant improvements in social skills when faced with the dance activity task They learned how to interact, communicate and cooperate with others in dance to create better relationships Therefore, a deeper understanding of the teaching content can effectively retain the knowledge learned When students pass the dance, they are given timely rewards to build their confidence in learning and become more involved in classroom learning In the process of unity and cooperation, complete the dance, let students strengthen interaction, immersed in an interesting, interactive, challenging learning environment, not only promote the development of sports dance, improve students' knowledge and skills, but also improve the communication ability between students, to create a relaxed and happy learning atmosphere.

Based on these results, we can conclude that supporting 2nd hypothesis: the self-image score of the experimental group after receiving the dance floor is significantly higher than that of the control group who continued the daily training. We found that sports dance had a positive impact on self -image promotion Through training and practice, people can better understand their body shape, improve self -confidence, enhance social skills and sports skills, so as to better show their self -image. This result may contribute to improve individual self-image.

These results have an accordance to the research of Anna Duberg and others (2016) that explored the experiences of adolescent girls who participated in an 8-month dance intervention and found in five generic categories: these are (1) An Oasis from Stress, which represents the fundamental basis of the intervention; (2) Supportive Togetherness, the setting; (3) Enjoyment and Empowerment, the immediate effect; (4) Finding Acceptance and Trust in Own Ability, the outcome; and (5) Dance as Emotional Expression, the use of the intervention. One main category emerged, Finding Embodied Self-Trust That Opens New Doors, which emphasizes the increased trust in the self and the ability to approach life with a sense of freedom and openness. The central understanding of the adolescent girls' experiences was that the dance intervention enriched and gave access to personal resources. With the non-judgmental atmosphere and supportive togetherness as a safe platform, the enjoyment and

empowerment of dancing gave rise to acceptance, trust in ability, and emotional expression. Taken together, this increased self-trust, and they discovered a new ability to ''claim space.'' Findings from this study may provide practical information on designing future interventions for adolescent girls with internalizing problems. In addition, the research of Downey and others (2009) that surveyed data from a sample of 103 belly dancers in Salt Lake City, Utah, addressing issues of body image and gender identity, has emphasized unhealthy body image influences, belly dance offers a counter-example, indicating broad and inclusive body image norms, a lack of pressure for body image conformity, and high levels of body satisfaction among dancers. Data also indicate that those norms are linked to more generalized challenges to gender roles and structures. Explanations for the maintenance of alternative collective norms focus on two institutional influences: processes of socialization to collective values and the free space provided by a gender-segregated activity.

11. Suggestions

The suggestions for the application of research results and future studies are as follows:

1. The research results are applied to the practice of sports dance teaching, training, and performance by improving teaching methods and providing personalized guidance.

2. The future study could expand the scope of students from different schools, ages, and cultural backgrounds to verify the generalizability of the findings. A variety of research methods can be combined, such as empirical research, case analysis, questionnaires, in-depth interviews, etc., to obtain more comprehensive and in-depth research results. Furthermore, the future study should explore the impact of physical dance on students' overall mental health, including emotional health, social interaction, and quality of life.

BIbliography

Allen, G.L. (2007). **History and philosophy of sports dance.** In G.L.Allen (Ed.), sports dance: The international dictionary of historical terms (pp.1-6). University Press of Florida.

Rosenberg, M. (1965). **Society and the adolescent self-image.** Princeton, NJ: Princeton University Press.

Sports dance Council of America. (2019). **Rules and regulations for competitive dance.** SDCA.

Swann, W B ., Jr. (1983). **Self -verification: Bringing social reality into harmony with the self.** In J Suls & A G Greenwald (Eds.), Psychological perspectives on the self (Vol 2, pp 33-66). Hillsdale, NJ : Erlbaum.)

Taylor, S E ., & Brown, J D. (1 9 8 8). **Illusion and well -being : A social psychological perspective on mental health Psychological Bulletin.** 103(2), 193-210

Taylor, S.E., & Brown, J.D. (1988). **Illusion and well-being: A social psychological perspective on mental health. Psychological Bulletin.** 103(2), 193-210.

Thompson, J.K., & Heinberg, L.J. (1999). **The media's influence on body image disturbance and eating disorders: We've reviled them, now can we rebuild them.** Journal of Social and Clinical Psychology, 18(1), 7-23.

Zimmerman, B.J., & Cleary, T.J. (2 0 0 6). **Adolescents' academic self-efficacy, the home environment, and parental self-efficacy.** The Journal of Educational Research, 99(4), 224-234.

Effectiveness of Management Mechanism of Art Design Education in Universities under Liaoning Province

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ABSTRACT

The objectives of this research were:(1) to explore the components of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province;(2) to propose the guideline to effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

This research was a mixed method between quantitative research and qualitative research. The population includes 1,361 administrators and teachers from 5 colleges and universities in Liaoning Province. Sample were 388 administrators and teachers in 5 colleges and universities. with stratified random sampling method. The researcher determined sample size with Krejcie and Morgan's table, and obtained by the stratified random sampling technique. The instrument used for data collection was a questionnaire with a five-point rating scale, in-depth interviews form and Focus Group Discussion form. The statistics used for data analysis were frequency, percentages, means Standard Deviations and Exploratory Factor Analysis (EFA), and content analysis was employed.

The research findings were: (1) There were five components effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province which consisted of Leadership and organization, Student management and support, Educational curriculum and teaching, Strategic planning and formulation, and Financial management and resource allocation. (2) There are 44 guiding principles for the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

Keywords: Effectiveness, Management Mechanism, Art Design Education, Universities of
Liaoning Province

1. Introduction

The background of the development of educational management in China has laid the foundation for the management of art design education. It plays an important role in the art design discipline of colleges and universities in Liaoning Province. The history of the establishment and development of college art design education in China is different from that in western countries. For example: In terms of curriculum structure, there is a problem of fragmented connection between courses. Courses are mostly patchwork, stacked, and lack of coherence, and the educational philosophy and design principles and objectives of the entire curriculum system cannot be clearly defined. As a result, the professional curriculum design of art colleges is unreasonable, and some curriculum Settings even deviate from the training objectives, the curriculum positioning is vague, and the teaching objectives are inaccurate. There is no confusion about the teacher's location.

As a college teacher majoring in art and design education, the researcher expects to effectively improve the management mechanism of art and design education and play its role in education management through this study. Because the effectiveness of art design education is not only related to the advancement of education reform, but also related to the inheritance and development of culture can meet the requirements of modernization. (1) Help improve the quality of teaching. Through standardized and clear teaching objectives, effective curriculum design, and appropriate teaching methods and assessment means, students' learning effect and satisfaction can be improved. Teachers can adjust and improve their teaching strategies according to the guidance and feedback of the quality management mechanism, so as to make the teaching process more effective and targeted. (2) Evaluate student learning outcomes. Through clear learning objectives and standards, students can clearly understand the learning requirements they need to achieve and receive the necessary guidance and support in the teaching process. At the same time, the quality management mechanism can also provide students with timely feedback and assessment, help them understand their learning outcomes and shortcomings, and further improve their learning ability and skills. (3) Promoting teacher professional development. Through the feedback and evaluation of the quality management mechanism, teachers can understand their own teaching effects and shortcomings, and improve their teaching ability and professional knowledge in a targeted way. At the same time, the quality management mechanism can also

provide teachers with opportunities to communicate and cooperate with their peers, and promote professional growth and common progress among teachers. (4) Promote practice and innovation ability. Quality management mechanism can promote the cultivation of innovation and practical ability. By encouraging students to undertake practical projects, design works and creative expressions, educational management mechanisms can provide students with opportunities for hands-on and practical experience. Such practical activities can cultivate students' innovative thinking, problem-solving ability and practical skills, so that they can better adapt to the actual working environment and market needs. Promote practice and innovation ability. Quality management mechanism can promote the cultivation of innovation and practical ability. By encouraging students to carry out practical projects, design works and creative expressions, the curriculum quality management mechanism can provide students with opportunities for practical operation and practical experience. Such practical activities can cultivate students' innovative thinking, problem-solving ability and practical skills, and make them better adapt to the actual working environment and market demand.

2. Research Questions

1. What are the components of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province?

2. What are the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province?

3. Research Objectives

1. To explore the components of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

2. To propose guidelines the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

4. Research Methodology

1. Population/Sample and key informants

Step 1: Examing concept of determining the effectiveness of management mechanism of Art Design Education in Universities

The researcher review literature of documents and related research, synthesized 20 relevant researches and summarized some variables of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province

In-depth interviews with 10 key informants including deans, project leaders, expert professors and teachers of LuXun University of Fine Arts, Dalian University of Arts, Shenyang Normal University, Shenyang University, and Shenyang Jianzhu University. Through the interview results was conducted to investigate the constituent factors of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

Step 2: Exploring the components of the effectiveness of management mechanism of Art Design Education in Universities.

The population includes 1,361 administrators and teachers in 5 Universities under Liaoning Province.

The sample was 388 administrators and teachers of 5 Universities under Liaoning Province. Determine the sample size by Krejcie and Morgan's table (1970) and sampling with stratified random sampling technique.

Step 3: Proposing guidelines the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

Focus group discussion 10 key information include of deans, experts, professors and teachers of 5 Universities in Liaoning Province. Due to the different professions and levels of experts and teachers, the researchers classified after criteria for selected by purposive sampling, Establish selection criteria qualification.

2. Research instruments

Three research instruments were used to examine the objectives of this research.(1) Semi-structured interview, (2) A five-point rating scale questionnaire and (3) Focus Group discussion form.

2.1 Semi-structured interview form

Through the semi-structured interview table, mainly by discovering the main factors, the semi-structured interview is preliminarily completed. The interview was mainly conducted in a non-face-to-face way. A total of 10 respondents were sent by mail and online.

2.2 Five-point rating scale questionnaire. The researchers used a three-part questionnaire; Part I: Demographic variables (Checklist), General information of the respondents, totaling 6 items, Part II: Variables on the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province (Five-point rating scale), totaling 36 items, and Part III: Suggestions and additional comments (Open Ended). Each factor is measured on a 5-point Likert's scale.

2.3 Focus Group discussion form 10 key informants to develop the guideline to improve the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

3. Data collection

(1) Researchers contacted key informants and sent interview questionnaires by email, telephone. (2) This part of the questionnaire can be distributed on site collected through online links. About 388 questionnaires need to be completed in about 2 weeks. The sample has been directly informed of content scope and research objectives, and received a formal permission letter from the university to the administrator and teachers, allowing to conduct and collect data from faculty in accordance with a letter of approval issued by the relevant authority. and (3) Focus Group Discussion can be conducted on site with researchers leading participants and open-ended discussions. the researcher acts as a facilitator.

4. Data analysis

(1) Conduct content analysis on the results of review literature and in-dept interview (2) Data for demographic variables were analyzed using descriptive statistical methods; frequencies and percentages. Variables and components of effectiveness of supporting for international students were analyzed using descriptive statistics; mean, standard deviation (SD). Exploratory Factor Analysis (EFA).

5. Results

(1) There were five components effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province which consisted of Leadership and organization, Student management and support, educational curriculum and teaching, Strategic planning and formulation, and Financial management and resource allocation. (2) There are 44 guiding principles for the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

The information obtained from the interviews, researchers summarized a total of 75 variables based on literature and expert interviews, and on this basis compiled a research tool, the five-point subscale questionnaire. The quality of the tool is tested by content validity and reliability. As for the content validity of the questionnaire, the researchers sent the questionnaire to five research experts for verification. Item Objective Consistency (IOC) is used to evaluate items in the questionnaire, with a score range of -1,0, +1. Items with scores below 0.5 have been corrected. On the other hand, candidates with a score of 0.6 or higher or equal will be retained. A total of 62 questionnaires were found. For reliability of questionnaire is a way of assessing the quality of the measurement procedure used to collect data. The

researcher has sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's alpha coefficient on or above 0.80 means adequate reliability to determines the internal consistency or average correlation of items in a survey instrument to gauge reliability of the questionnaire. As a result, Cronbach's alpha coefficient was at 0.995 which can be used to describe the reliability of questionnaire. Test the quality of the instruments through content validity and reliability.

Table 1: Frequency and percentage results of questionnaire data analysis.

General information	Frequency	Percentage
1. Gender		
male	205	52.8
female	183	47.2
2. age		
Lower than 25	11	2.8
25-35 years old	175	45.1
36-45 years old	177	45.6
Older than 45	25	6.4
3. Professional title		
Teaching assistant	40	10.3
lecturer	129	33.2
associate professor	168	43.3
professor	51	13.1
4. Education background		
Bachelor	14	3.6
Master	315	81.2
Doctor	59	15.2
5.Type of work		
Teacher	299	77.1
Administrator	89	22.9

Table 1 shows that a total of 388 respondents participated in the survey, including 205 males (52.8%) and 183 females (47.2%). Among them, 11 people aged lower than 25 accounted for 2.8%, 175 people aged 25-35 accounted for 45.1%, 177 people aged36-45 accounted for 45.6%, and at least 25 people older than 45 accounted for 6.4%. In terms of

professional titles, 40 teaching assistants accounted for 10.3%, 129 lecturers accounted for 33.2%, 168 associate professors accounted for 43.3%, and 51 professors accounted for 13.1%. Among the respondents, 14 had bachelor's degrees, accounting for 3.6%, 315 had master's degrees, accounting for 81.2%, and 59 had doctoral degrees, accounting for 15.2%. According to the type of work, 299 people is teacher, accounted for 77.1%, and 89 people is administrator in colleges and universities accounted for 22.9%.

Table 2: Descriptive statistics of questionnaire data analysis.

(n=388)

Variables	$\bar{\chi}$	S.D.	Level	SK	KU
Q1. The feedback mechanism helps to understand the needs of students and staff, so as to improve management effectiveness.	4.29	0.777	Highest	-0.784	-0.187
Q2. The educational performance indicators are helpful in measuring the quality of education and the effectiveness of management.	4.21	0.861	Highest	-0.739	-0.461
Q3. Educational trends have a positive impact on adapting to change and improving management efficiency.	4.22	0.870	Highest	-0.895	-0.028
Q4. The diversity strategy of educational institutions contributes to creating a diverse learning environment and improving management effectiveness.	4.27	0.838	Highest	-0.745	-0.588
Q5. Educational planning facilities contribute to the provision of a suitable learning environment and the management of educational resources.	4.25	0.833	Highest	-0.869	-0.014
Q6. The admission policy has a key impact on attracting and retaining qualified students and maintaining management effectiveness.	4.26	0.852	Highest	-0.829	-0.328
Q7. The quality of education standards have a key impact on the maintenance of the quality of education and the management of educational institutions.	4.22	0.829	Highest	-0.778	-0.175

Variables	$\bar{\chi}$	S.D.	Level	SK	KU
Q8. Analysis of educational data contributes to data-based decision-making and to improving the effectiveness of educational management.	4.24	0.868	Highest	-0.948	0.074
Q9. The management of student records is essential to the effectiveness of the management of student information and educational records.	4.22	0.804	Highest	-0.807	0.072
Q10.The tutor evaluation contributes to the student's academic development and management effectiveness.	4.24	0.787	Highest	-0.846	0.224
Q11.Reporting details tracking is critical to improving the school's management effectiveness and decision-making.	4.26	0.788	Highest	-0.841	0.136
Q12.Student admission policies and procedures have a key impact on maintaining the management of the school and attracting qualified students.	4.25	0.793	Highest	-0.920	0.429
Q13.Academic research projects play a key role in enhancing the university's research reputation and management effectiveness.	4.29	0.760	Highest	-0.857	0.252
Q14.Equal opportunities for diverse students contribute to creating inclusive school environments and improving management effectiveness.	4.22	0.770	Highest	-0.818	0.348
Q15.Health and safety training contributes to the health and safety of students and staff, thereby maintaining school management.	4.32	0.737	Highest	-0.735	-0.262
Q16.Student employment programmes have a key impact on the future career success of students and the effectiveness of school management.	4.35	0.738	Highest	-0.939	0.383
Q17.The academic integrity policy has a positive impact on maintaining the ethics and quality of school management.	4.26	0.774	Highest	-0.845	0.276
Q18.The student questionnaire can help to understand the needs of students and improve the effectiveness of school management.	4.26	0.817	Highest	-0.935	0.288

Variables	$\bar{\chi}$	S.D.	Level	SK	KU
Q19.Student associations have a positive impact on student participation and school management effectiveness.	4.28	0.800	Highest	-0.812	-0.160
Q20.Multimedia resources contribute to improving the interactivity and management effectiveness of education	4.24	0.770	Highest	-0.792	0.146
Q21.Knowledge of the art and design field has a positive impact on the provision of high quality art and design education and management effectiveness.	4.06	0.903	High	-0.836	0.411
Q22.The handling of student complaints has an important impact on the maintenance of school management and student satisfaction?	3.93	0.938	High	-0.622	-0.118
Q23.Providing career guidance to students have a significant impact on students' career planning and improving their job prospects	4.30	0.791	Highest	-0.944	0.269
Q24.Compliance with educational standards and guidelines contributes to improving the quality of educational management.	4.29	0.791	Highest	-0.725	-0.543
Q25.Monitoring and control mechanisms contribute to improving the effectiveness of educational management.	4.08	0.874	High	-0.745	0.117
Q26.Classroom management has a significant impact on maintaining a good learning environment and managing students.	4.19	0.833	High	-0.726	-0.280
Q27.Teaching assessment play a key role in understanding students' academic performance and improving teaching methods	4.06	0.934	High	-0.769	-0.027
Q28.The content of the course has a positive impact on the provision of quality education and management results.	3.98	0.959	High	-0.694	-0.141
Q29.Interdisciplinary cooperation can help solve complex educational management problems.	4.17	0.870	High	-0.858	0.135

Variables	$\bar{\chi}$	S.D.	Level	SK	KU
Q30.The curriculum objectives help to clarify the direction of education and improve the effectiveness of educational management.	3.99	0.926	High	-0.637	-0.185
Q31.Technical skills training has a positive impact on the improvement of technical skills and management effectiveness of faculty and staff.	4.18	0.904	High	-0.986	0.414
Q32.Teaching methods and strategies play an important role in improving the quality of education and the effectiveness of management	4.02	0.943	High	-0.804	0.143
Q33.The curriculum outline have a positive impact on the organization of course content and teaching plans	4.02	0.930	High	-0.868	0.530
Q34.Teacher qualifications and experience have a positive impact on the provision of quality education and management effectiveness.	4.09	0.898	High	-0.911	0.595
Q35.Teaching methods contribute to the improvement of students' academic performance and management effectiveness.	3.91	0.910	High	-0.787	0.442
Q36.Decision-making and implementation capacities play a key role in the effectiveness of educational management	3.99	0.941	High	-0.526	-0.572
Q37.A leader's management style is crucial to the effectiveness of educational management.	4.17	0.860	High	-0.697	-0.417
Q38.Salary and incentive policies help motivate faculty and staff and improve management effectiveness	4.03	0.937	High	-0.696	-0.240
Q39.The administrative structure has had a positive impact on the management of education.	4.02	0.949	High	-0.892	0.456
Q40.Employee satisfaction significant to the effectiveness of educational management	4.01	0.954	High	-0.685	-0.240
Q41.Development planning has a positive impact on the long-term success of schools or educational institutions.	3.93	0.899	High	-0.612	0.080

Variables	$\bar{\chi}$	S.D.	Level	SK	KU
Q42.Budgetary and supervisory systems contribute to improving the quality of educational management.	4.10	0.910	High	-0.774	-0.228
Q43.The school leadership team play an important role in the effectiveness of educational management	4.20	0.866	High	-1.096	1.171
Q44.The quality of education assessment indicators have had a positive impact on improving the effectiveness of education management.	4.08	0.933	High	-0.794	-0.076
Q45.Alumni and social resource support have a positive impact on the effectiveness of educational management.	4.05	0.933	High	-0.840	0.249
Q46.Addressing educational legal issues has a key impact on the effectiveness of educational administration.	4.10	0.929	High	-0.829	-0.012
Q47.The tuition policy has had a positive impact on the effectiveness of educational administration.	4.11	0.899	High	-0.932	0.604
Q48.The school governance structure contributes to improving the effectiveness of educational management.	4.13	0.910	High	-1.058	1.130
Q49.The setting of long-term development goals critical to the success of educational management	4.18	0.845	High	-0.781	0.028
Q50.Educational policies contribute to improving the effectiveness of educational management.	4.12	0.909	High	-0.771	-0.185
Q51.Learning engagement affects the effectiveness of educational management.	4.13	0.807	High	-0.599	-0.303
Q52.Leadership performance evaluation contributes to improving the quality of educational management.	4.06	0.930	High	-0.783	0.026
Q53.Transformational leadership contribute to driving change and innovation in education?	4.14	0.820	High	-0.545	-0.579
Q54.Organizational culture play a key role in educational management.	4.15	0.858	High	-0.732	-0.227
Q55.Staff performance evaluation contributes to improving the quality of educational administration.	4.08	0.941	High	-0.759	-0.204

Variables	$\overline{\chi}$	S.D.	Level	SK	KU
Q56.Funding for academic projects has a significant impact on the promotion of educational research and management effectiveness.	4.10	0.905	High	-0.767	-0.233
Q57.Educational innovation support has a positive impact on improving the effectiveness of educational management.	4.02	0.959	High	-0.826	0.107
Q58.Investment in infrastructure development and improvement has had a positive impact on the provision of appropriate learning environments and the management of educational facilities.	4.16	0.801	High	-0.752	0.289
Q59.Annual expenditure on education has a positive impact on the provision of quality education and the maintenance of the effectiveness of education management.	3.98	0.981	High	-0.794	0.090
Q60.The allocation of teaching materials and educational technology resources contributes to the provision of educational resources required by students and to the improvement of management effectiveness.	4.19	0.798	High	-0.714	-0.075
Q61.How does the school ensure that funds for collaborative projects are allocated and managed effectively	4.20	0.801	High	-0.742	-0.058
Q62.There is a data management system or tool for tracking student progress and achievement	4.16	0.804	High	-0.657	-0.199
Total	62				

As can be seen from table 2, in general, 62 questions are all about arithmetic the average value ($\overline{\chi}$) is between 3.91-4.35, indicating that the respondents have opinions on this level variable value from arithmetic mean ($\overline{\chi}$), from medium to high, standard the deviation (S.D.) is between 0.777- 0.981, indicating that there are great differences among respondents' views on variables. The variable with the largest arithmetic value ($\overline{\chi}$) is variable Q59. Whether annual expenditure on education has a positive impact on the provision of quality education and the maintenance of the effectiveness of education management. Its the arithmetic mean

($\overline{\chi}$) is 3.98, and the standard deviation (S.D.) is 0.981, which shows that the acceptance of this item is relatively consistent among all investigators, and the acceptance is high. It shows that the performance similarity of the surveyed schools in this item is high.

Descriptive statistical analysis was performed on all scale questions Maximum.

The minimum value is between 1-5, indicating that there is no extreme value, and the average value is between 3.91-4.35, indicating that the protocol is high. standard deviation 0.981, indicating that it basically conforms to the normal distribution.

Skewness was a measure of the direction and degree of skewness of statistical data distribution, and a digital feature of the degree of asymmetry of statistical data distribution. Skewness is also known as skewness and skewness coefficient. The characteristic number characterizing the degree of asymmetry of the probability distribution density curve relative to the average value. Intuitively, it is the relative length of the tail of the density function curve. An index describing the distribution state is the skewness coefficient, which can help judge whether the distribution shape of the data set is symmetrical. We generally think that the Skew value is acceptable between- 2

As can be seen from table 4-9, in general, 62 questions are all about arithmetic the average value ($\overline{\chi}$) is between 3.91-4.35, indicating that the respondents have opinions on this level variable value from arithmetic mean ($\overline{\chi}$), from medium to high, standard the deviation (S.D.) is between 0.777- 0.981, indicating that there are great differences among respondents' views on variables. The variable with the largest arithmetic value ($\overline{\chi}$) is variable Q59. Whether annual expenditure on education has a positive impact on the provision of quality education and the maintenance of the effectiveness of education management. Its the arithmetic mean ($\overline{\chi}$) is 3.98, and the standard deviation (S.D.) is 0.981, which shows that the acceptance of this item is relatively consistent among all investigators, and the acceptance is high. It shows that the performance similarity of the surveyed schools in this item is high

Kurtosis is a characteristic number that represents the peak value of the probability density distribution curve at the average value. Describe the kurtosis and steepness of the unimodal distribution curve. Intuitively, kurtosis reflects the sharpness of the peak. The kurtosis of the sample is a statistic compared with the normal distribution. We usually think that Kurtosis values between - 10 and 10 are acceptable. The Kurtosis values in this study are between 0.187 and 1.171. The Kurtosis statistical curve in this study is relatively flat, acceptable, and statistically significant.

Table 3: Shows KMO Meyer Olkin and bartlett's test

KMO and Bartlett's test		
Kaiser Meyer Olkin measure of sampling efficiency		0.922
Bartlett's test of sphericity	Approx. chi square	33973.272
	DF	1891
	Sig	0.000

The KMO test result of the data collected from the study was 0.922.

Kaiser and rice studied KMO (Kaiser Meyer Olkin sampling adequacy measure) Measuring whether the data is suitable for using factor analysis technology when using factor analysis to test validity, the premise of factor analysis is first of all, it needs to be satisfied, that is, there is a strong correlation between projects, which is reflected in two test indicators: 1. Kmo value, 2. Bartlett sphere test value. Among them, KMO Value is used to compare simple correlation coefficient and partial correlation coefficient items, and the value is between 0 and 1. The criteria of factor analysis are: Greater than 0.90, very suitable; 0.70-0.90 is appropriate; 0.60-0.70 is not appropriate; Less than 0.6 is not appropriate. Bartlett sphere test values for   testing. The correlation coefficient between items is significant. If significant (i.e. sig.<0.05), then It is applicable to factor analysis. The analysis at this stage uses the principal component extraction factor.

Table 4: Data analysis result on questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance

Component	Rotation sums of squared Loadings		
	Eigenvalues	% of Variance	% of Cumulative
1	33.853	54.602	24.671
2	3.822	6.165	40.785
3	2.928	4.723	55.197
4	1.865	3.007	64.897
5	1.332	2.149	69.984
Extraction method: principal component analysis			

Show Data Analysis Result on Questionnaire: Eigenvalues, Percentage of Variance,Percentage of Cumulative Variance.

It can be concluded from table 3 that effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province. When the rotation axis explained 69.984% of the total difference. Part 1 has a the maximum eigenvalue is 33.853, which can explain 54.602% of the total variance of each component, and it can explain 24.671% of the total variance. The maximum characteristic value of component 2 is 3.822. It can explain that the total variance of each component is 6.165%, that is, the total variance can be explained by 40.785%. The maximum characteristic value of component 3 is 2.928, It can explain that the total variance of each component is 4.723%. It can explain the total the difference of each component was 55.197%. The maximum characteristic value of component 4 is 1.865, which can explain 3.007% of the total variance of each component, and it can explain 64.897% of the total variance.

Table 5: Shows the factor loads and variables described in each major component after rotating the shaft.

Factor loading					
Variable	Component				
	1	2	3	4	5
Q37	.813				
Q55	.804				
Q50	.804				
Q42	.799				
Q56	.796				
Q54	.789				
Q59	.777				
Q57	.768				
Q39	.744				
Q30	.742				
Q52	.740				
Q40	.729				
Q38	.724				
Q43	.710				
Q41	.693				

Variable	Factor loading				
	Component				
	1	2	3	4	5
Q47	.680				
Q49	.623				
Q26	.620				
Q51	.588				
Q25	.564				
Q46	.544				
Q44	.542				
Q53	.523				
Q45	.518				
Q48					
Q12		.779			
Q11		.763			
Q20		.755			
Q14		.755			
Q19		.749			
Q23		.726			
Q17		.721			
Q18		.711			
Q10		.708			
Q16		.645			
Q13		.636			
Q15		.610			
Q24		.550			
Q36			.824		
Q27			.782		
Q29			.781		
Q31			.762		
Q34			.746		
Q28			.737		
Q21			.726		

Factor loading					
Variable	Component				
	1	2	3	4	5
Q22			.710		
Q32			.668		
Q33			.645		
Q35			.573		
Q8				.746	
Q2				.705	
Q3				.684	
Q5				.634	
Q6				.620	
Q1				.617	
Q9				.555	
Q4				.547	
Q7					
Q61					.708
Q62					.692
Q58					.674
Q60					.560

Table 5 Shows the factor loads and variables described in each major component after rotating the shaft.

According to the research criteria, When the number of variables contained in a dimension is less than 3, the dimension will not be used. Also remove entries with factor loading scores below 0.5 and retained the items with scores higher than 0.5. The elements and related factors of effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province are based on the criteria of selecting components. There are 5 components in total; The first part: 24 variables; The second part: 13 variables; The third part: 11 variables; The fourth part: 8 variables ; The Fifth part: 4 variables。 It shows the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

Table 6 :   Components of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province

Order	Assembly	Number of variables	Factor load
1	Component 1	24	0.518-0.813
2	Component 2	13	0.550-0.779
3	Component 3	11	0.573-0.824
4	Component 4	8	0.547-0.746
5	Component 5	4	0.560-0.708
	All	60	0.518-0.824

According to table 6, there are 5 qualified components as follows; Component 1 contains 24variables that describe the component. Coefficient load is between 0.518-0.813; Component 2 with 13 variables, the coefficient load of the component is between 0.550-0.779; The third part contains 11 variables describing the components, and the factor load is between 0.573-0.824; Component 4 contains 8 variables, describing the load between components and factors of 0.547-0.746. Component 5 contains 4 variables, describing the load between components and factors of 0.560-0.708. The total number of variables describing these five variables is 60 variables, and the factor load is between 0.518-0.824.

Based on the Exploratory Factor Analysis to extract variables to key component variables by Analyze the most likely conditions. The researcher summarized the 5 components as shown in Figure1.
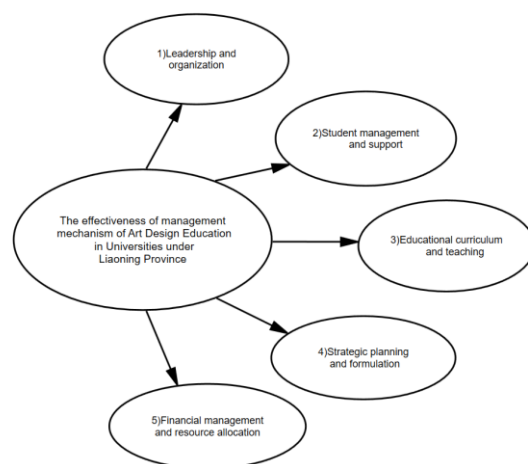
Figure 1 The factors influencing the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

There are 44 guiding principles for the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province：

1. Leadership and organization consist of 11 management mechanism

1) Set up a special art and design education management team composed of senior educators and art and design experts to ensure effective coordination and promotion of management work.

2) A clear vision and long-term goal for education to ensure that college art and design education is in line with industry needs and future trends.

3) Develop comprehensive educational quality standards to simplify and improve the quality of education, including teaching, academic research and student development.

4) Establish an interdisciplinary cooperation mechanism to promote collaboration between different disciplines and create interdisciplinary art and design education courses and research projects.

5) Ensure the transparency of decision-making, through an open decision-making process and consultation, so that all stakeholders have the opportunity to participate in management decisions.

6) Establish effective education system evaluations, including student performance evaluations, teacher evaluations, and graduate tracking, to provide quantitative data on the quality of education.

7) Hold regular faculty meetings, listen to teachers' opinions and suggestions, and promote communication and opinions.

8) Promote digital education and invest in modern educational technologies and online learning resources to meet different learning needs.

9) Develop teacher development plans and provide training and development opportunities to improve educational standards and skills.

10) Strengthen international cooperation, establish international exchange programs and partnerships, and provide students with international learning opportunities.

11) Regularly evaluate and update management policies to adjust and improve them according to school needs and best practices.

2. Student management and support consist of 9 management mechanism

1) A student counseling center was established to provide students with mental health counseling, career planning, and academic support.

2) Programs and bursaries are provided to support talented students and encourage them to pursue further opportunities in the field of art and design.

3) Encourage international exchange and provide international exchange programs to develop students' international perspective and cross-cultural communication skills

4) Create a student Art and Design association, promote exchanges and cooperation among students, and organize art exhibitions and events.

5) Implement student assessment and follow-up mechanisms to monitor students' academic progress and personal development, and provide timely intervention and support

6) Provide career counseling and internship opportunities to help students transition smoothly into their careers and build school-industry partnerships

7) Establish a mentor system where each student is assigned a mentor to provide academic and career guidance.

8) Establish a student innovation lab to provide students with places and resources for innovative and experimental projects.

9) Students are encouraged to participate in school decision-making, and student representative bodies are set up to allow students to express their opinions in school affairs.

3. Educational curriculum and teaching consist of 12 management mechanism

1) Regularly evaluate course content to ensure that art and design courses are in line with industry trends and technological developments.

2) Introduce hands-on teaching, including workshops, project-driven teaching and field trips to provide students with hands-on experience.

3) Interdisciplinary teaching is encouraged, integrating art and design with other disciplines (such as science, engineering, business, etc.) to foster innovative thinking.

4) Adopt modern educational technologies such as virtual reality and online learning platforms to provide diverse learning resources.

5) Experimentation and innovation are encouraged, and students are involved in research projects and design activities that foster creativity.

6) Dedicated art and design laboratories and studios are set up to provide students with places and resources to create and experiment.

7) Regular art exhibitions and presentations are organized to encourage students to share their creations and be evaluated by peers and the public.

8) International education, providing foreign language courses and international academic support exchange opportunities to cultivate students' international perspective.

9) Establish teaching evaluation standards to improve teacher effectiveness, including student feedback and peer review

10) Students are encouraged to engage in social practice, working with industry and the community to apply art and design knowledge to solve practical problems.

11) Set up a professional tutor system to provide students with unique academic and career guidance.

12) Provide research opportunities, encourage students to participate in academic research projects, and develop independent research skills.

4. Strategic planning and formulation consist of 7 management mechanism

1) Strategic goals for art and design education are established, including specific goals for academic excellence, student development, and social impact.

2) Develop close links with industry and industry partners to ensure that art and design education is aligned with market needs and provides employment opportunities for students.

3) Encourage innovation and experimentation to provide space for new approaches and technologies in education to meet changing needs.

4) Ensure engagement and discussion of strategic planning, including broad participation from school leaders, teachers, students and industry representatives.

5) Develop resource allocation strategies to ensure that the strategic plan is supported by adequate financial and human resources.

6) Focus on innovation in education and research and ensure that strategic planning includes goals and programs that support education and research.

7) Promote international development, formulate international cooperation strategies, and expand opportunities for international exchanges and cooperation.

5. Financial management and resource allocation.

1) Establish a transparent financial management system to ensure the transparency and fairness of financial decisions, so that the majority of stakeholders can understand the allocation and use of resources.

2) Develop a detailed financial plan and budget, including spending on education, research, and student support, to ensure that resources are allocated in line with the school's strategic objectives.

3) Develop criteria for resource allocation to ensure that resource allocation is equitable and based on academic and educational needs.

4) Optimize the use of resources to ensure that limited resources are fully utilized by integrating resources, saving costs and improving efficiency.

5) Establish a transparent financial management system to ensure the transparency and fairness of financial decisions, so that the majority of stakeholders can understand the allocation and use of resources.

5. Conclusions

Through content analysis. After data collection, content analysis will be conducted to analyze the collected data. From the perspective of research objectives, the main findings are as follows:

1. The research findings were: there were five components effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province which consisted of Leadership and organization, Student management and support, educational curriculum and teaching, Strategic planning and formulation, and Financial management and resource allocation.

2. There are 44 guiding principles for the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province.

6. Discussion

1.Components in the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province

There are 5 components in the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province Researcher study is in line with Joseph M Juran. (2003), "quality planning, quality control, and quality improvement": "Quality is a kind of applicability, and the so-called applicability Fitness for use refers to making the product meet the user's needs during use. Quality management is the management in the production practice to meet this suitability. Researcher study in line with the theory or research findings of Chinese scholars Liu Wei and Liu Guoning (2005) pointed out in the book "Quality Management" is quality management is to determine the policy, objectives and responsibilities and make them in the quality system through such as quality planning, quality control, quality

assurance and quality improvement All activities of all management functions implemented
.

Researcher study in line with the theory or research findings of Wang Shunji (2014) the uniqueness of decision-making should be based on mobilizing the enthusiasm of teachers and students, and try our best to meet the needs of students, promote the development of teaching, and promote the development of students' personality Cultivate excellent socialist successors.There are many factors that determine the success or failure of education, and the development of students is also affected by many factors, which does not depend on the teacher's personal will. But in a college, there are rules to follow whether a teacher's educational work may succeed or fail. Success is like war. Successful education is predictable. Whether a university's educational management mechanism is effective or not can be observed from two aspects of education and teaching. However, the effectiveness of curriculum management is reflected in the causes of education and teaching. They are also multifaceted, complement each other and cannot be completely separated.

Researcher study is in line with Zhao Yang(2015) The effectiveness of teaching management refers to the process of optimizing teaching activities by utilizing the functions of teaching management, rationally allocating various teaching resource elements, innovating teaching management methods to improve teaching management level, so as to effectively manage and fully realize the teaching management of higher normal colleges target, and Zhu Zhonghua (2022) , the effectiveness of teaching management in colleges and universities refers to the use of decision-making, organization, coordination and other functions of teaching management to optimize the process of teaching activities, rationally allocate various resource elements in the process of teaching activities, stimulate the vitality of teaching management, and improve the efficiency and level of teaching management. "Effective management" to maximize the realization of the teaching management goals of colleges and universities. To measure the effectiveness of teaching management in colleges and universities is essentially to examine the degree of realization of teaching management goals in colleges and universities. For teaching managers at all levels in colleges and universities, it is an important prerequisite to improve the effectiveness of teaching management in colleges and universities to clarify the goals of their teaching management activities. The relationship between this goal and other goals in order to achieve relative coordination and balance between goals.

Researcher study is in line with Zhu Zhonghua (2022), the effectiveness of the education management mechanism of art design in colleges and universities refers to the use

of decision-making, organization, coordination and other functions of teaching management to optimize the teaching activity process, rationally allocate various resource elements in the teaching activity process, stimulate the vitality of teaching management, and improve the efficiency and level of teaching management. , so as to maximize the realization of the teaching management goals of colleges and universities through "effective management". The essence of measuring the effectiveness of teaching management in colleges and universities is to examine the degree of realization of teaching management goals in colleges and universities. For teaching managers at all levels in colleges and universities, it is necessary to clarify the goals of their teaching management activities.

Researcher study is in line with Zhao Tingting. (2002), Zhao Tingting's article introduces three quality concepts of mass higher education in western countries, namely "suitability for purpose", "meeting consumers' wishes and needs", and "value added". It should be said that these three quality concepts have different degrees of internal connection with the adaptive quality concept. "Purpose suitability means that the standard for measuring the quality of education and teaching should be the corresponding behavioral goals set at the beginning." "Conforming to consumers' wishes and needs" is a typical adaptive quality concept. "Value appreciation" refers to "if the achievements and behaviors of students before entering higher education and after receiving higher education can be measured, then the greater the change between the two, the more value will be added, and the quality of education and teaching will also increase." the better

2.Guidelines to improve effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province

The guidelines of the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province can be divided into 5 parts, a total of 44 guidelines. The guidance given by these five experts includes Develop comprehensive educational quality standards to simplify and improve the quality of education, including teaching, academic research and student development、 encourage international exchange and provide international exchange programs to develop students' international perspective and cross-cultural communication skills、 Interdisciplinary teaching is encouraged, integrating art and design with other disciplines (such as science, engineering, business, etc.) to foster innovative thinking、 Focus on innovation in education and research and ensure that strategic planning includes goals and programs that support education and research、 Establish a transparent

financial management system to ensure the transparency and fairness of financial decisions, so that the majority of stakeholders can understand the allocation and use of resources and so on.These opinions on management mechanism are consistent with Cai Keyong(2001), Zhao Tingting. (2002), Xiao Zong Liu (2001), Zhu Zhonghua (2022), and on the basic needs of management mechanism of Art Design Education in Universities under Liaoning Province are also highly consistent.

7. Recommendations

Recommendation for Policies Formulation

1. Ensure efficient coordination of college art design education management system

2. Provide comprehensive support for students

3. Regularly update the curriculum, adopt diversified teaching methods, and provide teacher training

4. Make a clear long-term plan

5. Ensure financial support and establish transparent resource allocation policies

8. Limitations and Further Research

There are further studies on the management and application of art design education in colleges and universities in Liaoning Province. The contents are as follows:

1) Further expand the sample size in order to more accurately understand the work content of the leaders and organizations of colleges and universities in Liaoning Province.

2) Comparative study:

1. Compare the management of art design education in different colleges and universities in Liaoning Province, and understand their policies and implementation methods. Analyze the specific situation of each university, compare all aspects, from light to heavy, more accurately analyze the effectiveness of policies among universities and find the best policy plan.

2. Carry out comparative research on different provinces and cities, repeatedly compare colleges and universities of the same type, and verify and analyze similar research topics, so as to find out the optimal plan.

3) Expand the questionnaire survey area and target range, and master a large number of reliable data for analysis.

4) Based on the exploratory factor (EFA) analysis for the effectiveness of the management mechanism of art design education in colleges and universities in Liaoning Province.

BIbliography

Cai Keyong. (2001). **Popular Quality View: Combination of Diversity and Unity.** Higher Education Research, p7-8.

Joseph M Juran. (2003). J**uran Quality Manual.** Renmin University of China Press.

Liu Wei, Liu Guoning. (2005). **Quality Management.** China Yanshi Publishing House.

Wang Shunji. (2014). **Discussion on Suggestions for Improving the Effectiveness of University Teaching Management, Frontiers of Theory.**

Xiao Zongliu. (2001). **School Management.** People's Education Press.

Zhao Yang. (2015). **Coping Strategies to Improve the Effectiveness of Teaching Management in Colleges and Universities.** Journal of Party School of Jinan Municipal Committee of the CPC.

Zhu Zhonghua. (2022). **On the Influencing Factors and Countermeasures of the Effectiveness of Teaching Management in Colleges and Universities**.

Zhao Tingting. (2002). **The Change of Quality View of Higher Education from Elite to Popular, Jiangsu higher education**.

Xiao Zongliu. (2001). **School Management.** People's Education Press.

Factors Affecting Students' Talent Model in Product Design Major
in Universities of Zhuhai City, Guangdong Province

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ABSTRACT

The objectives of this research were: (1) To study the components of the students' talent of the Product major design in universities of Zhuhai City; (2) To development the model of factors affecting students' talent model in the Product major design in universities of Zhuhai City; and (3) To verify the mediators affecting on the relationship between the educational policy factor and the students' talent in the Product major design in universities of Zhuhai City, People's Republic of China.

The population for this research were teachers working in the academic year 2023 at five higher education institutions in Zhuhai city, Guangdong Province, totaling 3,622 teachers. The sample determined by G*Power software total 567 teachers and obtained by proportional stratified random sampling method. The data collection by a five score rating questionnaire. The statistic analyzed by Confirmatory Factor Analysis and Structural Equation Modeling techniques.

The research found that:(1) the components of the students' talent of the Product major design in universities of Zhuhai City were 4 components namely; multidisciplinary knowledge, teamwork and communication skills, problem-solving abilities and creative thinking skills, there were at moderate to high level. (2) The model of factors affecting students' talent model in the product major design in universities of Zhuhai City was fit well with empirical data (Chi-square=405,944, df=163, chi/df=2.490, TLI=.969, GFI=.929, CFI=.974, RMSEA=0.051); the educational policies, curriculum settings, teaching resources, and teacher competence there were significantly effect to students' talent in the Product major design (p<.01). and (3) The

educational policy factor had positive direct effect to the students' talent in the product major design in universities of Zhuhai city and had indirect effect through curriculum settings, teaching resources, and teacher competence, there were mediating variables effected.

Keywords: Product major design, Mediating effect, Educational policies, Students' talent

1. Introduction

Over the past few decades, higher education has shifted from a simple knowledge transfer approach to prioritize holistic student development, emphasizing practical skills to meet diverse societal needs. This shift is especially critical in fields like design, where students require not only theoretical knowledge but also problem-solving abilities and innovative thinking. However, traditional educational models often struggle to adapt to rapidly evolving societal and industrial demands. Therefore, thorough investigation and reform were necessary to address these emerging challenges. Among various design disciplines, product design programs receive significant attention due to their broad applicability and practical nature. The core objective of product design education is to cultivate students' capacity to translate creativity into viable products, encompassing skills like innovative thinking, technological application, market analysis, and user experience design. Higher education institutions need to explore more hands-on pedagogical approaches to better align with the needs of product design programs.

The central aim of this study was to deeply analyze and understand the key factors influencing the student talent model in product design programs in Zhuhai's higher education institutions. By comprehensively considering factors such as educational policies, teaching resources, faculty capabilities, and curriculum design, this research aims to reveal the interrelationships among these elements and their impact on the holistic development of student competencies. This study holds implications not only for academic endeavours but also for practical outcomes, directly affecting the effectiveness of higher education talent cultivation and its societal influence. Through this extensive investigation, insights will be gained on how to cultivate individuals equipped with interdisciplinary skills and innovative thinking, there by contributing to innovation in society.

Drawing upon researcher had seventeen years of experience as a senior educator in the field of higher education product design, the importance of nurturing exceptional design talents. Therefore, the value of this research lies in its in-depth exploration and systematic analysis of factors affecting the students' talent model, providing more scientific and rational guidance for higher education talent cultivation. Through this comprehensive investigation, the

research will offer valuable guidance for the reform of teaching and talent cultivation in higher education on product design programs. Additionally, the outcomes of this study will provide a fresh perspective on talent cultivation in the academic realm, bridging existing research gaps and offering valuable insights for related research endeavours. While the study primarily focuses on higher education product design programs in Zhuhai city, its results will undoubtedly have a positive impact on a broader range of higher education talent cultivation initiatives.

2. Research Questions

1. What are the components of the students' talent in the product design major in universities of Zhuhai City?

2. What is the model of factors affecting students' talent in the product design major in universities of Zhuhai City?

3. What are the mediating factors effect to the relationship between the educational policy factors and the students' talent in the product design major in universities of Zhuhai city?

3. Research Objectives

1. To study the components of the students' talent model in the product design major in universities of Zhuhai city.

2. To development the model of factors affecting students' talent model in the product design major in universities of Zhuhai city.

3. To verify the mediating effect on the relationship between the educational policy factor and the students' talent in the product design major in universities of Zhuhai city.

4. Research Hypothesis

H1: Educational policies had a positive direct effect to students' talent in the product design major in universities of Zhuhai city.

H2: Teaching resources had a positive direct effect to students' talent in the product design major in universities of Zhuhai city.

H3: Teacher competence had a positive direct effect to students' talent in the product design major in universities of Zhuhai city.

H4: Curriculum settings had a positive direct effect to students' talent in the product design major in universities of Zhuhai city.

H5: Educational policies had a positive direct effect to teaching resources in the product design major in universities of Zhuhai city.

H6: Educational policies had a positive direct effect to teacher competence in the product design major in universities of Zhuhai city.

H7: Educational policies had a positive direct effect to curriculum settings in the product design major in universities of Zhuhai city.

H8: Educational policies had an indirect effect to students' talent via teaching resources in the product design major in universities of Zhuhai city.

H9: Educational policies had an indirect effect to students' talent via teacher competence in the product design major in universities of Zhuhai city.

H10: Educational policies had an indirect effect to students' talent via curriculum settings in the product design major in universities of Zhuhai city.

Conceptual Framework
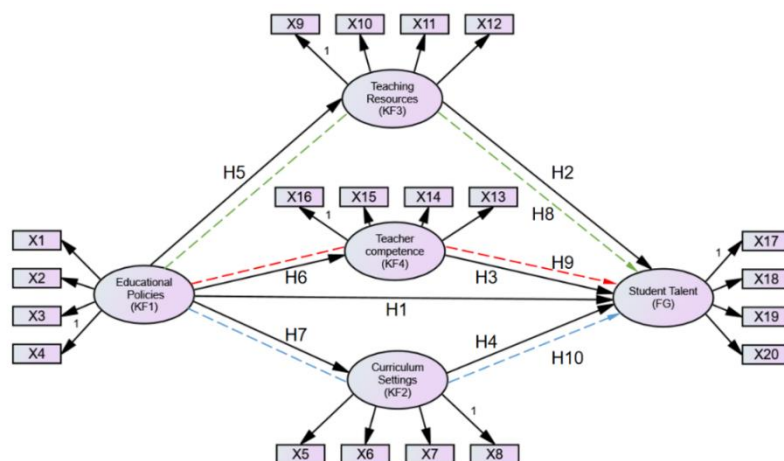
Figure 1 Conceptual framework of this research

5. Methodology

Research Design

This research was divided into three parts based on the research objectives:

Part One: Investigating the components of the students' talent model in the product design major in universities of Zhuhai City. In this part, extensive literature review and content analysis will be conducted to identify the constituent elements of the students' talent model in the product design major and study the factors that affecting the students' talent.

Part Two: Developing the model of factors affecting the students' talent in the product design major in universities of Zhuhai City, including educational policies, teaching resources, curriculum settings, and teacher competence. This part researcher used five rating scale questionnaires for correction data with the teachers in the product design major. the data analyzed by confirmation factor analysis and structural equation model.

Part Three: decompose on the factors affecting the students' talent model in the product design major in universities of Zhuhai City, and hypothesis testing for the effect of educational policies, teaching resources, curriculum settings, and teacher competence on the students' talent, and verified direct and indirect effect or mediating effect of factors affecting the students' talent model in the product design major in universities of Zhuhai City.

Population and sample

The population for this research were the teachers working in academic year 2023, from five higher education institutions in Zhuhai city, Guangdong Province. The total number was 3,622 teachers. The sample was 567 teachers which calculated by G*power software and used proportional stratified random sampling technique.

Instruments

The instrument for this research was a rating 5-point questionnaire. The questionnaire was divided into main 2 parts:

Part I: For the basic information of the respondents on 5 items; includes gender, age, educational background, position tittle and work experience.

Part II: A total of 60 questionnaires about component of students' talent in product design major, including the factor of educational policies, teaching resources, curriculum settings, and teacher competence. There were validity (IOC) of each item between 0.60 - 1.00, and reliability by Cronbach alpha coefficient of each factors between .89 - .97

Data Collection

This research conducted data collection through a questionnaire star application survey on the teachers involved in the Product Design major at five higher education institutions in Zhuhai City, Guangdong Province, during the 2023 academic year. The questionnaire was distributed to teachers through various channels, including online survey websites, email, and WeChat.

Data analysis

1.Descriptive statistics

In this research, the data analyzed by SPSS software for descriptive statistical, including frequency, percentage, mean, standard deviation, coefficient of variation (%CV), Skewness, Kurtosis, Madia's coefficient, and Pearson correlation.

2．Measurement model analysis

The measurement model analysis was conducted using the AMOS software. Model evaluation involved the chi-square test to assess the fit of the models to the empirical data, included chi-square, degrees of freedom, standardized root mean square residual (SRMR), root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis index (TLI), p-value close, and structural equation model.

6. Results

1) Demographic statistics

Table 1 Demographic statistics for samples:

Information		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Female	269	47.4	47.4	47.4
	Male	298	52.6	52.6	100.0
	Total	567	100.0	100.0	
Age	25-34	152	26.8	26.8	26.8
	35-44	205	36.2	36.2	63
	45-54	101	17.8	17.8	80.8
	More than 55	109	19.2	19.2	100
	Total	567	100	100	
professional title	Teaching assistant	166	29.3	29.3	29.3
	Lecturer	251	44.3	44.3	73.5
	Associate Professor	92	16.2	16.2	89.8
	Professor	58	10.2	10.2	100.0
	Total	567	100.0	100.0	
education background	Undergraduate	40	7.1	7.1	7.1
	Master	268	47.3	47.3	54.3
	Doctor	163	28.7	28.7	83.1

Information		Frequency	Percent	Valid Percent	Cumulative Percent
	Others	96	16.9	16.9	100.0
	Total	567	100.0	100.0	
Experience	< 5 Years	136	24.0	24.0	24.0
	5 – 10 Years	186	32.8	32.8	56.8
	10 – 15Years	193	34.0	34.0	90.8
	>15 Years	52	9.2	9.2	100.0
	Total	567	100.0	100.0	

Table 4.1; the basic information of respondents on gender majority was male at 52.60%; Age between 35-44 years as 36.20%, Professional tittle was lecturer at 44.30%, Educational background was master degree at 47.30% and Experience was 10-15 years at 34.0%

2) Multivariate normality assessment

Tables 2 Descriptive data for all observed variables

Variable	indicator	$\overline{X}$	S.D.	CV	skewness	kurtosis	Shapiro-Wilk W	p.
KF01	X1	3.24	0.944	29.14%	-.076	-.936	.965	<.001
	X2	3.16	1.007	31.84%	-.021	-.956	.964	<.001
	X3	3.31	0.922	27.86%	.050	-1.045	.956	<.001
	X4	3.39	0.883	26.07%	-.069	-.898	.964	<.001
KF02	X5	3.37	0.891	26.43%	-.101	-.895	.958	<.001
	X6	3.33	0.890	26.74%	-.084	-.812	.966	<.001
	X7	3.37	0.905	26.83%	-.120	-.789	.959	<.001
	X8	3.30	0.899	27.26%	-.016	-.759	.965	<.001
KF03	X9	3.25	0.873	26.83%	.068	-.740	.967	<.001
	X10	3.18	0.933	29.32%	.075	-.684	.970	<.001
	X11	3.26	0.856	26.27%	-.026	-.807	.966	<.001
	X12	3.28	0.840	25.57%	.048	-.788	.963	<.001
KF04	X13	3.47	0.832	24.01%	-.188	-.712	.963	<.001
	X14	3.26	0.941	28.91%	.069	-.796	.965	<.001
	X15	3.43	0.859	25.03%	-.098	-.759	.962	<.001

Variable	indicator	$\overline{X}$	S.D.	CV	skewness	kurtosis	Shapiro-Wilk	
							W	p.
	X16	3.44	0.820	23.87%	-.072	-.883	.958	<.001
	X17	3.63	0.910	25.09%	-.668	-.155	.941	<.001
FG05	X18	3.63	0.826	22.73%	-.424	-.194	.965	<.001
	X19	3.48	0.901	25.90%	-.363	-.546	.964	<.001
	X20	3.46	0.853	24.65%	-.240	-.749	.967	<.001

Tables 2 presents descriptive statistics for all observed variables used in the research, labeled as X1 through X20. There were mean between 3.16-3.63 at moderate to high level, the skewness were between -.098 to -.668, kurtosis were between -.155 to -1.045 and shapiro-wilk was significant at .001, that show on the indicators   distribution with normal curve patterns.

Table 3 The Square Matrix of Intercorrelation Between Latent Variables

Latent Variables	KF01	KF02	KF03	KF04	FG05
KF01	1				
KF02	.364**	1			
KF03	.379**	.335**	1		
KF04	.348**	.442**	.342**	1	
FG05	.571**	.586**	.550**	.563**	1

. Correlation is significant at the 0.01 level (2-tailed).

In this study, the latent variables had the intrecorrelation among latent variables: KF01, KF02, KF03, KF04, and FG05. there were correlation between .335 to .586 with statistical significance at .01 level.

3) Measurement model

In the measurement models specification in this research, the researcher identified five factors: (1) Educational policies (KF01), (2) Curriculum Settings (KF02), (3) Teaching resources (KF03), (4) Teacher competence (KF04), and (5) Students' talent (FG05). Additionally, there were 20 observed variables: X1-X20. as figure 2
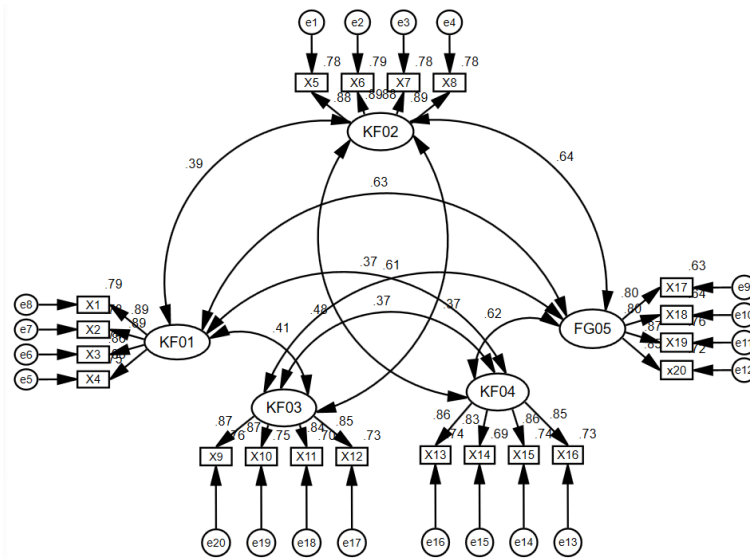
Chi-square= 290.847, Df=160, p.= .000, Chi/df= 1.818,
TLI= .983, GFI= .949, CFI= .986, RMSEA= .038

Figure 2 The Measurement Model in Standardized estimates.

The figure 2 the measurement model of factors affecting the students' talent model in the product design major in universities of Zhuhai City fit well with empirical data (Chi-square=405,944, Df=163, Chi/Df=2.490, TLI=.969, GFI=.929, CFI=.974, RMSEA=0.051).

Table 4 Measurement model fit valuation after modifying.

Measure	Estimate	Threshold	Interpretation
CMIN	290.847	--	--
DF	160	--	--
CMIN/DF	1.818	1-3 Excellent,3-5 Acceptable	Excellent
CFI	0.986	>0.95 Excellent, >0.9 Acceptable	Excellent
GFI	0.949	>0.95 Excellent, >0.9 Acceptable	Excellent
TLI	0.983	≥0.90 Excellent, >0.8 Acceptable	Excellent
RMSEA	0.038	<0.05 Excellent, <0.08 Acceptable	Excellent
P-Close	0.355	>0.05	Excellent

4) Test for the quality of measurement model

Table 5 The results of validity analysis

	CR	AVE	MSV	MaxR(H)	KF02	KF03	KF01	KF04	FG05
KF02	0.936	0.784	0.404	0.936	**0.885**				
KF03	0.917	0.734	0.368	0.918	0.365***	**0.857**			
KF01	0.929	0.766	0.398	0.930	0.394***	0.411***	**0.875**		
KF04	0.914	0.727	0.380	0.915	0.476***	0.369***	0.372***	**0.853**	
FG05	0.899	0.690	0.404	0.903	0.636***	0.606***	0.631***	0.617***	**0.831**

In order to identifying the latent variable composite reliability was between .899 to .936 (CR≥0.70), MSV less than AVE and the MaxR(H)>CR, and to identifying the convergent validity of the AVE≥0.50, to identify the discriminant validity by the method of Fornell & Larcker(1981,pp,39-50), the square root of AVE of latent variables must be more than its shared variance to other latent variables.

Table 6 HTMT Analysis

	KF02	KF03	KF01	KF04	FG05
KF02					
KF03	0.36				
KF01	0.389	0.408			
KF04	0.478	0.371	0.373		
FG05	0.639	0.604	0.622	0.62	

the HTMT analysis results indicate that the latent factors in the study generally possess good discriminant validity, implying their conceptual independence and minimal susceptibility to substantial cross-factor contamination. These findings hold important implications for confirming the soundness and efficacy of the measurement model, further solidifying the reliability and validity of the study.

5) Structural Equation Model
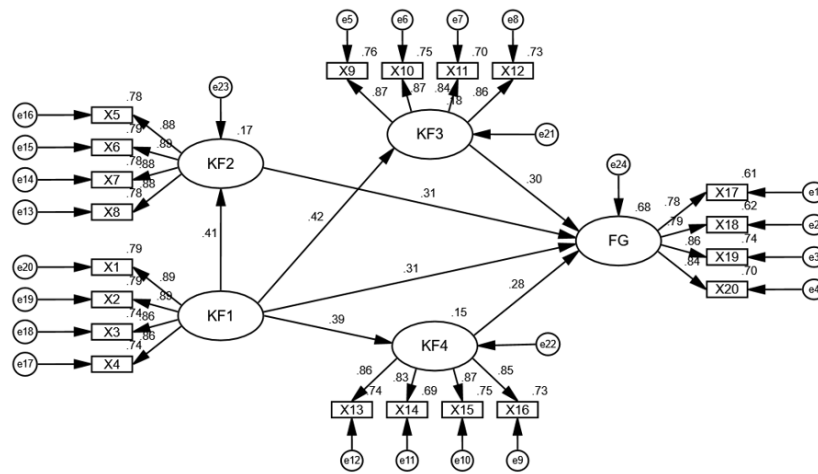
Chi-square= 405.944, Df= 163, P.=0.000,Chi/Df=2.490
TLI=.969, GFI=.929,CFI=.974, RMSEA=0.051

Figure 3 Structural Equation Models and Model Evaluation in Standardized

The assessment of the structural model's fit revealed the following goodness-of-fit statistics: the chi-square statistic resulted in a value of 405.944 with 163 degrees of freedom (Df), yielding a p-value of 0.000. The ratio of chi-square to degrees of freedom (Chi/Df) was calculated as 2.490. Additional fit indices included the Tucker-Lewis Index (TLI) at 0.969, the Goodness of Fit Index (GFI) at 0.929, the Comparative Fit Index (CFI) at 0.974, and the Root Mean Square Error of Approximation (RMSEA) at 0.051.The computed fit indices collectively indicated an acceptable level of fit for the structural equation model. And show the hypothesis testing as the table 7

Table 7 The hypotheses testing of direct effects

Relationship			Unstd.	Std.	S.E.	C.R.	P.	Hypothesis
FG	<---	KF1	0.284	0.313	0.035	8.161	***	H1
FG	<---	KF3	0.269	0.296	0.034	8.029	***	H2
FG	<---	KF4	0.276	0.280	0.037	7.52	***	H3
FG	<---	KF2	0.271	0.312	0.033	8.314	***	H4
KF3	<---	KF1	0.424	0.424	0.044	9.615	***	H5
KF4	<---	KF1	0.36	0.391	0.041	8.753	***	H6
KF2	<---	KF1	0.43	0.412	0.046	9.396	***	H7

Significance Indicators: ***p<0.010 (Gaskin& Lim, 2018)

The analysis of Table 7 reveals that all the direct hypotheses (H1 to H7) exhibit statistically significant effects based on their C.R. values and significance indicators. The standardized path coefficients further elucidate the strength and direction of these direct relationships among latent variables.

Table 8 The decomposition on the indirect effects

Indirect path	Std.	95% C.I		Hypotheses
		Lower	Upper	
KF1-->KF2-->FG	0.128	0.088	0.182	H8
KF1-->KF3-->FG	0.126	0.084	0.174	H9
KF1-->KF4-->FG	0.110	0.069	0.160	H10

Table 8 displays the indirect effects of educational policy factor (KF1) obtained through curriculum settings(KF2), teaching resources(KF3), teacher competence(KF4) to students' talent of Product Design majors in universities in Zhuhai City, The outcomes of these effect decomposition analyses provide pivotal insights into the mediation roles of various intermediary variables under different hypotheses.

7. Conclusion

1) The factor affecting model of the students' talent of Product Design majors in universities in Zhuhai City, including educational policies, curriculum settings, teaching resources, teacher competence. The overall there were at moderate to high level.

2) The model of the students' talent of Product Design majors in universities in Zhuhai City, when using structural equation model analysis, demonstrated a strong fit with empirical data.

3) The educational policies factor; curriculum settings factor, teaching resources factor and teacher competence factor had positive direct effect on students' talent with statistical significant (p<.001 level), and the educational policy factor had indirect effect on the students' talent of product design major through curriculum settings factor, teaching resources factor and teacher competence factor, there were mediators variables or the mediating effects on path analysis.

8. Discussion

From the literature, it can be observed that research primarily encompasses various aspects of the students' talent model, such as curriculum settings, teaching resources, teacher competence, and educational policies. However, the cross-interactions and combined effects of these factors have been relatively underexplored. Existing literature emphasizes the significance of each individual factor in nurturing student talent according studies by Sun et al. (2023), Zhang and Jiang (2005), Huang and Wang (2009), among others, underscore the crucial role of educational policies in fostering an environment conducive to diverse student development. Moreover, investigations by Hou (2013) and Gao (2013) highlight the importance of curriculum settings and teaching resources in enhancing student engagement and learning experiences.

These research often concentrate on specific dimensions of the students' talent model, occasionally overlooking the overall interactions among influencing factors. In contrast, the present researchers have adopted a comprehensive approach by simultaneously investigating all relevant factors and their interrelationships. This holistic perspective enables a more comprehensive understanding of the factors influencing student talent development in the context of product design education. By comprehensively considering the relationships between educational policies, teaching resources, teacher competence, curriculum settings, and student talent, we construct more comprehensive students' talent model. Through this comprehensive research approach, we gain a better understanding of the interconnections among these influencing factors in practical applications. This research not only uncovers the direct impacts of each influencing factor on student talent but also reveals indirect pathways of educational policies influence on students' talent, the researcher identify the significant mediating roles of teaching resources, teacher competence, and curriculum settings. This finding enhances our comprehension of the intricate relationships between different influencing factors and provides substantial evidence for optimizing student talent development in the future.

9. Recommendations

Based on the conclusions drawn from the analysis of factors affecting the students' talent model in the Product Design major, the following targeted recommendations are proposed to further enhance the cultivation of students' talent in this field:

1. Enhance Support for Relevant Educational Policies:

Government and educational authorities should increase their support for Product Design education. Encouraging the establishment of dedicated funds, scholarships, and sponsorship programs, as well as innovative projects in collaboration with enterprises, can motivate students to engage actively in learning and innovation. Additionally, the implementation of monitoring and evaluation mechanisms for these policies is essential to ensure their effective execution and continuous improvement.

2. Optimize Teaching Resources:

Institutions should invest more in Product Design education by updating and upgrading teaching facilities and software/hardware equipment. Creating advanced laboratories and studios, providing abundant teaching materials and reference books, and offering opportunities for practical learning can enrich students' hands-on experience. Collaborating with enterprises to introduce cutting-edge technology and practical experiences into teaching enhances the practicality and applicability of the resources.

3. Foster Faculty-Student Exchange and Collaboration:

Organizing academic exchange activities between faculty and students and inviting industry professionals to guide student projects can increase students' exposure to real-world projects. This deepens their understanding of the Product Design industry, enhances their creative and presentation skills, and personalized mentorship by assigning teachers as mentors can help students develop their potential more effectively.

4. Strengthen Practical Course Components:

Schools should continuously optimize the curriculum based on market demands and industry trends, placing a strong emphasis on practical teaching. Incorporating hands-on project courses and internship components allows students to apply theoretical knowledge in practical contexts and cultivate problem-solving abilities. Collaborating with enterprises to introduce real-world projects into the curriculum enables students to learn and develop within authentic industry projects, boosting practical experience and work-related skills.

5. Elevate Faculty Professional Development:

Encouraging faculty participation in industry training and academic exchanges is crucial for improving teaching quality and design expertise. A skilled faculty team provides a conducive learning environment and academic guidance. Instituting a faculty reward system can incentivize excellence in teaching and research accomplishments.

6. Establish Industry-Academia Research Collaboration Platforms:

Actively collaborating with enterprises and research institutions to establish industry-academia research platforms is beneficial. Engaging in real-world projects through

collaboration with enterprises enhances students' understanding of industry demands and improves practical capabilities and professional knowledge. Establishing industry-academia research bases offers more practical opportunities and innovation platforms, promoting a deeper integration of academia, industry, and research.

7. Enhance Industry-Oriented Education:

Schools should closely monitor the evolving trends of the Product Design industry and adjust the curriculum accordingly to ensure alignment with industry practices. Introducing industry professionals to teach practical skills helps students adapt better to their careers. Involving industry experts in curriculum design and teaching deepens industry-oriented education in terms of depth and breadth.

8. Encourage Student Engagement in Social Practices:

Encouraging students to actively participate in social practice activities, such as engaging in enterprise project activities or social welfare initiatives, enhances their societal experiences and problem-solving abilities. Instituting a reward system for student engagement in social practices acknowledges and rewards their proactive involvement.

9. Provide Innovation and Entrepreneurship Platforms:

Establishing guidance and platforms for students with innovation and entrepreneurial aspirations encourages them to undertake innovative projects in the Product Design domain. Creating innovation and entrepreneurship incubation centers that offer resources and support fosters a conducive environment for student entrepreneurship.

10. Foster Industry Collaboration Mechanisms:

Schools should establish mechanisms for collaboration with enterprises and industry associations, strengthening industry-academia collaboration and achieving a close relationship between academia and industry. Enterprises provide practical platforms and project resources, while schools offer technical support and talent cultivation, fostering a win-win collaboration. These mechanisms promote a deeper integration of academia, industry, and research, enhancing student engagement in real-world projects and practical capabilities.

In conclusion, by strengthening policy support, optimizing teaching resources, enhancing faculty competence, and implementing industry-oriented education, the cultivation of student talent in the Product Design major can be significantly improved. Encouraging faculty-student exchange and collaboration, establishing industry-academia research collaboration platforms, enhancing the practicality of the curriculum, contributes to students' better integration into industry practices, laying a solid foundation for their future careers. Collaborative efforts among schools, government bodies, and enterprises are essential to

continuously innovate and enhance the student talent model in Product Design, making valuable contributions to industry development and societal progress. Only through continuous optimization and improvement of the educational system for Product Design can we cultivate more outstanding talents who can adapt to the rapidly changing market demands and technological advancements, contributing positively to societal innovation and progress.

10. Recommendation for Further Research

While this study has provided valuable insights into the factors affecting the student talent model in the Product Design major, there are several avenues for further research that can contribute to a deeper understanding of this field. The following recommendations highlight potential areas of research for future scholars:

1) Longitudinal Studies: Conducting longitudinal studies to track students' development and career trajectories in the Product Design field over an extended period. This would provide insights into the long-term impact of educational policies and curriculum changes on students' talent and career outcomes.

2) Cross-Cultural Comparative Studies: Exploring cross-cultural differences in the factors influencing student talent in Product Design. Comparative studies involving universities in different regions or countries can reveal how cultural and contextual factors affect talent development.

3) Impact of Technological Advancements: Investigating how emerging technologies, such as artificial intelligence and virtual reality, influence Product Design education and talent development. This research can assess the integration of these technologies into the curriculum and their impact on students' skill sets.

4) Assessment Methods: Developing and evaluating innovative assessment methods to measure student talent more effectively. Research in this area can contribute to the refinement of assessment tools tailored to the specific needs of Product Design education.

5) Industry-Academia Collaboration Models: Analyzing different models of collaboration between educational institutions and industry partners. Exploring successful collaboration models can provide insights into how to enhance students' exposure to real-world projects.

6) Impact of Pedagogical Approaches: Investigating the impact of different pedagogical approaches, such as project-based learning, on student talent development. This research can

assess the effectiveness of various teaching methods in preparing students for the Product Design industry.

7) Globalization and Internationalization: Studying the effects of globalization and internationalization on Product Design education. This includes analyzing the mobility of students and faculty, international collaboration, and the globalization of design trends.

These research recommendations offer a glimpse into the potential areas of study that can further enrich our understanding of the factors influencing student talent in the Product Design major. Addressing these topics can lead to improvements in education and talent development in this dynamic field. Researchers and educators are encouraged to explore these avenues to contribute to the continued advancement of Product Design education and practice.

BIbliography

Fornell C.D.& Larcker, D.F. (1981). **Evaluating Structural Equation model with Unobservables and Measurement Error.** *Journal of Marketing Research*. 18(39-50).

Gao, S. (2013). **Study on the Cultivation Mechanism of Entrepreneurial Ability for Engineering and Technological Talents.** Doctoral dissertation]. Zhejiang University.

Gaskin, J. & Lim,J.(2018). **Indirect Effect**. AMOS Plugin: Gaskination's StatWiki.

Hou, L. P. (2013). **Cultural Transformation and the Reform of Undergraduate Curriculum Design in Contemporary Chinese Design Education [Doctoral dissertation**. Central Academy of Fine Arts].

Huang, Z., & Wong, H. (2009). **Analysis on the cultivation of the talents majored in educational policy in America.** Educational Research, 11, 76-81.

Sun, H., Zhang, Y., & Yu, H. (2023). **Exploration and Practice of Discipline-Integrated Talent Cultivation Mode for Design Majors: Taking Industrial Equipment Product Design Direction as an Example.** Packaging Engineering, 44(4), 423-429.

Zhang, Z., & Jiang, T. (2005). **A Brief Discussion on the Ability Structure and Cultivation of Industrial Design Major Students.** Journal of Huaiyin Institute of Technology, 14(6).

Teachers' Competency Indicators in Research Universities
under Jiangsu Province

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ABSTRACT

The research objectives were: (1) to explore the components of teachers' competency in research universities under Jiangsu Province; and (2) to verify teachers' competency indicators in research universities under Jiangsu Province.

This research was a mixed method research, including quantitative research and qualitative research. The population consisted of 9178 teachers from eight research universities under Jiangsu province. The sample size was determined by Taro Yamane formula program obtained through stratified random sampling technique. There were 383 teachers in total. Eight experts key informants were gained through purposive sampling methods. The instruments used for data collection are semi-structured interview form and five-point rating scale questionnaire. Statistics used for data analysis included frequency, percentage, mean, Standard Deviation, Exploratory Factor Analysis and Delphi Technique.

The research findings revealed that:(1) there were three components of teachers' competency indicators in research university under Jiangsu province which consisted of basic quality；teaching ability and research ability; (2) the 15 indicator of teachers' competency in research universities under Jiangsu province verified by 17 experts: good learning ability, good communication and teamwork skills, strong information search ability, good observation and insight , the ability to analyze the problems, affinity and have a harmonious relationship with the students, good organizational skills, advanced educational concepts,

solid academic background, good scientific ethics, good scientific ethics, the spirit of dedication to scientific research , good critical thinking , persistence and focus of the research , innovative thinking.

Keywords: Teachers' competency, Competency indicators, Research university,
Jiangsu province

1. Introduction

According to records, the earliest research university was the University of Berlin in Germany, founded in 1810, the founder Wilhelm von Humboldt put forward through scientific research methods and teaching and scientific research method to pursue the idea of pure knowledge, make scientific research for the first time become university functions, created the university 'research and teaching'.

Wilhelm von Humboldt based on the educational philosophy of "university autonomy", "academic freedom" and "integration of teaching and research" has also made the University of Berlin a target for countries to follow suit, especially in the United States, where many scholars have gone to study and brought back the German experience, Johns Hopkins university in 1876, became a new milestone in the modern sense of the birth of the research university.

After more than 100 years of development, the achievements of research universities occupy their leading position in the world of science and higher education circles.

The basic characteristics of a research-oriented university are the following six points: First, advanced school management concept and distinctive school-running characteristics. Second, the convergence of academic masters, outstanding scientific research achievements. Third, high-level research, permeated into classroom teaching. Fourth, the quality of students is first-class, and the "teacher-student ratio" is moderate. Fifth, with abundant scientific research funds and superior conditions for running schools. Sixth, the variety of complete disciplines, scientific and standardized management.

China has implemented the "211" project since 1995, Since the implementation of the "985" project in 1985, Has developed a number of research universities, China's research universities are selected by the state education administration according to academic and educational standards.

These universities on the list will receive strong national and local support, mainly for the purpose of cultivating outstanding talents, higher academic level, with a large number of doctoral programs and awarded doctoral degrees. The ratio of undergraduate and graduate students is around 1:2.5, A complete range of disciplines, strong ability to raise funds.

As the province with the largest number of universities in China, Jiangsu Province has several high-quality research universities, which play an exemplary role in cultivating innovative talents, improving academic status, accelerating the transformation of achievements, directly serving the society and promoting international exchanges, and playing an exemplary role in adhering to educational innovation, improving the level of school-running, and ensuring the quality of teaching. This is a new platform for higher education in Jiangsu Province to leap to a new level and form new advantages; Economic and social development can be supported by new goals of stronger talent and intelligence.

As a prerequisite for cultivating innovative talents, teachers can correctly guide students 'sense of innovation, deeply develop students' innovation potential, and create a superior innovation atmosphere for students through a good teacher-student relationship. If a university has a group of innovative teachers, then the students trained by the university will be more innovative consciousness and innovative ability.

How to measure the competency of faculty in research universities and to verify teachers' competence indicators for research universities in Jiangsu Province? This should be an important measure to improve the teaching mode of research universities in Jiangsu Province and build the teaching quality of Jiangsu Province from a large higher education province to a strong higher education province.

2. Research Questions

1. What are the components of teachers' competency in research university?

2. What are the verified teachers' competency indicators in research universities under Jiangsu Province?

3.Research Objectives

1. To explore the components of teachers' competency in research university under Jiangsu Province.

2. To verify the teachers' competency indicators in research universities under

Jiangsu Province.

4.Research Method

4.1 Research Design

This dissertation mainly adopts the mixed research methods of quantitative research and qualitative research. The phase 1 is Qualitative research: The researcher studied the concepts, principles and theories of the components of teachers' competency indicators in research universities under Jiangsu Province, and conducted in-depth interviews with 8 experts. The phase 2 is Quantitative research: The researcher selected the validity variables of the competency of teachers in Jiangsu research universities from phase 1, and compiled a questionnaire to explore the components of the competency model of teachers in Jiangsu research universities, and established a sample data collection tool. The phase 3 is qualitative research using Delphi Technique to select various and indicators of the teacher competency indicators of Jiangsu research universities from phase 2, and verify the teacher competent indicators of Jiangsu research universities by 17 key informants.

4.2 Population and Sample

The phase 1 Qualitative research: In-depth interviews with 8 key informants, the phase 2 population included teachers in Jiangsu Province. Choose 383 teachers from totally 9178 faculty members. The sample group will be selected by using proportional stratified random sampling from Taro Yamane formula totally 383 teachers.

4.3 Research Instruments

Phase1: Collect the relevant literature on the teachers' competency indicators in research university by semi-structured interview format. Phase 2: The instrument for this phase is questionnaire. Phase 3: A five-point rating scale questionnaires for Delphi Technique.

4.4 Data Collection

Phase 1: Data collection was performed by the researcher, through 20 documents and the interview of 8 experts. Phase 2: The questionnaires were sent by online and mail. Information on the indicators of teachers' competency in research universities under Jiangsu Province was collected by filling in the questionnaire of 383 teachers. Phase 3: Checklist will be sent to the panel of experts by mail and online. The data collected in this stage mainly consisted of interviews and surveys conducted by 17 experts.

4.5 Data Analysis

Phase 1: The collected data was analyzed by Content Analysis statistics using frequency and percentage. Phase 2: Data for demographic variables were analyzed by frequency and percentage. Descriptive statistics were used to analyze the variables of the indicators of teachers' competency in research universities under Jiangsu Province; mean, standard deviation (S.D.). For interpretation criteria about classifying mean score. The indicators of teachers' competency in research universities under Jiangsu Province was analyzed by Exploratory Factor Analysis (EFA), reduce unrelated variables. Phase 3: Mode, Median, Inter Quartile Range are used for data analysis.

5. Research Results

5.1 Demographic Information

Data analysis resulted according to Table 4.8 reveal that, the respondents in this studied 216 persons (56.39%) were male and 167 persons (43.61%) were females. When classified by age, the majority were over the age of 25-34 years, with 94 people or 24.54 percent and 35-44 years, with 123 people or 32.11 percent .45-54 years, with 101 people or 26.37 percent. 21-30 years, above 55 years, with 23 people or 6.00 percent. For Educational time with 1-10 years of experience, the total number of 125 persons (32.63%), 11-20 year of experience, there were 122 persons (31.85%) , the 21-30 year of experience, there were 74 persons (19.32%), the 31-40 year of experience, there were 20 persons (5.22%) The Professional title that with 82 persons (21.41%) were Teaching assistants and 180 persons (46.99%) were Lector, 55 persons (14.36%) were Associate professor ,14 persons (3.65%) were Professor. By qualification It was found that with 17 persons (4.43%) were at collages degrees level and 114 persons (29.76%) were Bachelor degree level, 166 persons (43.34%) were master degrees level ,44 persons (11.48%) were doctoral degrees level.

5.2 Reliability analysis of initial measurement

For reliability of questionnaire is a way of assessing the quality of the measurement procedure used to collect data. The researcher has sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's alpha coefficient was at 0.986 above 0.80 means adequate reliability to determines the internal consistency or average correlation of items in a survey instrument to gauge reliability of the questionnaire. which can be used to describe the reliability of questionnaire.

5.3 Exploratory factor analysis

Through comprehensive analysis of the KMO value, variance interpretation rate, and factor load coefficients, etc.to verify the validity level of the data. Among them, the KMO value is used to evaluate the effectiveness of the data, and the variance interpretation rate value is used to illustrate the level of information extraction. The results of KMO value were 0.794, which indicates that the sample's adaptability is very good. Another test is the Bartlett's Test, which can be used to detect the independence between variables, and whether the correlation between variables was suitable for factor analysis. As a result, the approximate card value inspected by the Bartlett's Test, was 33871.488, the degree of freedom is 3160, and the significant level is 0.000. This result shows that the correlation between variables was significant.

Table 1 Data analysis results of the third part of the questionnaire-Squares Loading (n=383)

Factors	Extracted Sums of Squares Loadings			Rotation Sums of Squared Loadings		
	Eigenvalues	Percentage of Variance	Percentage of Cumulative	Eigenvalues	Percentage of Variance	Percentage of Cumulative
1	32.264	40.330	40.330	32.264	40.330	40.330
2	10.002	12.502	52.833	10.002	12.502	52.833
3	8.414	10.517	63.350	8.414	10.517	63.350
4	1.599	1.998	65.348	1.599	1.998	64.348
Extraction Method: Principal Component Analysis						

In this form, we could see that 4 main components (factor) were extracted, and each main factors had a corresponding extraction load square and rotating load square. It could be seen that the extraction load of the first main factor was 32.264, which accounts for 40.330% of the total difference, and the accumulated total difference was explained to 40.330%. For the second main ingredient, its extraction load square and 10.002, accounting for 12.502% of the total difference, and the accumulated total difference was explained to 52.833%. Based on this, each main ingredient had a corresponding extraction load square. The accumulated total difference was interpreted as 64.348%. factor analysis and principal component analysis were used to analyze the influencing factors. the rotated adopts the maximum variance orthogonal rotation method, with a total of 4 factors extracted fixedly. It was generally believed that the

total variance interpretation Factor extraction rate was greater than 60%, indicating sufficient information Has been extracted. The validity of the scale was considered to be good. It showed the factor loading and variables described in each of the main variables. Components behind the rotating shaft.

Table 2 Data analysis results of the third part of the questionnaire- summary

Order	Assembly	Number of variables	Factor load
1	Component 1	31	0.771-1.058
2	Component 2	27	0.535-1.021
3	Component 3	22	0.747-1.015
	All	80	0.535-1.058

According to table 2, there were 3 qualified components as follows;

Component 1 was described by 31 key variables. After rotation, on the shaft, the variable factor load in the component was between 0.771-1.058, with the maximum eigenvalue of 32.264, which could explain that the total variance was 40.330%. Compared with the variance of other components, it was found that this part was the most important, that was all 31variables were the best combination with the component. The maximum factor load of variable " I am used to making detailed plans first and then implementing specific work tasks " was 1.058. The variable " I can keep up with the subject trends and constantly learn and update my professional knowledge ", and the minimum factor loading was 0.771. Researcher named it " Basic quality".

Component 2 was described by 27 key variables. After rotation, on the shaft, the variable factor load in the component was between 0.535-1.021, with the maximum eigenvalue of10.002, which could explain that the total variance was 12.502%. Compared with the variance of other components, it was found that this part was the most important, that was all 31variables were the best combination with the component. The maximum factor load of variable " I think teaching can help students develop a new way of thinking in this subject" was 1.021. The variable "I often attend teaching seminars or workshops", and the minimum factor loading was 0.535. Researcher named it " Teaching ability ".

Component 3 was described by 22 key variables. After rotation, on the shaft, the variable factor load in the component was between 0.747-1.015, with the maximum eigenvalue of 8.414, which could explain that the total variance was 10.517%. Compared with the variance of other

components, it was found that this part was the most important, that was all 31variables were the best combination with the component. The maximum factor load of variable "I often use my spare time to focus on writing papers, writing textbooks, and applying for scientific research projects " was 1.015. The variable "The number of scientific research projects I had participated in the past year ", and the minimum factor loading was 0.747. Researcher named it " Research ability ".
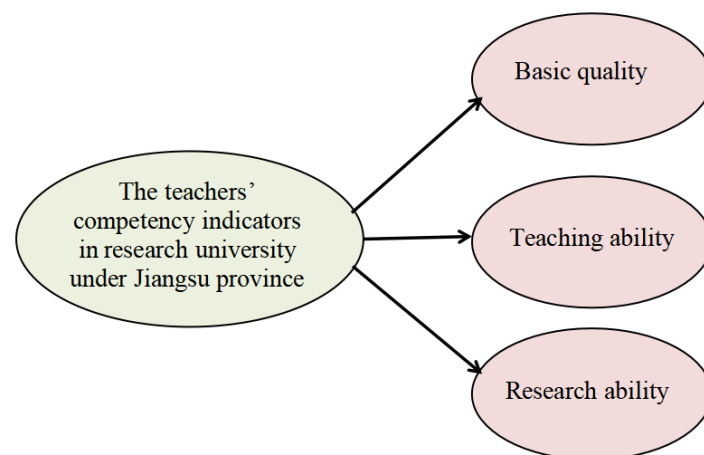
Figure 1 Showed the Component of teachers' competency indicators in research universities under Jiangsu province

5.4 Verify teachers' competency indicators in research universities under Jiangsu Province (Delphi)

(1) Content Analysis of Opinions from Expert Interviews on teachers' competency indicators in research universities under Jiangsu Province for the dimension of Core Competencies, Round 1

The Round 1 of open-end interview questions was guided by research questions. Respondents from 17 key informants were received by email, and 17 key informants' names returned the open-ended questions by email. The first interview round was completed within 3 weeks. The open-ended questions were used as a guide for the interviews. Some general open-ended questions would be submitted to in advance.

(2) Verifying teachers' competency indicators in research universities under Jiangsu Province in Round 2

The result of teachers' competency indicators in research universities under Jiangsu Province was a feasibility trend. Teachers' competency indicators in research universities under Jiangsu Province Median was found to be 5. When considering the list, there

was a base value in the Inter quartile Range of 0.00 from 17 expert. No .55, 59, 60, 64, 67, 70, 75, 76, 78, 79, 80 Inter quartile Range of 0.50. No.3,9,15. No.11, 14, 26, 27, 28, 35, 36, 42, 43, 46, 49, 65, 66, 68, 72, 73, 77 Inter quartile Range of 1.00. No.10, 12, 13, 19, 21, 22 Inter quartile Range of 1.50. It was acceptable for inter quartile range 0.00-1.50. Data trend concentration, with a skewed distribution.

Therefore, there were 3 important dimension of teachers' competency indicators in research universities under Jiangsu Province: Basic quality, Teaching ability, Research ability.

(3) To develop the model of teachers' competency indicators in research universities under Jiangsu Province.

Based on the results of an analysis of the feasibility trends of teachers' competency indicators in research universities under Jiangsu Province of a group of 17 key informants, teachers' competency indicators in research universities under Jiangsu Province can use the analysis results to create a picture of the model. There were three dimensions as follows:

(1) Basic quality: there were 5 indicators.

(2) Teaching ability: there were 5 indicators.

(3) Research ability: there were 5 indicators.

Figure 2 The model of teachers' competency indicators in research universities under Jiangsu Province.
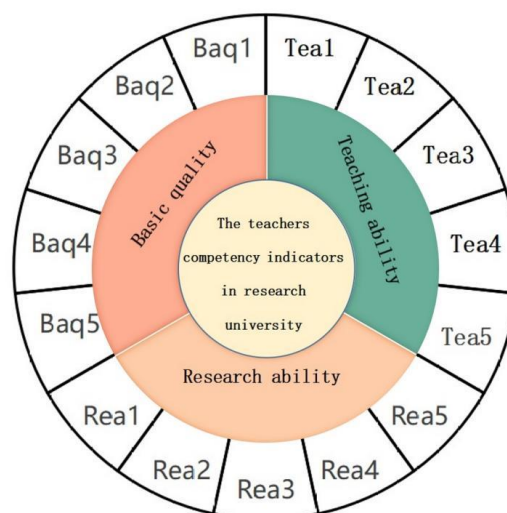
6. Discussion

The discussion will be presented as follows:

6.1 Discussion about major findings of objective 1

The first objective of the research was to explore the components of teachers' competency in research university under Jiangsu Province. The major findings revealed three components of teachers' competency in research university: Basic quality, Teaching ability, Research ability.

The major findings were revealed as such because teachers' Basic quality, Teaching ability, and Research ability are a key component of the teacher competency indicators. Through the collision of various factors and spiral progress, improve the overall level of research university teachers, so as to better guide students.

These research findings were in accordance with the theories or research of Chelo Moreno Rubio (2009:34-46) found that an effective teacher must be able to provide relevant and relevant tasks accompanied by an equitable assessment system. In addition, efficient teachers are responsible for creating a good school or educational environment that foster a passionate, motivated and interactive teacher-student relationship. It also involves caring for and responding to the needs of learners. Anna Maria Pesso a de Carvalho (2016:1-16), Alamgir Khan (2017:18-21), Adeleke Foluso Florence (2022:240-245) studied highlights the importance of teacher communication skills, and indicates that not only experienced but also inexperienced teachers need to constantly learn and improve this key skill. Marlene Edith Reyes Manrique (2016:17-30), Fareeda Ibad (2018:162-177), Nyoman Sugihartini (2019:306-310) believed that education is a comprehensive art that shapes people. To maximize the benefits of this comprehensive art, its cornerstone and engine are the qualities and abilities of teachers. ükran Tok (2010:4142-4146), Sariaman Gultom and Ahmad Fakhri Hutauruk (2020:1564-1569) found that by studying the level of teaching, educators can plan and implement the curriculum more effectively to meet the needs of different students and promote the acquisition and deeper understanding of knowledge. Trigwell, L.&Suzanne Shale (2004:18-24), David Blazar (2016:1-161) believed that over the past decade, research has confirmed that teachers have substantial impacts on their students' academic and life-long success.

6.2 Discussion about major findings of objective 2

The second objective of the research was to verify the teachers' competency indicators in research universities under Jiangsu Province. The teachers' competency indicators put forward a more comprehensive and practical competency indicators to develop the teachers' competency indicators in research universities under Jiangsu Province.

The teachers' competency indicators in research universities under Jiangsu Province,

there were total 15 competency indicators. The major findings were revealed as such because the good learning ability, good communication and teamwork skills, strong information search ability, good observation and insight , the ability to analyze the problems, affinity and have a harmonious relationship with the students, good organizational skills, advanced educational concepts, solid academic background, good scientific ethics, good scientific ethics, the spirit of dedication to scientific research , good critical thinking , persistence and focus of the research , innovative thinking.

These findings were in accordance with the theories or research of Lin Lijie (2007:230-234) , Wang Yu, Dai Liangtie, Xiong ke (2006:120-122) which was found that the views proposed are consistent. Leng Jiaqing (2018:68-72), Nie Shaoqun (2017:89-92), Mwiya DB (2017:1044-1098), W Wahyuddin (2016:102-128) Zhu Jianliu (2016:34-51), Wang Jinyou (2014:127-136), Gao Yingbin (2013:190-193) believed that the basic quality to ensure that teachers can interact more effectively with students, parents, and colleagues, so as to improve the quality of teaching and students' learning experience. These basic qualities together constitute the educational foundation of a teacher and help them to perform their educational work effectively. Eric Hoyle (2012:76-88), Wang Xiaolong (2011:3-45), Liu Yeyu (2008:147-169), Song Qian (2008:21-23), Xie Heping (2008:4-9), Lin Lijie (2007:230-234), JM Bartunek (2006:9-15) found that teacher's teaching ability able to great significance for the long-term development of the education system and the society. Shi K (2006:586-595), Tigelaar D E H (2004:253-298), Gerard Kaspal (2002:57-69), Mcber H (2000:58-67), Sandbe Jorgen (2000:9-17), Martin Finkelstein (1998:135-168) found that research abilities help to enhance teachers' sense of value and dignity towards their profession, making them more motivated and satisfied to achieve higher level educational goals.

7. Recommendations

7.1 Recommendations for Policy Formulation

The investigators believe that the suggestions for policy making can be discussed based on the following three dimensions:

(1) Basic ability dimension:

a. Develop comprehensive quality standards: The government and schools can formulate clear comprehensive quality standards, covering communication skills, teamwork ability, leadership and other aspects, to guide the development of teachers.

b. Establish a comprehensive quality training system: set up a comprehensive

quality training program, provide courses and training to help teachers improve their basic abilities, including speech skills, interpersonal relationship, conflict management, etc.

c. Encourage cross-field training: Promote teachers to participate in cross-field training and develop interdisciplinary competence to better adapt to the changing academic and social needs.

(2) Teaching ability dimension:

a. Promote teaching innovation: Formulate policies to encourage teachers to explore innovative teaching methods, such as problem-oriented teaching, flipped classroom, etc., to improve teaching effects.

b. Provide teaching and training resources: establish a teaching and training resource database, provide training materials in teaching design, textbook compilation, classroom management and other aspects, to help teachers continuously improve their teaching ability.

c. Establish a teaching evaluation system: establish a comprehensive teaching evaluation system, including student evaluation, peer review, etc., to encourage teachers to constantly improve their teaching methods.

(3) Research ability dimension:

a. Encourage scientific research project application: formulate policies to encourage teachers to actively participate in scientific research project application, provide scientific research funds and resource support, and promote the development of scientific research activities.

b. Establishment of scientific research cooperation fund: establish scientific research cooperation fund, encourage teachers to carry out interdisciplinary and cross-school cooperation, and promote the implementation of innovative scientific research projects.

c. Support the transformation of scientific research achievements: formulate policies to support teachers to transform scientific research achievements into practical applications, such as technology transfer and entrepreneurship support, so as to enhance the social influence of scientific research.

In conclusion, research based on different dimensions can provide guidance for policy makers, provide suggestions on practical applications for schools and teachers, and continue to explore more segments in future research to better promote the all-round development of teachers in research universities in Jiangsu Province.

7.2 Recommendations for practical application

Based on the study of Jiangsu Province, the results can be applied to the following fields or institutions:

(1) University education management: The research results can provide the basis for teacher training, development, selection and evaluation in colleges and universities, and optimize the structure and quality of teachers.

(2) Teacher training institutions: The research results can design training courses and contents for teacher training institutions to help teachers improve their basic quality, teaching ability and scientific research ability.

(3) Government education authorities: the research results can provide reference for the government to formulate higher education policies, promote the all-round development of university teachers, and improve the quality of education.

(4) Educational research institutions: The results can provide data support for educational research institutions' in-depth discussion of teacher development paths, educational policies and educational reform.

(5) Academia and academic communities: The results can provide an empirical basis for academia to explore topics such as teacher career development, academic innovation, and interdisciplinary collaboration.

In conclusion, these research results can be applied in many fields and institutions, including higher education management, education training, government policy making, and academic research, to support the comprehensive development of research university teachers and improve the quality of education.

7.3 Recommendation for Further Research

After two rounds of Delphi analysis, through data analysis, from three dimensions to determine the 80 ability project, to verify the research university in Jiangsu province teachers provide foundation, for the research university of Jiangsu province screening, training, improve teacher's competent factors provide significance, also for the future direction for the development of the following aspects of thinking:

(1) In-depth discussion of factors: to further deepen the dimensional analysis of the basic ability, teaching ability and scientific research ability, and to explore the correlation between different factors, and their influence in different backgrounds.

(2) Longitudinal follow-up study: a long-term follow-up study of teachers 'competence factors, to understand the development trajectory of teachers at different stages of their career, and to provide more detailed guidance for teachers' career development.

(3) Research on influencing factors: explore the influence of external factors on teachers 'competence factors, such as policy changes, social environment, etc., so as to deepen the comprehensive understanding of teachers' ability development.

(4) Education policy research: explore the influence of education policy on the development of teachers 'competence factors, and analyze the guiding role of policy formulation on teachers' career and ability cultivation.

(5) Research on education quality evaluation: explore the relationship between teachers' competence factors and school education quality, to provide more scientific basis for education quality evaluation.

(6) Exploration of education reform: Based on the research of teachers' competence factors, explore the direction of education reform to meet the needs of education in the new era, and promote the innovation and development of college education.

In short, the future research direction should explore the development of the competence factors of teachers in research universities in Jiangsu Province from a deeper and broader perspective, so as to provide more specific and practical suggestions and guidance for the development of higher education. At the same time, interdisciplinary cooperation, education policy research and education quality evaluation and other areas are also worthy of further research direction.

BIbliography

Abdelhady Elnagar. (2021). **International Education and the Internationalization of Public Schooling in Canada: Conceptualizations and Approaches.** Canadian Journal of Educational Administration and Policy. 2021, 80-94.

Alamgir Khan, Salahuddin Khan. (2017). **Communication Skills of a Teacher and Its Role in the Development of the Students' Academic Success.** Journal of Education and Practice, 2017(1): 18-21.

Cheng Lisi. (2017). **Research on the open construction of primary and secondary school teachers.** University Of Hebei, 2017: 1-64.

David Blazar. (2016). **Teacher and Teaching Effects on Students' Academic Performance, Attitudes, and Behaviors: Extensions of the Literature.** the Graduate School of Education of Harvard University. 2016, 1-161.

Gao Yingbin. (2013). **Discussion on the classified management mode of "three functions in one" university teachers.** Human Resources Management, 2013 (10): 190-193.

Kıymet Selvi. (2016). **Teachers' Competencies.** International Journal of Philosophy of Culture and Axiology, 2016, 7(1): 167-175.

Liu Xiangjie. (2019). **Construction of the index system of the comprehensive ability evaluation of higher vocational professional teachers.** Journal of Hunan Industrial Vocational and Technical College, 2019, 19(04): 107-112.

Nie Shaoqun, Xiong Qi, Li Tiebin. (2017). **Empirical study on the relationship between the characteristics and job performance of university teachers in Jiangxi Province.** Journal of Gannan Normal University, 2017, 38 (1): 89-92.

Teachers' Council of Thailand. (2018). **The Southeast Asia Teachers Competency Framework (SEA-TCF).** 2016,1-43.

Wang Jinyou, Pu Shilu. (2014). **Analysis of the classified management of university teachers from the perspective of the reform of the personnel management system of modern universities.** China University Teachers Research, 2014 (1): 1-6.

Wang Jinyou, Pu Shilu, Tu Huimin, Li Ni. (2014). **On the classification management of university teachers' positions -- the experience of foreign universities and the practice of business schools in China.** Journal of Sichuan University (Philosophy and Social Sciences Edition), 2014 (2): 127-136.

Wang Xiaolong. (2011). **Thoughts on the reform of personnel management system in colleges and universities.** Heilongjiang Higher Education Research, 2011,3): 43-45.

Zhang Leping, Liu Jiajia. (2023). **Comprehensively improve the quality of independent training of high-level talents: the role, response and guidance of research universities in the new era.** The Journal of Higher Building Education, 2023:1-11.

Zeng Xiaodong. (2004). **Sorting out the performance evaluation process of primary and secondary school teachers.** Research on Teacher Education, 2004 (1).

Transformational Leadership Factor Affecting Teachers' Job Satisfaction of High School in Tieling City under Liaoning Province

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 ABSTRACT

The objectives of this research were: (1) To explore the factors and indicators of transformational leadership and teachers' job satisfaction of high school in Tieling City under Liaoning Province. (2) To examine factors of transformational leadership affecting teachers' job satisfaction of high school in Tieling City under Liaoning Province. (3) To propose the guidelines for improving transformational leadership of high school administrators in Tieling City under Liaoning Province.

This research was a mixed method research, including quantitative research and qualitative research. The population consisted of 3645 high school teachers of 16 high schools in Tieling City under Liaoning Province. The sample size was determined by Yamane formulate that obtained through random sampling technique. There were 360 high school teachers as the sample in total. The instrument used for collecting data was a five-point rating scale questionnaire. Descriptive statistics, Confirmatory Factor Analysis and Multiple regression analysis were used to perform data analysis using statistical software.

The results showed that; 1) There were 4 factors of transformational leadership of high school: moral model, build a vision, leadership charisma and Individualized care, 61 indicators and 4 factors of teachers' job satisfaction of high school: work itself, interpersonal relationship, school management, income and welfare and 26 indicators in this. 2) Factors of transformational leadership affecting on teachers' job satisfaction: the results showed that the correlation coefficient of moral model, build a vision, leadership charisma, Individualized care,

transformational leadership and teachers' job satisfaction were 0.542,0.550,0.711,0.517 and 0.776 respectively, and the corresponding P values are less than 0. 01, has statistical significance, moral model, build a vision, leadership charisma and Individualized care and teachers 'job satisfaction have significant positive correlation, transformational leadership is higher, teachers' job satisfaction is higher. 3) There were 18 guidelines for improving transformational leadership of high school principals in Tieling City, Liaoning Province, including 4 guidelines of strengthening moral model, 2 guidelines of leadership charisma, 6 guidelines of enhancing individualized care, and 5 guidelines of build a vision motivation.

Keywords: transformational leadership, teachers' job satisfaction, high school in Tieling City

1. Introduction

The 21st century is a century of reform, a century of competition, and a century of rapid development. Especially after the outbreak of COVID-19, the educational model has changed dramatically, and the leaders of the educational system face great challenges. With the changes of the times, economy and the educational system, the leadership style of high school has become to a diversified leadership style. School leaders break the traditional bureaucratic style, adopt the combination of incentive and humanized leadership to constantly promote reform and development of school. Therefore, this study takes cities in northern China as an example to explore the impact of transformational leadership on teachers' job satisfaction from the perspective of teachers, so as to explore the factors that improve the transformational leadership of administrators. (Zhu Wenhui, Jin Yule, 2014)

In this context, it becomes important for administrators to enhance transformational leadership. This research explores the working guidelines for improving transformational leadership of administrators through the survey of teachers' job satisfaction.

2. Research objectives

2.1 To explore the factors and indicators of transformational leadership and teachers' job satisfaction of high school in Tieling City, Liaoning Province, People's Republic of China.

2.2 To examine the factors of transformational leadership affecting the teachers' satisfaction of high school in Tieling City, Liaoning province, People's Republic of China.

2.3 To propose the guidelines for improving the transformational leadership of high school administrators in Tieling City, Liaoning province, People's Republic of China.

3. Hypothesis

3.1 Leadership Charisma has a positive direct effect on teachers' job satisfaction.

3.2 Moral Model has a positive direct effect on teachers' job satisfaction.

3.3 Build a Vision has a positive direct effect on teachers' job satisfaction.

3.4 Individualized Care has a positive direct effect on teachers' job satisfaction.

4. Research Methodology

4.1 Research on Design

This dissertation mainly adopts the mixed research methods of quantitative research and qualitative research. Phase 1 is Qualitative research: The researchers studied the concepts, principles and theories of the components of transformational leadership and teachers' job satisfaction, and conducted semi-structure interviews with 7 relevant experts. Phase 2 is quantitative research. Researchers select affective variables that affect teachers' job satisfaction from step (1) and compile questionnaires to prove the relationship between transformational leadership factors and teachers' job satisfaction. And then use the IOC method to text the questions in questionnaire. A original sample test is carried out that we call it try out with 30 questionnaire. The relationship will be certified by CFA and multivariate regression analysis. Phase 3 is the qualitative research. Using focus group discussion with 10 experts to verify the new guidelines for improving the transformational leadership of high school administrators.

4.2 Key informants / Population and Sample

The key informants of phase 1 consist of 7 experts who are the Educational Bureau, the deputy directors, the dean of the graduate school, the dean of the higher vocational college and the educational experts. For the phase 2, the population of this research are 3645 high school teachers of 16 high schools in Tieling City, Liaoning Provinc. In this study, 360 teachers as the sample that selected by Yamane formula from 3645 high school teachers. The key informants of phase 3 are about 10 experts to do the focus group discussion to propose the guidelines for improving the transformational leadership of high school administrators in Tieling City, Liaoning province, People's Republic of China.

4.3 Research Instruments

Phase1: The research instruments of this phase are data record sheets, and semi-structured interview forms. **Phase 2:** The questionnaire as the instrument for this phase consists of three parts. Part 1 are the questions about basic information of the respondents,

the part 2 is the 5 points rating scale questionnaire to examine the factors of transformational leadership affecting teachers' job satisfaction, part 3 is about the open questions that able to achieve the information of guidelines. **Phase 3:** To propose the guideline for improving the transformational leadership of high school administrators in Tieling City in Liaoning Province using focus group discussion and make conclusion to be the guidelines. The instrument used in this phase was interview form.

5.4 Data Collection

Phase 1: Data collection through 22 documents and the semi-structure interview with 7 experts. **Phase 2:** The questionnaires were sent by online and researcher. Information on the factors was collected by answering the questionnaire of 360 high school teachers involved in the questionnaire. **Phase 3:** Collected the mainly guidelines information with 10 experts by focus group discussion.

5.5 Data Analysis

Phase 1: Content Analysis was used to explore the factors and indicators of transformational leadership and teachers' job satisfaction. **Phase 2:** Descriptive statistical and CFA were used to analyze variables. The relationship between transformational leadership and teachers' job satisfaction was analyzed by multiple regression analysis. The content analysis will be used to analysis the open questions to propose the guidelines. **Phase 3:** Content analysis was used to propose the guidelines after focus groups discussion meeting.

5. Research Results

5.1 Demographic Information

Descriptive statistical analysis results according general information of 318 high school teachers showed that: 1. There were 166 male teachers (52.2%) and 152 female teachers (47.8%) as the samples in this research. In terms of age, the number of people over 41 years old was the lowest, with 21 (6.6%). 26 (8.2%) were aged 36 to 40; 48 people (15.1%) aged 31-35; The number of people aged 26 to 30 was 105 (33%); The largest number of people were under the age of 25, with 118 (37.1%). In terms of academic qualifications, 121 people (38.1%) with a bachelor's degree and 164 people (51.6%) with a master's degree do not have a doctor's degree. According to professional titles, 101 junior (31.8%); Intermediate (134942.1%); Advanced 83 (26.1). According to the teaching age, 90 students (28.3%) with 1-5 years; 80 (25.2%) aged 6-10 years; 74 (23.3) in years 11-15; 35 (11%) in 16-20 years; 26 (8.2%) aged 21-25; 10 people in 26-30 years (3.1%); Three people (0.9 percent) were over 30 years old.

5.2 Validity and reliability analysis of initial measurement

Using IOC to text the validity of questionnaires. 51 questions were selected through 87 questions. Questionnaire reliability refers to the degree to which a questionnaire produces consistent results when repeated. The researchers sent out 30 questionnaires to collect data from non-samples to test the reliability of the results. It is generally accepted that Cronbach's alpha coefficient equal to or greater than 0.80 indicates sufficient confidence to determine the internal consistency or average correlation of the items in the survey tool to measure the reliability of the questionnaire. In this survey, Cronbach's alpha coefficient of transformational leadership was 0.927, and that of teacher job satisfaction was 0.931 so it was determined that this questionnaire had good usability reliability.

5.3 Confirmatory factor analysis (CFA)

Through comprehensive analysis of KMO value, variance interpretation rate, factor load coefficient, etc., the validity level of the data is verified. Among them, the KMO value is used to evaluate the validity of the data, and the variance interpretation rate value is used to explain the content validity level. The KMO value of teachers' job satisfaction was 0.910, the KMO value of transformational leadership was 0.926, indicating that the sample had good adaptability. Another test is Bartlett's test, which can be used to test the independence of variables and whether the correlation between variables is suitable for factor analysis to explain the level of structural validity. Therefore, the approximate card value tested by the Bartlett test is 4232.572 and 5258.343, with 190 and 325 degrees of freedom and a significance level of 0.000. This result shows that the correlation between the variables is significant.

Chi-square=301.004 DF=264 Chi/DF=1.140
GFI=.935 AGFI=.913 RMSEA=.021
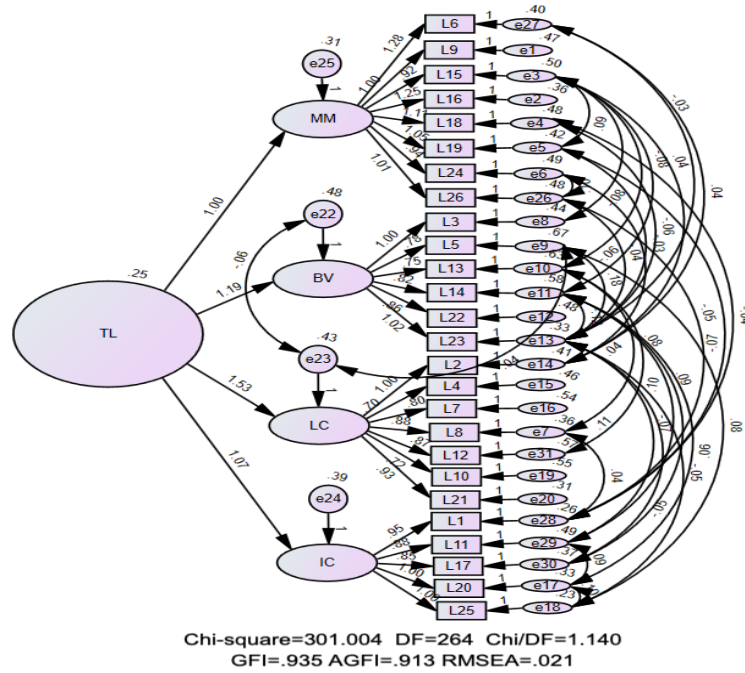
Table 1 the model of transformational leadership

According to the table, X^2 / df is 1.140, less than 3, GFI is 0.935, greater than 0.8, AGFI is 0.913, greater than 0.8, RMSEA is 0.021, less than 0.08, according to the standard of the model fitting index, the fitting index of the model meets the requirements, so the path of the model is analyzed.

Chi-square=231.149 DF=153 Chi/DF=1.511
GFI=.934 AGFI=.910 RMSEA=.040
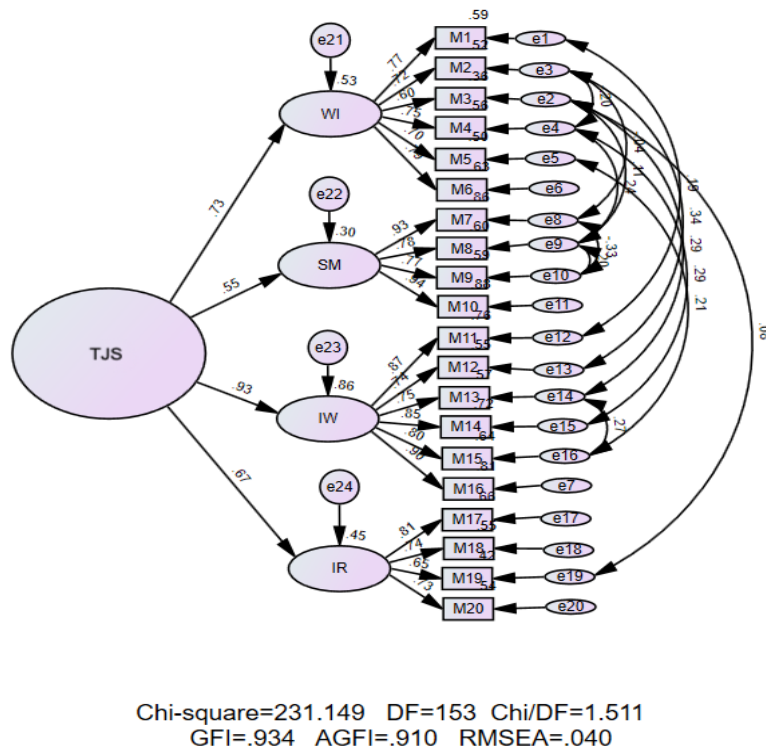
Table 2 the model of teachers' job satisfaction

According to the table, X² / df is 1.511, less than 3, GFI is 0.934, greater than 0.8, AGFI is 0.910, greater than 0.8, RMSEA is 0.040, less than 0.08, according to the standard of the model fitting index, the fitting index of the model meets the requirements, so the path of the model is analyzed.

5.4 Multiple regression analysis

5.4.1 Regression test of teachers' job satisfaction with transformational leadership

Table 3: Regression test of teacher job satisfaction with transformational leadership

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std.Error	Beta			Tolerance	VIF
(Constant)	-0.09	0.231		-0.39	0.697		
sex	-0.025	0.053	-0.017	-0.472	0.637	0.956	1.046
age	0.021	0.022	0.034	0.938	0.349	0.953	1.049
marriage	0.013	0.029	0.016	0.451	0.653	0.951	1.051
record of formal schooling	0.096	0.038	0.090	2.498	0.013	0.966	1.036
professional ranks and titles	0.055	0.035	0.057	1.569	0.118	0.936	1.068
of school age	-0.015	0.018	-0.029	-0.810	0.419	0.971	1.030
Teaching	0.028	0.032	0.031	0.858	0.392	0.976	1.025
school	-0.005	0.039	-0.005	-0.133	0.894	0.977	1.023
Transformational leadership	0.855	0.042	0.751	20.259	0.000	0.905	1.105
R²			0.617				
Adjusted R Square			0.606				
F			55.173***				

Dependent Variable: Teacher job satisfaction

Note: * indicates P <0.05, * * P <0.01, * * * P <0.001,

As can be seen in the above table, the common linear statistics VIF (Variance Infiation Factor) in the model is less than 10, indicating that the degree of collinearity between independent variables is small and the model is reasonable. The regression model was constructed by using transformational leadership as the independent variable and teacher job

satisfaction as the dependent variable. The obtained square value of the model R was 0.617, and the fit degree was 61.7%, greater than 20%, indicating that the goodness of fit was good and could explain the change of teachers' job satisfaction to a certain extent. In the F test, an F value of 55.173 and a significance value of 0.000 <0.05 were obtained, indicating that the model is valid.

The effect of transformational leadership on teachers' job satisfaction is mainly verified by establishing regression models. To improve the explanatory power of the model, demographic variables were introduced as control variables. The multiple regression model was established with gender, age, marriage, education, professional title, teaching age, teaching, school, and transformational leadership as independent variables, and the independent variable of teacher job satisfaction was 0.751 (t=20.259, p <0.001), indicating that the independent variable transformational leadership has a significant positive effect on teachers' job satisfaction, so the hypothesis is true.

5.4.2 Regression test of teachers' job satisfaction in each factors of transformational leadership

Table 4 ：Regression test of teacher job satisfaction in each factors of transformational leadership

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std.Error	Beta			Tolerance	VIF
(Constant)	0.078	0.225		0.345	0.730		
sex	-0.020	0.051	-0.014	-0.395	0.693	0.942	1.062
age	0.016	0.021	0.026	0.732	0.465	0.946	1.057
marriage	-0.007	0.028	-0.008	-0.237	0.813	0.926	1.080
record of formal schooling	0.094	0.037	0.088	2.544	0.011	0.965	1.036
professional ranks and titles	0.065	0.034	0.068	1.927	0.055	0.927	1.078
of school age	-0.019	0.017	-0.037	-1.060	0.290	0.967	1.034
Teaching	0.025	0.031	0.028	0.805	0.421	0.964	1.037
school	-0.006	0.038	-0.006	-0.163	0.871	0.966	1.035
Moral Model	0.138	0.036	0.160	3.862	0.000	0.672	1.489
Build a Vision	0.206	0.035	0.242	5.953	0.000	0.701	1.427

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std.Error	Beta			Tolerance	VIF
Leadership Charisma	0.375	0.036	0.457	10.491	0.000	0.610	1.640
Individualized Care	0.118	0.037	0.133	3.198	0.002	0.672	1.488
R²			0.646				
Adjusted R Square			0.633				
F			46.469***				

Dependent Variable: Teacher job satisfaction

Note: * indicates P <0.05, * * P <0.01, * * * P <0.001,

As can be seen in the above table, the common linear statistics VIF (Variance Infiation Factor) in the model is less than 10, indicating that the degree of collinearity between independent variables is small and the model is reasonable. The regression model was constructed by using each dimension of transformational leadership as the independent variable and teacher job satisfaction as the dependent variable. The square value of model R was 0.646, and the fit degree was 64.6%, more than 20%, indicating that the goodness of fit is good and can explain the change of teachers' job satisfaction to a certain extent. In the F test, an F value of 46.469 was obtained and a significance value of 0.000 <0.05, indicating that the model is valid.

The influence of each factor of transformational leadership on teachers' job satisfaction is mainly verified by establishing regression models. To improve the explanatory power of the model, demographic variables were introduced as control variables. The model takes gender, age, marriage, educational background, professional title, teaching age, teaching, school, transformational leadership as the independent variables, and teachers' job satisfaction as the dependent variable to establish a multiple regression model. 1. The standardized regression coefficient of the independent variable moral model on teachers 'job satisfaction in the model is 0.160 (t=3.862, p <0.001), indicating that the independent variable moral model has a significant positive impact on teachers' job satisfaction, so the hypothesis is true. 2. The standardized regression coefficient of independent variable build a vision on teachers 'job satisfaction in the model was 0.242 (t=5.953, p <0.001), indicating that independent variable build a vision has a significant positive impact on teachers' job satisfaction, so the hypothesis is true. 3. The standardized regression coefficient of

independent variable Leadership charisma on teachers 'job satisfaction in the model is 0.457 (t=10.491, p <0.001), indicating that independent variable Leadership charisma has a significant positive impact on teachers' job satisfaction, so the hypothesis is true. 4. The standardized regression coefficient of independent variable Individualized care on teachers 'job satisfaction in the model is 0.133 (t=3.198, p <0.01), indicating that independent variable Individualized care has a significant positive impact on teachers' job satisfaction, so the hypothesis is true.

5.5 Research to find out the guidelines

Moral Model: 1. Set a good moral example. 2. Strengthen moral education. 3. Emphasize the sense of responsibility. 4. Advocate a culture of integrity.

Build a Vision: 1. Define and Share the vision. 2. Develop a strategy to achieve the vision. 3. Encourage participation and input. 4. Continuous communication. 5. Timely feedback and adjustment.

Leadership Charisma: 1. Develop good communication and listening skills. 2. Be positive and resilient.

Individualized care : 1. Know and Respect each employee. 2. Building trust relationships. 3. Provide development opportunities. 4. Encourage employees to express their opinions. 5. Establish a supportive work environment. 6. Encourage self-improvement.

6. Discussion

6.1 Discuss the factors and indicators of transformational leadership and teachers' job satisfaction

According to Burns' theory, transformational leadership should be composed of three factors: personal charm, intellectual motivation and personal consideration. In 1990, Podsakoff et al. summarized the previous studies and proposed that transformational leadership should include six factors, namely, promoting cooperation, personalized care, modeling, expressing vision, raising high expectations, and intelligent stimulation. In China, in 2005, Li Chaoping and Shi Kan research showed that transformational leadership is a four-factors structure, including vision motivation, leadership charisma, moral model and personalized care. Moreover, in their view, transformational leadership in China also includes a unique dimension: moral model, that is, leaders model themselves with good moral qualities and influence subordinates to strive for organizational goals.

Based on the two-factor theory of Herzberg (1957), teachers' job satisfaction has two dimensions, namely internal satisfaction and external satisfaction. Lu Jia and Shi Kan (2001)

put forward the structure of job satisfaction scale after in-depth interviews and case analysis of managers in different regions and industries of Chinese enterprises, including five aspects: satisfaction with corporate image (management system, customer service, quality management, participation in management); Leader's satisfaction (manager, job recognition); Satisfaction with the rewards of work (compensation, benefits, training and development, working environment); Satisfaction with work collaboration (colleagues, communication, respect); Satisfaction with the job itself (sense of competence, accomplishment, security). In the field of education in China, Chen Yunying and Sun Shaobang (1994) compiled a "Teacher job satisfaction Scale" consisting of 40 items after several tests and revisions. He divided teacher job satisfaction into six dimensions: job nature, physical conditions, salary, further study and promotion, interpersonal relationship and leadership and management. Feng Bolin (1996) compiled the teacher's job satisfaction scale and believed that the teacher's job satisfaction was composed of five factors, namely, self-actualization, work intensity, salary income, leadership relationship and colleague relationship. Due to the particularity of teachers' work, the structure of their job satisfaction may be different from that of other organizational employees.

6.2 Discuss the relationship between transformational leadership and teachers' job satisfaction

In 2012, Liu Chao and Xia Ni proposed in their paper Research on the Mediating Variables of the Correlation between transformational Leadership and Job Satisfaction that transformational leadership style significantly affects employees' job satisfaction, but they are not necessarily and directly related all the time, and mediating variables such as efficacy, psychological empowerment, trust and job characteristics can all have an important impact. Thus, it can have a positive impact on employees' psychology or attitude and improve their job satisfaction. In 2004, Judge, T.A. And Piccolo, R.F. a meta-analysis was used to conduct a detailed analysis of nearly 90 samples of transformational leadership over the previous 8 years. The analysis shows that transformational leadership has a significant positive correlation with employees' work attitude, motivation and job satisfaction. Fred, W.O. And Lawler, J.J. The results of two efficacy surveys in 2004 and 2005 show that transformational leadership has a positive effect on the development of the common vision of organization members, the evaluation of superiors and job satisfaction. Kuei-Mei Cheng(2003) investigated employees of Taiwan health club and explored the relationship among leadership behavior, organizational commitment and job satisfaction by establishing a relationship model. The results showed

that leadership behavior directly affected employees' job satisfaction. Nan-Fu Chen (2008) studied the relationship between leadership behavior, organizational commitment, job satisfaction and employees' turnover goals in sports departments of 36 universities in Taiwan, and the results showed that leadership behavior and job satisfaction had a significant positive relationship. Taking enterprise managers as research objects, Meng Hui (2003) compiled the "Transformational Leadership Questionnaire" to explore the relationship between leadership behavior, employees' job satisfaction and organizational commitment. The results show that transformational leadership can effectively predict employees' job satisfaction. Chinese scholar Li Chaoping et al. (2006) conducted a survey on 744 employees in 14 enterprises in China, and the results show that vision motivation and moral ethics have a significant impact on organizational commitment and employee job satisfaction, leadership charisma and personalized care have a significant impact on employee job satisfaction, and vision motivation and moral ethics affect employee satisfaction through work significance.

6.3 Discuss the guidelines for improving transformational leadership of high school administrators

Zhu Wenhui and Jin Yule (2014) believe that the theory of transformational leadership emphasizes that principals should shape the common vision of the school together with teachers in an open and innovative organizational atmosphere, encourage and inspire teachers' innovative thinking, and provide teachers with support in work and care in life. In addition, principals also need to pay attention to their own moral cultivation, and establish a harmonious interpersonal relationship with teachers. (1) The establishment of the common vision of the school under the "I with you" relationship. (2) The inspiration of teachers' mental model. (3) Teachers' personalized care. (4) The improvement of the principal's moral cultivation. (5) The construction of harmonious interpersonal relations.

Zhang Tao (2005) believes that while transformational leadership exerts great influence in the fields of politics and business administration, its influence in the field of education is very limited. However, this does not mean that this theory has no value in educational management. Through research, the following guidelines are given for the leadership of principals. (1) The principal shall shape a shared vision for the long-term development of the school. (2)The president should establish his own power and leadership charm. (3) Principals should strengthen their encouragement and care for teachers.

7. Recommendations

7.1 Recommendation for Policies Formulation

1. Through this study, the Education Bureau of Tieling City can plan and cultivate the leadership ability of high school principals according to the guidelines for improving transformational leadership and influencing teachers' Job satisfaction of high school principals in Tieling City. Professional managers who empower managers with transformational leadership.

2. The Senior high School Management Office of the Ministry of Education will take the research results of "Guide to Influence Teachers' Job Satisfaction by Transformational Leadership Factors of High School Principals in Tieling City" as a guideline for principals and a policy to cultivate school administrators' awareness and recognition of their own leadership value.

3. The Guide on the Influence of Transformational Leadership Factors on Teachers' Job Satisfaction of High School Principals in Tieling City, prepared as the result of this study, provides a detailed explanation and direction for the management ability training of high school principals.

7.2 Recommendation for practical application

1. Implement democratic management, cultivate teachers' sense of ownership, and encourage teachers to participate in administration.

2. Promote teachers' professional growth, and enhance teachers' identification with the school and their willingness to work hard.

3. Construction of school organizational culture to achieve the unity of values of the school and teachers.

7.3 Recommendation for further research

1. Do multi-dimensional research. Each item of the two variables, transformational leadership and teacher job satisfaction, was answered by teachers, which may lead to homologous variance in the collected data. Although some studies have shown that homologous variance is not sufficient to invalidate the conclusions of the study, the researchers believe that it is necessary to use different data sources for different variables in future studies to overcome the problems that may be brought about by homologous variance.

2. Avoid Cross sectional study design. Transformational leadership style affects teachers' job satisfaction level, and this process has a certain effect time. In principle, these two variables should be measured in different time periods. However, the questionnaire in

this study measured the two variables at the same time, which makes this study unable to assert that there is a causal relationship between transformational leadership and teachers' job satisfaction. Although the results of this study are consistent with the theoretical basis, the cross-sectional design prevents the study from completely excluding other possible explanations. Therefore, it is necessary to make use of longitudinal design (Longtitude) or experimental methods in future studies to further explore the causal relationship between various variables.

3. Further expand the scope of research. Due to the limitations of time and energy, this study only takes high school teachers in Tieling City, Liaoning Province as the research object, and cannot be popularized to a larger scope. In future related studies, the scope of sampling should be further expanded.

4. Enrich the connotation of teachers' work performance. Such as increasing teacher organizational commitment, teacher job involvement, teacher organizational citizenship behavior and other variables, to explore and test the theoretical logic and relationship between transformational leadership and teacher performance. Although foreign countries have begun to carry out such research, but China's research on these aspects is very little.

5. Introduce mediating variables. Avolto etc. (2004) with a large public hospitals in Singapore 520 nurses as the research sample, examines the psychological authorization in the relation between transformational leadership and employee commitment to the intermediary role, they use HLM (Hierarehieal Linear Modelling), The results show that psychological empowerment plays an intermediary role in the relationship between transformational leadership style and employee commitment. Future studies should be verified in educational organizations, and trust, reciprocity and other mediating variables can also be selected to study the mechanism of transformational leadership on teachers' job satisfaction. Therefore, future research needs to further explore the process of the effect of transformational leadership on teachers' work attitude or performance from the perspective of psychological variables.

BIbliography

Abraham J P. **Cynicism about organizational change[J]**. *Group and Organization Management*, 2000.

Allen N J, Mayer J P. **The measurement and antecedents of affective, continuance and normative commitment to the organization[J]**. *Journal of occupational and organizational Psychology*, 2002.

Alimo—Metcalfe B, Alban—Metcalfe R J. **The development of a new transformational leadership questionnaire[J]**. *Journal of occupational and organizational Psychology*,2001.

Avolio B J, Zhu W, Koh W, Bhatia P. **Transformational leadership and organizational commitment:mediating role of psychology empower and mediating role of structure distance [J]**. *Journal of organizational Behavior*,2004.

Bass B M. **Theory of Transformational Leadership Redux**. The Leadership Quarterly, 1995,6 (4):463-478

Burns, J. M. **Leadership [M]**. New York, NY: Harper & Row. 1985: 20.

Bass, B. M. **Leadership and Performance beyond Expectations [M]**. New York, NY: Free Press, 1985: 14 -24, 26 -28.

Banks, G. C. , Mccauley, K.D., Gardner, W.L., et al. **A Meta-analytic Review of Authentic and Transformational Leadership: A Test for Redundancy [J]**. Leadership Quarterly, 2016(4) : 634 652.

Buonomo, I. , Fiorilli, C. & Benevene, P. **Unravelling Teacher Job Satisfaction: The Contribution of Collective Efficacy and Emotions Towards Professional Role [J] .** International Journal of Environmental Research and Public Health, 2020(3). https: / /doi. org /10. 3390 /ijerph17030736.

Buri, I. & Moè, A. *What Makes Teachers Enthusiastic: The Interplay of Positive Affect, Self-efficacy and Job Satisfaction* **[J].** Teaching and Teacher Education, 2020 (3) : 110.

Chen Xin. **The Significance and Methods of School Evaluation of Teachers' Job Satisfaction [J].** 2005. 36.

Chen Hu, Yin Yingji, WANG Yingchao. **Research on the relationship between Servant leadership style, Job Stress and Job satisfaction [J].** Statistics and Decision, 2017 (6) : 100 103.

Chen Yunying, Sun Shaobang. **Measurement of teacher job Satisfaction [J].** Psychological Science, 1994.

Du Pengcheng, Yao Yao, Du Xue. **The impact of Inclusive Leadership on Employees' Job Satisfaction: The mediating effect based on psychological ownership [J].** Enterprise Economics, 2017(8) : 96 103.

Feng Bolin. **A Study on Teachers' Job Satisfaction and its Influencing factors [J].** Educational Research, 1996.

Gong Huoliang. **A study on the status quo of high school teachers' job satisfaction in Henan Province [D].** Master's thesis, Henan University, 2002.

Gui, C. , Luo, A. , Zhang, P. , et al. **A Meta-analysis of Transformational Leadership in Hospitality Research [J].** *International Journal of Contemporary Hospitality Management*, 2020(6) : 2029 2034.

He Weiqiang, Xuan Hongping. **Research on Teachers' Job Satisfaction and its Social psychological mechanism [J].** Journal of Qiqihar University (Philosophy Social Science Edition), 2002.

He Yiqing, Liu Na, Sun Ying. **How role dynamics affect teachers' performance and health: The moderating effect of proactive personality on job satisfaction [J].** *Exploration of Higher Education,* 2020(1) : 99 108.

Huang Chunsheng. **Research on the correlation between job satisfaction, organizational commitment and turnover intention [D].** Xiamen: Ph. D. Thesis, Xiamen University, 2004.

Ji Chunmei, Feng Bang, Zhao Hui. **How transformational leadership of school principals affects Job satisfaction of primary and secondary school teachers [J].** Global Education Outlook, 2019, 51 (2) : 93-107.

Liang Wenyan. **Job requirements, job resources and teachers' Job satisfaction: An empirical study based on international survey data of teachers' teaching in Shanghai [J].** Educational Research, 2020(10) : 102 115.

Liu Shiyong, Liu Zhixing, LI Jiaoyan. **Research on the relationship between paternalistic leadership, job satisfaction and coercive organizational citizenship behavior of college counselors [J].** Hubei Social Sciences, 2018(8) : 166 170.

Li Chaoping, Meng Hui, Shi Kan. **The Impact of transformational Leadership on organizational citizenship Behavior [J].** Psychological Science, 2006.

Li Chaoping, Shi Kan. **A study on the relationship between transformational leadership and leadership Effectiveness [J].** Psychological Science, 2003.

Li Chaopin, Tian Bao, Shi Kan. **Transformational Leadership and Employee work attitude: The mediating role of psychological empowerment [J].** Psychology, 2006.

Li Chaopin, Shi Kan. **The Structure and measurement of transformational Leadership [J].** *Acta Psychologica Sinica*, 2005.

Lin Chongde, Shen Jiliang, Xin Tao. **The composition of teacher Quality and its training approach [J].** *Chinese Journal of Education*,1996.

Liao Yanfang. **A study on the relationship between school principals' leadership and school effectiveness in Macao Middle School [D].** Guangzhou: Master's degree, *South China Normal University, Paper,* 2002.

Ling Wenshuan, Fang Liluo. **Leadership and Motivation [M].** Beijing: China Machine Press, 2000.

Long Junwei. **School-based Personnel Development and Management [M].** Guangzhou: Guangdong Higher Education Press, 2002.

Luo Shuangping. **Career stage Division [J].** *Chinese Talent*, 2002.

Lopes, J. & Oliveira, C. **Teacher and School Determinants of Teacher Job Satisfaction: A Multilevel Analysis [J].** School Effectiveness and School Improvement, 2020(3) : 1 - 19

Locke, E.A. **What is Job Satisfaction? [J]**. *Organizational Behavior Human Performance*, 1969 (4) : 309 -336.

Liu Chao, Xia Ni. **Research on the mediating variables of the relationship between transformational leadership and job satisfaction**. Financial Theory and Practice, 2012, (1) : 91-94

Mackenzie, S. B. , Podsakoff, P. M. & Rich, G. A. **Transformational and Transactional Leadership and Salesperson Performance [J]**. *Journal of the Academy of Marketing Science*, 2001(2) : 115 -134.

Meng Hui. **An Empirical Study on Transformational Leadership Style [J]**. A*pplied Psychology*, 2004. 463-478

Meng Hui. **The Five Personality Traits of enterprise managers, trait goal Orientation and transformational leadership [PhD thesis D]**. *Shanghai: East China Normal University*, 2003,3

Meng Hui. **An Empirical Study on Transformational Leadership Style [J].** *Applied Psychology*, 2004,10 (2) : 18-22

Mowday, R. T. , Steers, R. M. & Porter, L. W. **Employee-organisation Linkages: The Psychology of Commitment, Absenteeism and Turnover [M]** . New York, NY: Academic Press, 1982: 28-45.

Nyenyembe, F. W. , Maslowski, R. , Nimrod, B. S. , et al. **Leadership Styles and Teachers' Job Satisfaction in Tanzanian Public Secondary Schools [J]** . *Universal Journal of Educational Research*, 2016 (5) : 980 -988.

Podsakoff, P. M. , Mackenzie, S. B. , Moorman, R. H. , et al. **Transformational Leader Behaviors and Their Effects on Followers' Trust in Leader, Satisfaction, and Organizational Citizenship Behaviors [J]** . *The Leadership Quarterly*, 1990(2) : 107-142.

R•Hoppock. *Job Satisfaction [M]*. **New York: Harper and Row Inc.,1935**.

Shi Yan. The Relationship between University campus culture and staff job satisfaction [D]. *Master's thesis, Tsinghua University*, 2004.

Skaalvik, E. M. & Skaalvik, S. **Motivated for Teaching? Associations with School Goal Structure, Teacher Self-efficacy, Job Satisfaction and Emotional Exhaustion [J]**. *Teaching & Teacher Education*, 2017(7) : 152 -160.

Toropova, A. , Myrberg, E. & Johansson, S. **Teacher Job Satisfaction: the Importance of School WorkingConditions and Teacher Characteristics [J]** . *Educational Review*, 2020(8) : 1 27.

T.Judge, R. Piccolo. **Transformational and Rransactional Leadership:A Meta - analytic Test of their Relativevalidity [J]** . Journal of Applied Psychology , 2004, 89 (4) : 755 - 768

Veeriah, J. , Chua, Y. P. & Siaw, Y. L. **Principal's Transformational and Teachers' Affective Commitment in Primary Cluster Schools in Selangor [J]** . *International Online Journal of Educational Leadership*, 2017 (1) : 60 -89

Wang Zuli. **A survey on junior high school teachers' Job satisfaction [J]**. *Contemporary Educational Science,* 2003.

Wu Zhiming, Wu Xin. **The Impact of transformational Leadership in Knowledge Teams on organizational citizenship behavior [J]**. *Psychological Science*, 2006.

Wang Zhen, Chen Loni, Li Xupei. **Transformational leadership and job engagement: a mediation model based on Affective Perspective [J]**. *Management Review*, 2015(9) : 120 129.

Xie Gang. **A Psychological Analysis of University Teachers' Job Satisfaction [J]**. Journal of Technical Economics, 2000.

Yang Xiaowei. **School Leadership in Transformational Change [J]**. Educational Research and Experiment, 2005.

Yu Tianci. **Research on Organizational Commitment and Motivation of University Teachers: a human resource Perspective [D]**. Beijing: Master's degree, Beijing Normal University, The theory of Article, 1999.

Yu Wenzhao. **Management Psychology (3rd Edition) [M]**. Shanghai: Oriental Publishing House, 2002.

Zhang Tao, Li Hong. **Transformational Leadership Theory and its implications for the Work of Principals [J]**. *Teaching and Administration*, 2005.

Zhang Zhongshan, **Study on Job Satisfaction of Primary School Teachers in Shanghai [J]**. *Shanghai Education and Research*, 2000.

Zhang Zhongshan, Wu Zhihong. **Research on the relationship between principals' Leadership behavior and Teachers' Job satisfaction [J]**. *Psychological Science*, 2001.

Zhou Junhong. **The Correlation between school organizational climate and teachers' Job satisfaction [J]**. *Coal Higher Education*, 1997.

Zhou Yajuan. **A study on the correlation between organizational climate and teachers' job satisfaction in junior middle schools in Guizhou Province [D]**. Guizhou Normal University, Master's thesis. 2005

Zhou Li-Chao. **A Study on the Job Satisfaction of University teachers [J]**. Journal of Tianjin Television University, 2004.

Zhuge Weimin. **Investigation and Analysis of the Current Situation of Physical Education teachers' Job Satisfaction in Zhejiang, Shanghai, and Jiangsu Universities [J]**. Beijing Sports University Journal of Science, 2001.

Zhu Yan. **Job stress level and its impact on job satisfaction of teachers in Shanghai, China: An empirical analysis based on TALIS2018 data [J]**. Global Education Perspectives, 2020(8): 117 128.

Zhao Qian, Xi Rong, **The Transition of President's Leadership [J]**, Education Journal of Renmin University of China, 2018(2): 69-77.

The Mediating Factors on the relationship
between Social Factors and Female Administrators' Leadership
in Public high schools under Shenyang City

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ABSTRACT

The objectives of this research were: (1) To study the components on the Female administrators' Leadership in high schools under Shenyang city. (2) To develop the model of mediating factors between social factors and Female administrators' Leadership in high schools in Shenyang city. And (3) To decompose mediating factors of the social factors affecting on female administrators' leadership in public high schools in Shenyang city. The population were administrators' and teachers in public high schools determined by G*Power software, total 2,862 and used stratified random sampling method for 212. The data analyzed by statistical software including descriptive statistics, confirmatory factor analysis, and structural equation model.

The research found that; (1) The leadership of female administrators' consist of 5 components mainly; thinking ability, organizational ability and decision-making ability; (2) Personal factors, Ffamily factors and Oorganizational factors had positive effect on female administrators' leadership with statistical significant ($p<.05$), and play an intermediary role between social factors and female administrators' leadership;   And (3) The mediating effect of intermediary factors could be reduce the direct effect of social factors on the leadership of female administrators at 59%.

Keywords: Female managers' leadership, Social factors, Mediating, public high school

1. Introduction

Administrators' leadership is closely related to the specific implementation and methods of management activities, and gender differences are also an important research topic for leaders to develop leadership, in which many scholars have shown great interest.

According to reason, social support is a behavior or process that can promote support, help or support things. It is an individual's response to his/her own/others' social needs and the source of people's overall level of participation and social support environment; whether social support can provide individuals with composite structural help, a force or factors in the social environment to promote human development. (Sarason., Levine, Basham, et al,1983) and Chen Hui (2019). considered that the subjects of social support refer to the various social forms related to the objects, including family, community, society, school, organization, government, etc. Female leaders in public high schools are mainly provided with a support network of life care, emotion, culture, policy and other aspects by social support subjects such as family, school, government, etc.; the object of social support refers to female leaders in public high schools , who are not socially disadvantaged groups or individuals, but only individuals or groups who generally need support in their daily life; the intermediary of social support refers to the connection between family, community, school, government and female administrators in public high schools female leaders, including the content, mode and type of services provided by the subject of social support as an object, which are specifically expressed as emotional support (gaining respect, trust and care), information support (borrowing tools such as relevant policy guidance, media publicity feedback and affirmation) friendly support (acceptance, sense of belonging) and instrumental support (material resources, financial assistance or required services). In addition, as more and more female administrators' leaders emerge in society, female leaders are also receiving more and more attention.

2. Research Questions

(1) What were the components of leadership of female administrators in public high schools in Shenyang City?

(2) What were the mediating factors between social factors and leadership of female administrators in public high schools in Shenyang City?

(3) How did social factors change female administrator leadership through mediating factors?

3. Research Objectives

(1) To study the components on the female administrators' leadership in high schools under Shenyang city.

(2) To develop the model of mediating factors between social factors and female administrators' leadership in high schools in Shenyang city.

(3) To decompose mediating factors of the social factors affecting on female administrators' leadership in public high schools in Shenyang city.

4. Research Hypothesis

H1: The model of mediating factors between social factors and female administrators' leadership in high schools in Shenyang city fit well with empirical data.

H2: The family factors, organizational factor and personal factor were mediators' effect on the relationship between social factors and female administrators' leadership in high schools in Shenyang city.

H3: Mediating factors could be change to the effect of the social factors affecting on female administrators' leadership in public high schools in Shenyang city.

Conceptual Framework
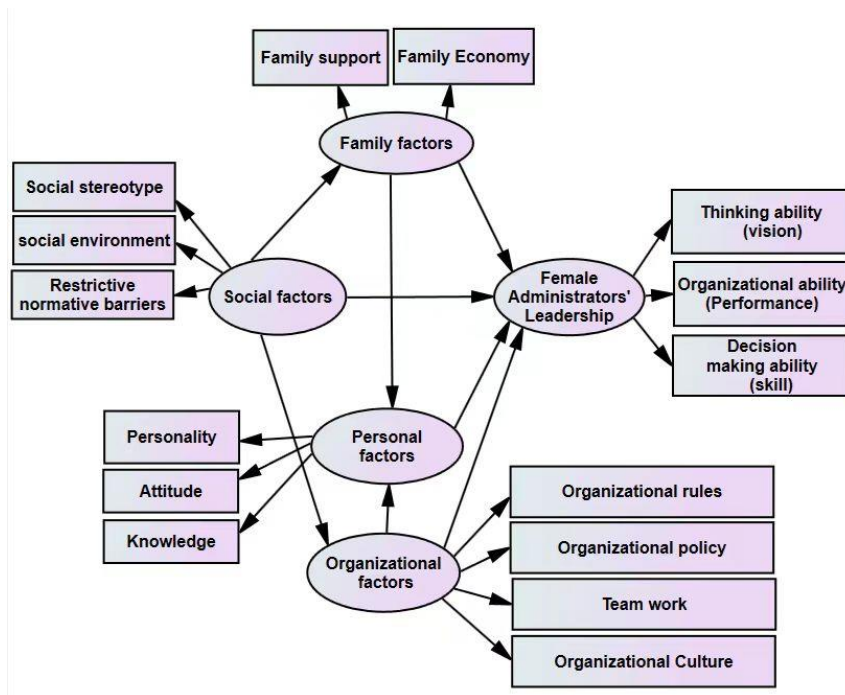
5. Methodology

Step 1: Apply for permission to collect research data from the faculty of Education, Bankokthonburi University.

Step 2: Obtain researcher references from the faculty of Education, Bankokthonburi University.

Step 3: Select some coordinating teachers to help data collection in Shenyang. These teachers will help to understand the details of questionnaire and data collection.

Step 4: Send questionnaires to coordinating teachers to gathering data from the sample. The coordinating teacher will help to collect data from the selected sample of teachers in each school.

Step 5: The analysis was performed using data analysis methods include descriptive statistics were used for data analysis, mean, standard deviation (S.D). The model was evaluated using the chi-square goodness-of-fit. chi-square test, Confirmation factors analysis and hypothesis testing used by structural equation modeling.

6. Research Finding.

Descriptive analysis of indicators

On the leadership of female administrator leadership(FAL) consisted of 3 components mainly; thinking ability(TA), organizational ability(OA) and decision-making ability (DA); and there were 4 factors affecting female administrator leadership namely; family factor(FF), personal factor(PF), social factor(SF), and organization factor(OF). Result as follow;

Table 1 Test for distribution of data

Factors	Variables	Mean	Level	S.D.	Skewness Statistic	SE	Kurtosis Statistic	SE	Tolerance	VIF
Familly	FS	3.219	Moderate	1.072	-.453	.164	-1.162	.326	.239	4.187
(FF)	FE	3.221	Moderate	1.116	-.479	.164	-1.033	.326	.254	3.936

Table 1 Test for distribution of data

Factors	Variables	Mean	Level	S.D.	Skewness		Kurtosis		Tolerance	VIF
					Statistic	SE	Statistic	SE		
Social (SF)	SS	3.268	Moderate	1.066	-.351	.164	-1.228	.326	.148	6.776
	SE	3.279	Moderate	1.072	-.346	.164	-1.178	.326	.170	5.879
	RB	3.245	Moderate	1.040	-.328	.164	-1.185	.326	.141	7.098
parents (PF)	PE	3.103	Moderate	.980	-.305	.164	-1.158	.326	.269	3.719
	AT	3.276	Moderate	1.061	-.418	.164	-1.105	.326	.180	5.562
	KN	3.341	Moderate	1.084	-.452	.164	-1.133	.326	.168	5.935
	ORR	3.257	Moderate	1.107	-.376	.164	-1.258	.326	.158	6.318
Organization (OF)	OP	3.261	Moderate	1.099	-.296	.164	-1.296	.326	.151	6.622
	TW	3.219	Moderate	1.126	-.302	.164	-1.218	.326	.159	6.294
	OC	3.298	Moderate	1.109	-.389	.164	-1.254	.326	.178	5.625
Femel Leadership	TA	3.246	Moderate	1.070	-.388	.164	-1.083	.326	.158	6.316
	OA	3.262	Moderate	1.122	-.488	.164	-1.132	.326	.180	5.547

Table 1 Test for distribution of data

Factors	Variables	Mean	Level	S.D.	Skewness		Kurtosis		Tolerance	VIF
					Statistic	SE	Statistic	SE		
(FAL)	DA	3.233	Moderate	1.121	-.470	.164	-1.106	.326	.170	5.866

On the table 1; That show on the distribution of factors and each component of factors. All of component had mean between 3.10 to 3.34 at a high level and there were skewness value between -0.48 to -0.29, kurtosis value between 1.03 to 1.29, that show the data distribution with normal curve, when test multicoliniality with VIF and tolerance had value between 3.72 to 7.09 and 0.14 to 0.27 respectively, that no multicoliniality effect.

Correlation testing

The intrecorrelation of variables of model could have correlation coefficient as the table 2

Table 2: Pearson correlation coefficient

	FS	FE	TA	OA	DA	ORR	OP	TW	OC	PE	AT	KN	SS	SE	RB
FS	1														
FE	0.857**	1													
TA	0.223**	0.190**	1												
OA	0.260**	0.239**	0.876**	1											
DA	0.221**	0.183**	0.883**	0.859**	1										
ORR	0.325**	0.316**	0.337**	0.385**	0.357**	1									
OP	0.282**	0.268**	0.272**	0.309**	0.324**	0.876**	1								

Table 2: Pearson correlation coefficient

	FS	FE	TA	OA	DA	ORR	OP	TW	OC	PE	AT	KN	SS	SE	RB
TW	0.288**	0.273**	0.282**	0.320**	0.303**	0.872**	0.874**	1							
OC	0.305**	0.308**	0.321**	0.367**	0.361**	0.857**	0.863**	0.869**	1						
PE	0.463**	0.427**	0.478**	0.471**	0.437**	0.286**	0.241**	0.270**	0.305**	1					
AT	0.317**	0.292**	0.392**	0.394**	0.334**	0.451**	0.424**	0.454**	0.468**	0.751**	1				
KN	0.307**	0.299**	0.391**	0.390**	0.348**	0.404**	0.404**	0.416**	0.423**	0.774**	0.889**	1			
SS	0.304**	0.297**	0.350**	0.343**	0.295**	0.446**	0.393**	0.439**	0.425**	0.357**	0.506**	0.506**	1		
SE	0.317**	0.287**	0.354**	0.339**	0.306**	0.439**	0.398**	0.451**	0.421**	0.360**	0.494**	0.498**	0.885**	1	
RB	0.349**	0.309**	0.368**	0.383**	0.301**	0.446**	0.426**	0.450**	0.436**	0.366**	0.509**	0.508**	0.897**	0.882**	1

* $p<0.05$ ** $p<0.01$

From the table 2 that show the correlation of all variable in the model had value between 0.18 to 0.89 and there were significant at .01. that suitable for the next step.

The measurement model

The measurement model of mediating factors between social factors and female administrators' leadership in high schools in Shenyang city on unstandard estimate and standard estimate as the figure below;
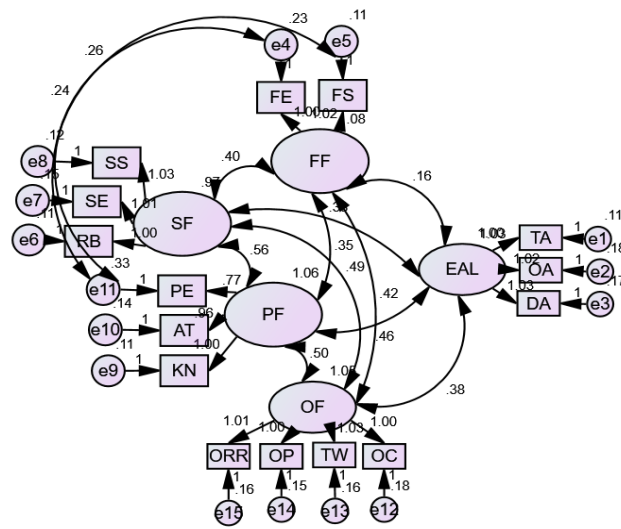
model unstandardized estimates
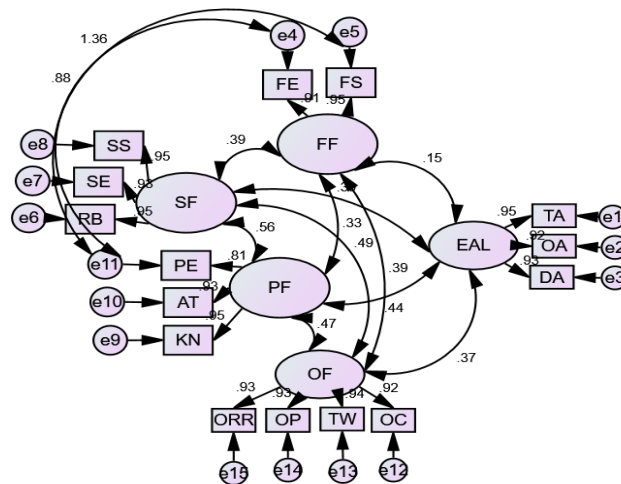
model standardized estimates

Table 3: Show all the result on estimate model and criterion for model fit with empirical data.

Indicators	Standard Score	Result	Conclusion	References
Chi-square	Chi-square	109.246		
Df		78		
CMIN/df	≤ 3	1.401	excellent	Bollen (1989), Diamantopoulos and Siguaw (2000)
CFI	≥0.9	0.991	excellent	Hair et al. (1998), Mueller (1996)

Indicators	Standard Score	Result	Conclusion	References
NFI	≥0.9	0.971	excellent	Hair et al. (1998), Mueller (1996)
GFI	≥0.9	0.941	excellent	Hair et al. (1998), Browne and Cudeck (1993)
IFI	≥0.9	0.991	excellent	Hair et al. (1998), Mueller (1996)
RMSEA	≤0.08	0.043	excellent	Hair et al. (1998), Browne and Cudeck (1993)

On the measurement model (CFA), The convergent validity, composite reliability and discrimination validity test, should be analysis before the hypothesis testing, The model quality testing by Convergent validity, composite reliability and discrimination validity test as the table 4

Table 4: Results of convergence validity analysis

Variable	Model variable	Standard factor load coefficient	S.E.	C.R.	p	CR	AVE
FF	FS	0.779				0.845	0.620
	FF	0.796	0.076	13.990	***		
SF	SS	0.798				0.886	0.616
	SE	0.756	0.075	13.134	***		
	RB	0.732	0.060	15.643	***		
PF	PE	0.710				0.851	0.552
	AT	0.705	0.066	13.946	***		
	KN	0.673	0.064	13.855	***		
	OP	0.789					

Variable	Model variable	Standard factor load coefficient	S.E.	C.R.	p	CR	AVE
OF	TW	0.701	0.063	14.847	***	0.864	0.623
	OC	0.644	0.056	13.243	***		
	ORR	0.682	0.274	12.487	***		
FAL	TA	0.745					
	OA	0.748	0.054	14.578	***	0.862	0.605
	DA	0.768	0.665	14.752	***		

***. Correlation is significant at the 0.001 level (2-tailed).

The table 4, Show the composite reliability (CR) and mean variance extraction value (AVE) of each variable, that shown in the table. The factor load value of each variable ranges from 0.644 to 0.836 were high convergence validity, CR of all dimensions was greater than 0.7, (Hu and Bentler 1998) and when find out the discriminant of model CFA by Fornell and Lacker (1980) method as table 5

Table 5: Discriminative validity analysis test

	CR	AVE	MSV	MaxR(H)					
FF	0.845	0.620	0.437	0.791	**0.717**				
SF	0.886	0.616	0.496	0.811	0.661***	**0.717**			
PF	0.851	0.552	0.496	0.754	0.625***	0.704	**0.708**		
OF	0.864	0.603	0.418	0.762	0.635***	0.646	0.604***	**0.709**	
FAL	0.862	0.625	0.434	0.772	0.621***	0.603	0.616	**0.664**	**0.784**

On table 5, The Fornell & Larker (1980) criterion which is evaluated by using the square root of AVE for each potential structure. This method is greater than the highest correlation between the structure and the other structures in the model. Data analysis in

Table 4.8 shows that AVE square root of factors and each value is greater than the correlation between variables.

The hypothesis testing

The model of mediating factors between social factors and female administrators' leadership in high schools in Shenyang city on hypothesis testing as figure below,
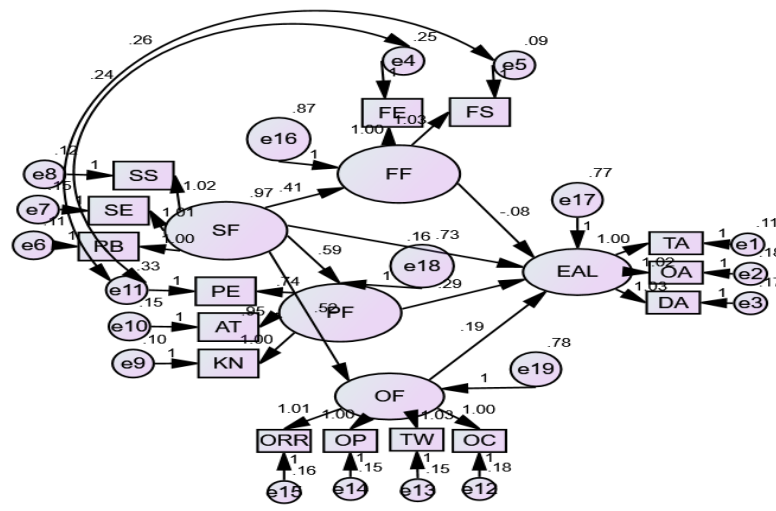
model standardized estimates

The hypothesis testing on the model could be conclusion as follows;

H1: The model of mediating factors between social factors and female administrators' leadership in high schools in Shenyang city fit well with empirical data with CMIN/DF = 1.706, which is within the acceptable range of less than 3, the value-added fitness statistic CFI, NFI, GFI, and IFI were all greater than 0.9, and the absolute fitness statistic RMSEA was less than 0.057. Therefore, the indicators in the model were acceptable.

H2: The family factors, organizational factor and personal factor were mediators' effect on the relationship between social factors and female administrators' leadership in high schools in Shenyang city.

(1) Testing for direct effects hypothesis as the table 6

Table 6; Hypothesis testing of direct effects.

Effect of variable			Unstandardized Coefficients	S.E.	C.R.	P	Standardized Coefficient
OF	<---	SF	.521	.066	7.887	***	.501
FF	<---	SF	.408	.071	5.748	***	.394
PF	<---	SF	.595	.064	9.252	***	.566
FAL	<---	FF	.081	.062	1.301	.193	.081
FAL	<---	SF	.165	.093	1.778	.075	.161
FAL	<---	PF	.285	.076	3.765	***	.292
FAL	<---	OF	.190	.072	2.651	.008	.192

(Note: *** p≤.001).

(2) Testing for indirect effects hypothesis

The result on indirect effect in the model as the table 7 as follows:

Table 7: Hypothesis testing of indirect effects

Relationships	Standardized indirect effects
FAL<---FF<---SF	0.03
FAL<---OF<---SF	0.10
FAL<---PF<---SF	0.18

On the table 7, Found that; The social factors had indirect effect via mediators (FF, PF and OF)

H3: Mediating Factors could be change be changing the effect of the social factors affecting on female administrators' leadership in public high schools in Shenyang city. As the table 8

Table 8: Show the reduce direct effect when the model don't have mediator

effect			Direct effect	Indirect effect	Total Effect	% Direct effect	Model
FAL	<---	SF	.386***	-	.386	100	No mediator
FAL	<--FF<--	SF	.338***	.048	.386	88	FF mediator
FAL	<--FF<--	SF	.212*	.174	.386	55	FF, PF mediators
FAL	<--PF<--	SF					
FAL	<--FF<--	SF	.161	.229	.386	41	FF, PF, OF

	effect		Direct effect	Indirect effect	Total Effect	% Direct effect	Model
FAL	<--PF<--	SF					mediators
FAL	<--OF<--	SF					

On the table 8, Show that; first model (no mediator), The direct effect of SF on FAL had .386, when take the FF, EF, and OF as mediators on relationship between SF and FAL had direct effect 0.161 that show the mediating effect could reduce direct effect of SF on FAL at 59% and mediating effected on direct effect from significant at .001 to no significant too.

7. Discussion

The FF, PF and OF in the model had mediating effect could reduce direct effect of SF on FAL at 59% and could be change the directed of the social factor (SF) on female administrators' leadership (FAL) from significant at .001 to no significant too. That can show; the effect of social factor in university may be not appear to effect on female administrators' leadership directly but actually it can also have an effect through intermediate variables, therefore developing the female administrators; leadership emphasis should be placed on social factors and mediator's variables which corresponds to social learning theory of Bandura (1986).

8. Recommendations

1. Optimize the cultivation of leadership behaviour in colleges and universities to promote female leadership enhancement.

2. Improve the incentive mechanism to promote leadership influence.

3. Creating a gender-equal social and cultural environment to support women in the workplace.

4. Establishment of reasonable and legal rules and regulations to promote leadership improvement.

9. Suggestions for future research

1. The distribution of the sample in this study is relatively short, so in the subsequent study, the collection of the sample needs to be set aside for a longer period of time, as comprehensive as possible, involving multiple groups, adding a variety of ways to make the

sample data collection more cautious.

2. This study on the promotion of women's leadership in colleges and universities suggested that there is still less research in the existing market, so this paper can refer to less literature, in the subsequent research continue to focus on the development of women in colleges and universities this thesis.

Bibliography

Bandura A. (1986). **Social foundation of thought and action: A social cognitive theory Englewood Cliffs.** NJ: Prentice-Hall.

Bentler, P. M., & Chou, C. H. 1987. **Practical Issues in Structural Modeling.** Journal of Sociological Methods & Research, 16(1): 78 - 117.

Browne, M. W., and Cudeck, R. (1993). **"Alternative ways of assessing model fit," in Testing Structural Equation Models.** eds K. A. Bollen and J. S. Long (Beverly Hills, CA: Sage), 136–162.

Chen, H. (2019). **Research on the leadership of female teachers in colleges and universities from the perspective of social support.** Master's thesis, Shenzhen University, CNKI http://cdmd.cnki.com.cn/Article/CDMD-10590-1021811692.htm

Diamantopoulos, A. & Siguaw, J. A., (2000). **Introduction to LISREL: A guide for the uninitiated.** London: SAGE Publications, Inc,

Fornell, C., Larcker, D. F. (1981). **Evaluating Structural Equation Models with Unobservable Variables and Measurement Error.** Journal of Marketing Research, 18(1), 39–50.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2010). **Multivariate data analysis: A global perspectives.** Upper Saddle River, NJ: Pearson Education, International.

Hu, L., and Bentler, P. M. (1998). **Fit indices in covariance structure modeling: sensitivity to underparameterized model misspecification.** Psychol. Methods 3:424. doi: 10.1037/1082-989X.3.4.424

Mueller, R. O. (1996). **Basic principles of structural equation modeling: An introduction to LISREL and EQS.** New York: Springer.

Sarason, T.G., Levine, H.M., Basham, R.B., & Sarason,B.R. (1983). **Azzessing Social support: The social support Questionnaires.** Journal of Personallity and Social Psycology, 44, 127-139.

The Eeffectiveness of Academic Administration in Digital Transformation of Art Design Major in Colleges and Universities under Liaoning Province

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ABSTRACTS

The objectives of this research were: (1) to examine the components for effectiveness of academic administration in digital transformation of Art Design Major in Colleges and Universities under Liaoning Province; and (2) to develop managerial guidelines for effectiveness of academic administration in digital transformation of Art Design Major in Colleges and Universities under Liaoning Province.

The research methodology was a mixed methodology research, including qualitative research and quantitative research. The population of the research consisted of 2193 who were administrators, professors, instructors of art design major in colleges and universities under Liaoning Province. The sample size was determined by Krejcie and Morgan's Table (1970), and obtained by a stratified sampling technique sampling method, totaling 325 samples. The key informants for in-depth interview consisted of seven key informants who were vice presidents of academic administration, professors and lecturers, and key informants for Focus Group Discussion consisted of nine deans of the colleges of art design. All key informants were obtained by purposive sampling method. The instruments used for data collection were a in-depth interviews form, a five-level rating scale questionnaire, and Focus Group Discussions form. The statistics used for data analysis were frequency, percentage, mean, Standard Deviation, and Exploratory Factor Analysis as well as the content analysis was employed.

The research findings revealed that: (1) there were five components for effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province which consisted of academic quality management and talent training, academic administration organization and management, teacher team

construction and development, quality assurance and evaluation, and digital teaching resource management; and (2) there were total 32 managerial guidelines for effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province which consisted of nine managerial guidelines for component of academic quality management and talent training; eight managerial guidelines for component of academic administration organization and management; six managerial guidelines for component of teacher team construction and development; four managerial guidelines for component of quality assurance and evaluation; and five managerial guidelines for component of enhancement of digital teaching resource management.

Keywords: Eeffectiveness, Academic Administration, Digital Transformation, Art Design Major, Liaoning Province

1. Introduction

Twenty years had passed in the 21st century, and the economy, politics, culture, science and technology had achieved great development, and the human society has entered a new era of digitalization. With the deepening development of digital technology, the digitalization of all walks of life has swept the world. The change of digitalization has promoted the development of education. It has changed the traditional school management system and management mode, especially the academic management of the school was deeply influenced by digital transformation, and the academic management has changed from the traditional mode to the information management mode under digital transformation.

Academic administration refers to according to the law of teaching and academic development and the authority of knowledge, the process of organizing and coordinating others' academic activities and regulating and standardizing the limited academic resources and academic behaviors, so as to efficiently achieve academic goals. (Wang Xiaolong,2013:150-152 The Chinese government prioritizes digital education transformation, with broad support from various governmental levels. "China's Education Modernization 2035" by the CPC Central Committee and The State Council promotes education reform in the information age, emphasizing intelligent campuses and integrated teaching, management, and service platforms. The plan aims to modernize talent training, combining large-scale education with personalized approaches, innovating the education service industry, and establishing mechanisms for sharing digital resources and new education service supervision. The Ministry of Education issued the "Code for Digital Campus Construction of Colleges and Universities" in 2021, emphasizing information technology integration, supporting high-quality education development. In 2023,

the Department of Higher Education intensifies digital strategy implementation, driving digital transformation in higher education and enhancing a national smart education platform. The "Report on the Digital Development of World Higher Education" leads global digital reform, using the Digital Development Index of World Higher Education for evaluation and guidance. Local colleges and universities are encouraged to pilot digital reform, fostering collaboration in higher education's digital development. At this point, digital construction in Chinese higher education is at its peak, supported by robust national policies.In terms of Liaoning province, The Liaoning Provincial government issued and implemented the "14th Five-Year Plan" of Liaoning Province, pointing out to promote education reform in the intelligent era, build an integrated digital education service system, promote the construction of digital campus, promote the deep integration of information technology and education and teaching, and enhance the ability to guarantee network security.

However, The design of management system was not scientific enough, the design of management process was relatively simple, and the information of teaching quality monitoring was weak.(Liu Wei 2022:81-83) The relationship between power and responsibility of teaching quality management was not clear, the teaching quality management methods were outdated, and the performance appraisal mechanism of teaching quality management was not perfect.(Wang Ying 2021:183-185)Art and design majors, like many others, lag in technology integration and adaptable educational administration systems. A researcher reviewing a provincial key art and design school's website discovered the absence of a digital academic administration system. Instead, traditional networks and standard computers are in use, demanding immediate adoption of intelligent network education and management. Across Liaoning Province universities, issues like network resources, professional management platforms, and network environments are prevalent in digital academic administration for art and design majors. Urgent improvement is needed to enhance the effectiveness of digital academic administration for these majors in Liaoning Province.

Colleges and universities, for their development and survival, rely not only on first-class education but also on first-class management. Thus, academic administration, a vital pillar supporting their operation and growth, must lead the way in reform. The management mode for academic administration in higher education must shift from traditional to digital. This entails reinforcing academic quality management, optimizing digital academic resources, altering conventional administrative concepts, enhancing the organizational capabilities and functionalities in digital transformation, and optimizing management resources for academic administration in this digital evolution. Consequently, it is imperative to implement effective

strategies for academic administration during digital transformation. These strategies serve as the theoretical foundation and data-backed support for academic administration's digital transformation within art and design programs at universities in Liaoning Province. By identifying key factors influencing academic administration's digital transformation in university art and design programs in Liaoning Province, we aim to enhance management effectiveness.

The research analyzes the current state of digital transformation in art design majors across 21 universities in Liaoning Province, systematically examining quality administration, organization administration, and resources administration. Based on theories of Administrative Management, effective managerial guidelines were presented, benefiting talent training and improving art design abilities, employment rates, and government employment services. Ultimately, this research aims to solve existing problems in academic administration, enhance the abilities of art design major students, and provide an analytical basis for management decision-making and effective academic administration in Liaoning Province's colleges and universities

2. Research objectives

1. To examine the components for effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province.

2. To develop managerial guidelines for effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province.

3. Scope of research content

1. Effectiveness
   (1) Effective management theory
   (2) Academic effectiveness
   (3) Effectiveness of Academic Administration
2. Academic Administration Concepts and Theories
   (1) Academic Administration
   (2) Administrative Management theory
3. Digital Transformation
   (1) Digital Transformation Theories
   (2) Academic Administration in Digital Transformation
4. Art Design Major
5. Colleges and universities under Liaoning Province

4. Research Methodology

  1. Population and sampling

    In this research included key informants, population, and sample.

    1. In-depth interview from seven key informants

      This research involved 7 key informants from three universities in Liaoning Province, including an Associate Dean for academic administration, professors, and instructors from the Department of Art Design. These universities encompass both public and private institutions, offering comprehensive and specialized programs. Dalian University of Technology was a prestigious public university, while Lu Xun Academy of Fine Arts was renowned for its art design major. Liaoning Communication University represents private education in the region, excelling in art design. All three institutions had actively engaged in academic administration for digital transformation in recent years. The data was collected during interviews, employing purposive sampling method.

    2. Research Questionnaire on population/samples

      This research intended to conduct aquantitative research of the components for effectiveness of academic administration in digital transformation of art design major in 21 universities in Liaoning Province. Sample was obtained by stratified random method .From representative colleges and universities under Liaoning Province, population included professional instructors, educational administrators in art design major, totaling 2193. Sample size was determined by Krejcie and Morgan's table (1970), sample was 325. The questionnaire was used for data collection. Exploratory Factor Analysis (EFA) was employed to reduce the irrelevant variables.

    3. Focus Group Discussion

      Focus Group Discussion (FGD): Nine key informants for developing the managerial guidelines for the components for effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province. Nine key informants were the dean of the school of art design. All key informants were obtained by purposive sampling method.

  2. Research Instrument

    There were 88 variables from interview of key informants. The researcher has employed content analysis. As result, total of 88 variables were found and prepared as research instrument, a five-point rating scale questionnaire. The quality of instruments has been verified by content validity and reliability.

For the content validity of the questionnaire, the researcher has sent the questionnaire to seven experts for verification. The Item-Objective Congruence (IOC) was used to evaluate the items of the questionnaire based on the score range from - 1 to +1.0. The items that had scores lower than 0.6 were revised. On the other hand, the items that had scores higher than or equal to 0.60 were reserved. As a result, it was found that there were 77 items in the questionnaire.

For reliability of questionnaire was a way of assessing the quality of the measurement procedure used to collect data. The researcher has sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's alpha coefficient on or above 0.70 means adequate reliability to determine the internal consistency or average correlation of items in a research instrument to measure reliability of the questionnaire. As a result, Cronbach's alpha coefficient was at .987 which could be used to describe the reliability of the questionnaire.

3. Data collection procedure

(1) The researcher had applied to the Faculty of Education for permission to continue the research and carry out the research in accordance with the guiding procedures and research plan.

(2) The sample was directly informed of the content scope and research objectives, and received an official permission letter from the university to the administrator, allowing them to conduct and collect data from instructors in accordance with the approval letter issued by the relevant authorities.

(3) After the administrator's permission was processed and confirmed, Researcher and instructors or college and university's coordinators agreed to distribute questionnaires online.

(4) The questionnaire was completed within 4 weeks or 30 days. The time for data collection was one and a half months.

4. Data Analysis

The data of demographic variables were analyzed by descriptive statistics; frequency, and percentage. The variables of academic administration in digital transformationt were analyzed by descriptive statistics; mean, Standard Deviation (S.D.). The components for effectiveness of academic administration in digital transformation of art design major were analyzed to reduce irrelevant variables.

Exploratory Factor analysis (EFA) reduces measurable variables to fewer latent variables that share common variance but were unobservable. These latent factors represent

hypothetical constructs, such as 'communication ability' inferred from oral presentation and interview scores. EFA was used to discover influencing factors and analyze variables that 'go together.' The goal was to find the smallest number of common factors explaining correlations. Common factors affect multiple surface attributes, while specific factors impact particular

5. Research Results

1. Demographic information

There were total of 325 respondents to the questionnaires; 154 females, 47.4 percent, and 171 males, 52.6 percent. In terms of age, 147 were aged 25 – 35,45.2%, and 149 aged 35 – 45,45.8%. The two age groups were about the same, accounting for 91% together. It shows that young and middle-aged were the main force of teachers and education administrators of art design in colleges and universities in Liaoning Province. In terms of educational background, only 11 respondents obtained bachelor's degrees, accounting for 3.4%. 267 respondents had master's degrees, accounting for 80.6%, and 52 respondents had doctor's degrees, accounting for 6%, indicating that the educational level was generally high. Work experience in terms, 12 people had worked for 1-5 years, accounting for 3.7%. In 6-10 years, there were 116 samples, accounting for 35.7%; in 11-15 years, 163 samples, accounting for 50.2%; There were 34 people with more than 15 years of working experience, accounting for 10.5%, indicating that most of them were teachers with rich work experience. In terms of Professional ranks and titles, teaching assistant had 32 people, accounting for 9.8%, 115 people in lecturer, accounting for 35.4%, associate Professor had 139 people, accounting for 42.8%, and professor had 39 people, accounting for 12%. That the intermediate and senior professional titles occupy the vast majority.

2. Exploratory Factor Analysis（EFA）

(1). KMO-Meyer-Olkin and Bartlett's Table

Table 1: KMO Meyer Olkin and bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.929
Bartlett's Test of Sphericity	Approx. Chi-Square	36845.514
	df	3003
	Sig.	.000

(2). Data Analysis Result on Questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance.

From Table 2 shows the number of components for effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province. It was found that there were 9 components with an Eigenvalues greater than 1. When rotating the axis, it explained a total variance of 74.027 percent, but considering the selection criteria, components with factor loading at 0.45. There were more than 1 Eigenvalues and more than 3 or more variables that described components.

The components that met all 5criterias when the axis was rotated, component 1 had a maximum Eigenvalues of 51.028, it could explain the total variance of 20.365 %per component, component 2 had a maximum Eigenvalues of 6.778, it could explain the total variance of 14.542 %per component, component 3 had a maximum Eigenvalues of 4.29, the total variance could be explained by 12.713 %, component 4 had a maximum Eigenvalues of 3.529 , it could explain the total variance of 11.688 %, component 5 had a maximum Eigenvalues of 2.48, explaining the total variance of 7.584 %, and other components had an Eigenvalue and the ability to describe it, all variance gradually decreased accordingly, and the components that met certain criteria were components 1-5, it was found to be able to explain a total variance of 66.893.

Table 2: Data Analysis Result on Section III of Questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance.

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	39.802	51.028	51.028	39.802	51.028	51.028	15.885	20.365	20.365
2	5.287	6.778	57.806	5.287	6.778	57.806	11.343	14.542	34.907
3	3.346	4.29	62.096	3.346	4.29	62.096	9.916	12.713	47.62
4	2.753	3.529	65.625	2.753	3.529	65.625	9.117	11.688	59.308
5	1.934	2.48	68.105	1.934	2.48	68.105	5.916	7.584	66.893

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
6	1.308	1.677	69.782	1.308	1.677	69.782	1.497	1.92	68.812
7	1.159	1.486	71.268	1.159	1.486	71.268	1.43	1.833	70.645
8	1.081	1.387	72.654	1.081	1.387	72.654	1.335	1.712	72.357
9	1.071	1.373	74.027	1.071	1.373	74.027	1.303	1.67	74.027
Extraction Method: Principal Component Analysis.									

(3). The factor loading, variables described in each of the main components after rotating the axis.

First, researchers test the applicability of data and models to see whether the models used are reasonable. Referring to the previous research results, the goodness of fit of the research model and data in this paper is tested, and several key indicators are in line with the recommended values, indicating that the overall goodness offit of the theoretical model in this paper is good, and the model diagram is acceptable.

Table 3: Showed Components of Effectiveness of Academic Administration in Digital Transformation of Art Design Major.

Order	Components	Number of Variables	Factor Loading
1	Component 1	26	0.813-0.47
2	Component 2	16	0.845-0.483
3	Component 3	13	0.787-0.586
4	Component 4	13	0.768-0.537
5	Component 5	9	0.733-0.479
	Total	77	0.845-0.47

According to Table 3, there were five qualified components as follows; component 1 containing 26 variables that described component, factor loading between 0.813-0.47; component 2 containing 16 variables that described component, factor loading between 0.845-0.483; component 3 containing 13 variables that described component, factor loading between 0.787-0.586; component 4 containing 13 variables that described component, factor loading between 0.768-0.537; component 5 containing 9 variables that described component, factor loading between 0.733-0.479. The total number of variables that described the five components were 77 variables, factor loading between 0.845-0.47.

Table 4: Showed Components 1: Academic quality management and talent training

Variables	Statement	Factor Loading
Q37	Ensuring educators have necessary resources, materials, and support for effective instruction.	0.813
Q55	Assessing internal and external factors that influence strategic decision-making.	0.807
Q50	Tracking progress and ensuring alignment with the strategic vision and goals.	0.802
Q42	Implementing changes in curriculum and pedagogy to adapt to evolving educational needs.	0.791
Q56	Leveraging data to make informed decisions and measure progress.	0.789
Q54	Encouraging creative approaches and technologies to enhance the learning experience.	0.78
Q59	Nurturing continuous growth in teaching capabilities through training and mentorship.	0.774
Q57	Choosing relevant and effective resources to support curriculum delivery and student learning.	0.759
Q39	Measuring student performance and assessing the effectiveness of teaching methodologies.	0.747
Q52	Providing resources and opportunities for teachers to enhance their skills.	0.745
Q30	The process of admitting students and ensuring a smooth transition into the educational institution.	0.74

Variables	Statement	Factor Loading
Q45	Continuously improving the learning environment and support systems for students.	0.503
Q53	Creating a clear and inspiring long-term direction for the organization's future.	0.488
Q48	Involving educators, students, and relevant stakeholders in the curriculum design and management process	0.47
Q40	Supporting ongoing professional growth for educators through training and skill enhancement.	0.74
Q38	Employing diverse strategies to engage students and facilitate learning in the classroom.	0.713
Q47	Designing a purposeful educational framework to achieve specific learning goals.	0.712
Q43	Evaluating individual and collective student progress to guide instructional adjustments	0.702
Q41	Conducting educational research to inform and improve teaching practices.	0.687
Q51	Iteratively enhancing strategies based on evaluation results and lessons learned.	0.579
Q26	Gathering input from teachers to assess their needs, concerns, and suggestions.	0.573
Q49	Executing strategies and initiatives to turn plans into tangible actions and results.	0.554
Q44	Ensuring teaching standards align with educational goals and continuously monitoring improvement.	0.534
Q46	Establishing a system for students and teachers to provide input and drive improvements.	0.533
Q77	Offering resources and assistance to help students succeed academically.	0.512
Q25	Evaluating educators' performance and providing opportunities for career advancement	0.511
Variable Variance (Eigenvalues)		51.028
Percent of Variance		20.365

Table 5: Showed Component 2: Academic administration organization and management.

Variables	Statement	Factor Loading
Q62	Ability to guide and supervise effective teaching practice and decision-making.	0.845
Q66	Build partnerships for enhanced educational opportunities and growth.	0.805
Q69	Strategic allocation of resources strengthens teaching organization effectiveness.	0.804
Q70	Effectively conveying ideas and fostering collaboration among stakeholders.	0.77
Q68	Accountable management ensures successful teaching outcomes and objectives.	0.767
Q67	Engage stakeholders for input and commitment in educational initiatives.	0.762
Q72	Making well-informed and timely choices to drive transformation.	0.754
Q65	Optimize external funds for enriching teaching resources.	0.745
Q76	Providing opportunities for students to explore interests beyond the curriculum.	0.739
Q71	Effectively conveying ideas and fostering collaboration among stakeholders.	0.694
Q61	Building a cohesive and collaborative group of educators with diverse expertise.	0.687
Q58	Developing teaching material tailored to the curriculum's goals and objectives.	0.651
Q64	Shape a positive and inclusive school culture for all.	0.622
Q63	Collaborative decision-making fosters a cohesive educational environment.	0.592
Q74	Developing clear and measurable quality criteria and benchmarks.	0.483
Q60	Ensure the quality and quantity of newly introduced teachers.	0.535
Variable Variance (Eigenvalues)		6.778
Percent of Variance		14.542

Table 6: Showed Component 3: Teacher team construction and development.

Variables	Statement	Factor Loading
Q36	Providing opportunities for growth and promotion within the chosen profession.	0.787
Q27	Facilitating opportunities for students to gain practical experience and secure employment.	0.771
Q31	Motivating and inspiring students to actively engage in their learning journey.	0.762
Q29	Providing educators with skills to effectively incorporate digital resources into instruction.	0.746
Q28	Ensuring teaching standards align with educational goals and promoting excellence in instruction.	0.739
Q22	Providing educators with skills to effectively incorporate digital resources into instruction.	0.733
Q34	Building expertise and capabilities through education, training, and skill enhancement programs.	0.723
Q21	Incorporating teacher feedback into decision-making and improvement processes.	0.714
Q32	Defining clear goals and competencies for developing skilled professionals.	0.674
Q73	Encouraging creative solutions to address challenges in new ways.	0.623
Q33	Creating a structured roadmap for skill acquisition and career development.	0.622
Q75	Encouraging students to actively take part in classroom activities and discussions.	0.618
Q35	Fostering the acquisition of essential skills and knowledge for career success.	0.586
Variable Variance (Eigenvalues)		4.29
Percent of Variance		12.713

Table 7: Showed Component 4: Quality assurance and evaluation

Variables	Statement	Factor Loading
Q12	Examining data to identify trends, issues, and improvement opportunities.	0.768
Q14	Collecting data on processes and outcomes to ensure quality.	0.757
Q20	Gathering input from students to improve educational offerings and services.	0.746
Q11	Identifying the specific roles and expertise needed within an organization or industry.	0.717
Q19	Evaluating the impact of teaching methods on student academic progress.	0.706
Q10	Developing a comprehensive plan to achieve organizational objectives and competitive advantage.	0.683
Q17	Creating a structured framework for assessing and measuring quality.	0.68
Q23	Motivating and rewarding educators for outstanding performance and dedication.	0.668
Q18	Examining evaluation outcomes to make informed decisions for improvement.	0.665
Q16	Implement changes and measures to improve the quality of teaching assurance level	0.604
Q13	Assessing the effectiveness and relevance of the curriculum in achieving educational outcomes.	0.595
Q15	Sharing quality-related information with stakeholders and the public.	0.569
Q24	Ensuring curriculum content aligns with educational standards and guidelines.	0.537
Variable Variance (Eigenvalues)		3.529
Percent of Variance		11.688

Table 8: Showed Component 5: Teaching resource management.

Variables	Statement	Factor Loading
Q8	Keeping digital content current and up-to-date to reflect changing knowledge and trends.	0.733
Q2	Collecting and organizing existing digital resources for educational purposes.	0.693
Q3	Ensuring that digital resources are inclusive and usable by all learners.	0.655
Q5	Adapting digital resources to meet individual student needs and preferences.	0.617
Q6	Ensuring the accuracy, relevance, and effectiveness of digital educational materials.	0.588
Q1	Creating digital materials like videos, e-books, and interactive simulations for learning.	0.585
Q9	Iteratively enhancing the curriculum based on feedback and evolving educational needs.	0.56
Q4	Utilizing platforms to deliver, track, and manage digital educational content.	0.525
Q7	Encouraging students and teachers to provide input for resource improvement and optimization.	0.479
Variable Variance (Eigenvalues)		2.48
Percent of Variance		7.584

Based on the Exploratory Factor Analysis to extract variables to key component variables by Analyze the most likely conditions. The researcher summarized the 5 components as showed in Figure2.
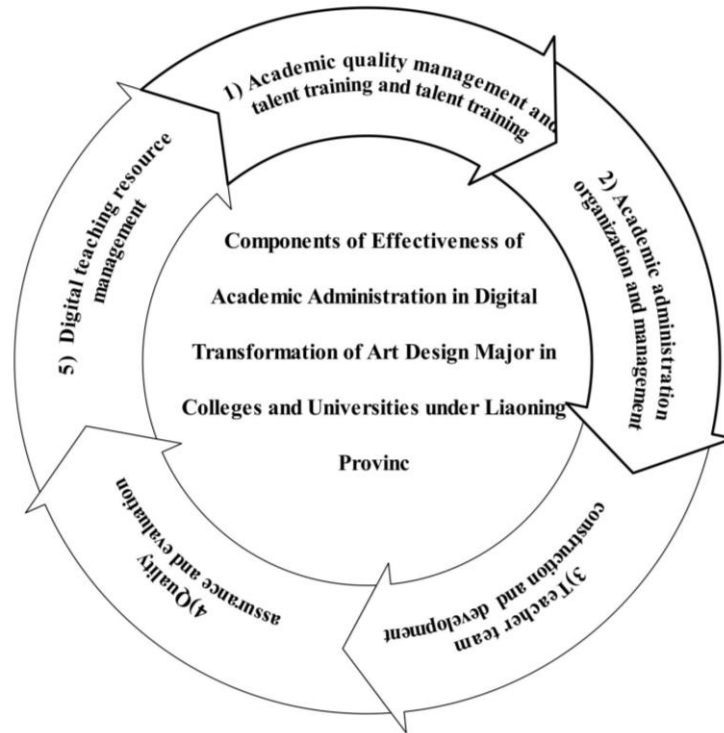
Figure 2 Showed the Components of Effectiveness of Academic Administration in Digital Transformation of Art Design Major in Colleges and Universities under Liaoning Province

6. Conclusion

　　1. Components of effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province Through qualitative research, quantitative research and factor analysis, it is concluded that there were 5 components of effectiveness of academic administration in digital transformation of art design major in colleges and universities under Liaoning Province, which are: (1) Academic quality management and talent training, (2) Academic administration organization and management, (3)Teacher team construction and development, (4) Quality assurance and evaluation,(5) Digital teaching resource management.

　　2. Managerial guidelines for effectiveness of academic administration in digital transformation of Art Design Major in Colleges and Universities under Liaoning Province consisted of 32 guidelines.
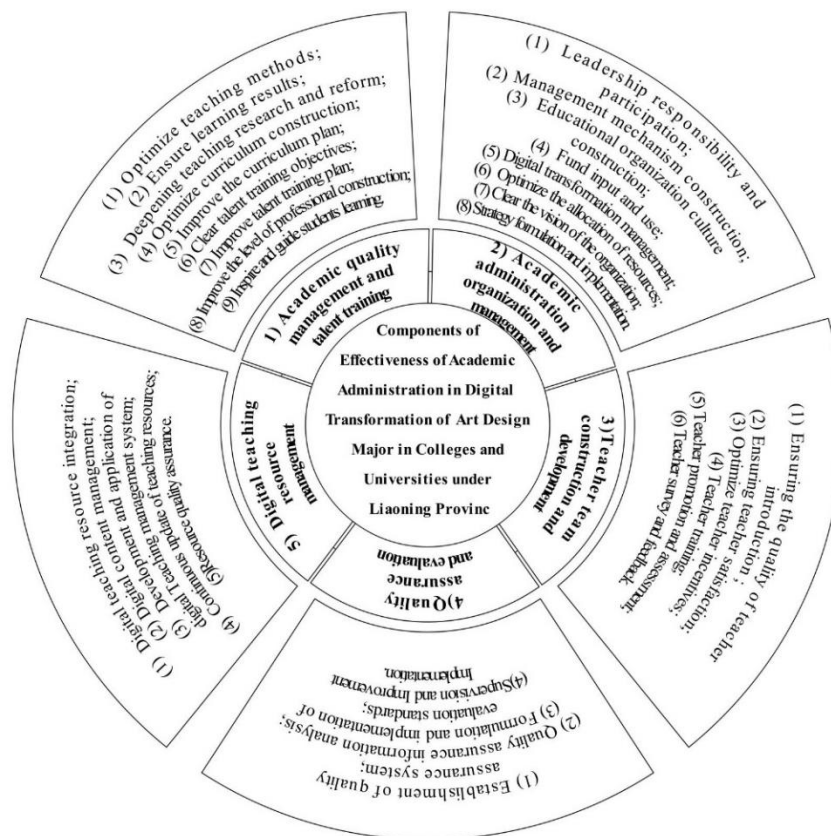
Figure 3: Showed the Components and Guidelines

7. Discussion

1. Discussion about Major Findings of Objective 1

There were five components for effectiveness of academic administration in digital transformation of art design major which consisted of Academic quality management and talent training, Academic administration organization and management, Teacher team construction and development, Quality assurance and evaluation, digital teaching resource management. Academic quality management and talent training establishes the foundational importance of academic quality management in art design education's digital transformation. It ensures that educational goals are met while equipping students with digital skills for the job market, benefiting society and The Times by producing adaptable graduates. Academic administration organization and management focuses on structurally efficient academic administration, streamlining decision-making and resource allocation. This agility aids the timely adoption of digital advancements, benefiting art design education.

Teacher team construction and development concentrates on faculty development, crucial for integrating digital tools into teaching, ultimately enhancing the learning experience for students. Quality assurance and evaluation emphasizes continuous

assessment and feedback for the transformation's effectiveness and overall education quality. Digital teaching resource management manages digital resources, ensuring access to tools, benefiting students and society with digitally proficient graduates.

This research finding was in accordance with the theories or research of Deng Wei (2022:78-80),it was found that intelligent education system was rich in connotation and in content, involving many elements such as system, teaching and environment. The teaching method was the key to lead the elements of the teaching mode and give full play to the educational function and value of the teaching environment. Under the background of intelligent education, promoting the reform of teaching methods could more effectively optimize the intelligent education system and improve the effectiveness of intelligent education. Corresponding to the research of Yang Lin (2023:73-76) which was found that the risks and challenges of digital transformation on the organizational management of universities should be addressed by strengthening the strategic planning of digital transformation, establishing the organizational structure adapted to the digital transformation, creating the organizational atmosphere that agrees with the digital transformation, and cultivating the organizational management with digital leadership. Yang Qin (2023:27-30) which was found that the three-dimensional digital literacy improvement mechanism of university teachers was composed of four dimensions of demand-oriented digital literacy map, incentive-oriented motivation mechanism, service-oriented guarantee mechanism and goal-oriented personalized improvement path.

2. Discussion about Major Findings of Objective 2

There were 32 managerial guidelines for the effectiveness of academic administration in the digital transformation of art design majors in colleges and universities provide a comprehensive framework to guide institutions through this complex process. Component 1 establishes the foundational importance of academic quality management in art design education's digital transformation. It ensures that educational goals are met while equipping students with digital skills for the job market, benefiting society and The Times by producing adaptable graduates.Component 2 focuses on structurally efficient academic administration, streamlining decision-making and resource allocation. This agility aids the timely adoption of digital advancements, benefiting art design education.Component 3 concentrates on faculty development, crucial for integrating digital tools into teaching, ultimately enhancing the learning experience for students. Component 4 emphasizes continuous assessment and feedback for the transformation's effectiveness and overall education quality. Component 5

manages digital resources, ensuring access to tools, benefiting students and society with digitally proficient graduates.

This research finding was in accordance with the theories or research of Wang Ying (2021:183-185) which was found that to improve the teaching quality of application-oriented universities from the perspective of constructing the relationship network of teaching quality management, making continuous innovation of teaching quality management methods, and improving and implementing the performance assessment mechanism of teaching quality management. Moreover, From the research of Chen Honghua (2021:3-5),it was found that by establishing a perfect teaching organization, constructing the three-level teaching process quality monitoring mechanism of school, college and department; establishing a student-oriented comprehensive evaluation system, conducting regular comprehensive inspection and objective evaluation of teaching quality; and continuously promoting teaching reform and management; encouraging teaching innovation and increasing learning challenges. These reform ideas and measures could enhance students' independent learning ability and ensure the realization of training objectives. Also, the findings were in the same direction with Fu Xu (2023:8-11) which was found that in order to realize the steady development, colleges and universities should adhere to the reform and development of education and teaching under the guidance of the intelligent management concept, and realize the digital, network, intelligent and diversified teaching reform.

8. Recommendations

1. Recommendation for Policies Formulation

(1) Digital Competency Framework: Develop a holistic framework specifying required digital skills and knowledge, integrated into the curriculum with clear learning outcomes. Policies should ensure faculty familiarity with this framework and guide digital learning objectives, supported by regular assessments for student progress.

(2) Innovation Culture: Encourage an innovative culture through policies that motivate faculty and students to explore new technologies and teaching methods. Support pilot programs and experimentation with digital tools, fostering interdisciplinary collaboration and creative technology integration in art design education.

(3) Digital Accessibility: Prioritize accessibility by setting guidelines for creating accessible digital content and tools. Policies should include training on accessibility best practices and assistive technologies for faculty and staff, along with regular audits to ensure compliance.

(4) Faculty Development: Establish policies that robustly support faculty development with funding opportunities for training in digital pedagogy and technology integration. Create workshops and peer communities for best practice sharing and incentivize faculty excelling in digital teaching and research.

(5) Data-Driven Decisions: Emphasize data-driven decision-making with guidelines for collecting and analyzing data on digital learning outcomes, student engagement, and tool effectiveness. Policies should outline procedures for using this data in curriculum updates, resource allocation, and faculty development.

In summary, these policy recommendations underscore the importance of a comprehensive digital competency framework, fostering an innovation culture, accessibility, robust faculty development, and data-driven decision-making. Implementation of these policies will enable institutions to navigate the challenges and opportunities of the digital era, ensuring that art design education remains relevant, competitive, and aligned with industry demands.

2. Recommendation for Practical Application

(1) Cross-Functional Task Force: Establish a task force involving various departments to formulate a comprehensive digital transformation strategy, ensuring policies are tailored to the unique needs of art design education.

(2) Faculty Development Roadmap: Create a structured faculty development roadmap for digital competencies, offering access to training, workshops, and encouraging incremental adoption of digital tools, reducing resistance to change.

(3) Digital Resource Sharing Platform: Implement a centralized platform for sharing high-quality digital resources and teaching materials. Encourage faculty contributions, promote resource sharing, and provide guidelines for resource evaluation.

(4) Quality Assurance Audits: Enforce policies for regular quality assurance audits of digital courses and resources, with systematic assessments and feedback loops for continuous improvement.

(5) KPIs and Data Analytics: Establish clear KPIs and employ data analytics tools for ongoing monitoring and assessment. Define key metrics and responsibilities for data-driven decision-making, enabling continuous improvement in digital education.

In summary, these practical policy recommendations emphasize interdisciplinary collaboration, structured faculty development, resource sharing, quality assurance, and data-driven decision-making. Implementation of these policies will help institutions adapt to the

digital age, maintain high-quality art design programs, and equip students with the skills needed for success while remaining focused on quality and innovation.

     3. Recommendation for Further Research

       (1) Validate Component Applicability: To enhance digital transformation credibility in art design education, research should verify component suitability across diverse institutions and programs, ensuring rational and scientific application.

       (2) Tailored Policies: Implement customized policies to drive digital transformation in art design, aligning with unique program needs for practical and beneficial integration.

       (3) Diverse Context Validation: Validate research findings in diverse academic settings to enhance generalizability, benefiting a wider range of art design programs.

BIbliography

DengWei. (2022). **Research on the reform of Teaching methods in colleges and universities under the intelligent education Environment.** Journal of Huainan Vocational and Technical College, 78-80.

YangLin. (2023.1). **Analysis of the impact of digital transformation on university organization management and coping strategies.** Education exploration, 73-76.

YangQin. (2023). **Research on university teachers' digital literacy and its three-dimensional promotion mechanism.** Journal of Taizhou Vocational and Technical College, 27-30.

WangYing. (2021). **Thoughts and strategies of teaching quality management in application-oriented universities.** Science & Technology Vision, 183-185.

ChenHonghua. (2021.2). **On the construction of university teaching quality management system under the OBE concept.** Heilongjiang Education (Research and Evaluation of Higher Education), 3-5.

FuXu. (2023). **Digital, networking, intelligence and diversification of university education path based on the concept of intelligent management.** Journal of Heilongjiang Teacher Development College, 8-11.

The Principal's Transformational Leadership Indicators Development Model in Bilingual Kindergarten in Zhuhai, Guangdong

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ABSTRACT

The objectives of this research were:(1) to determine the components and indicators of principal's transformational leadership. (2) to develop the model of principal's transformational leadership bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China. (3) to propose the guideline for improving principal's leadership of bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China.

The research was a mixed methodology, including qualitative and quantitative research. The population of the research consisted of 1457 who were teachers of bilingual kindergarten in ZhuHai, Guangdong. A proportional stratified random sampling method was used to sample, totaling 306 persons. The instruments used for data collection were semi-structured interview and a five-level rating scale questionnaire. The statistics used for data analysis were descriptive statistics and Confirmative Factor Analysis.

The research findings revealed that: (1) there were 4 components and 15 indicators of transformational leadership required by principals of bilingual kindergarten in ZhuHai, Guangdong, which consisted of Individualized consideration, Moralemodeling, Visionary vision, Charisma; and (2) the developed transformational leadership model for principals of bilingual kindergarten in ZhuHai, Guangdong was consistent with the empirical data. (3) propose the guideline for improving principal's leadership of bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China.The value of Relative Chi-square (χ^2/df) = 1.874, Degree of Freedom (df) = 80, Goodness of Fit Index (GFI) = 0.905, Tucker-Lewis Index (TLI) = 0.973, and Root Mean Square Error of Approximation (RMSEA) = 0.050, all in line with

specified criteria. And the key components had the weight between 0.835-0.927 higher than 0.70.

Keywords: Transformational Leadership Model, Principal, bilingual kindergarten, ZhuHai GuangZhou

1. Introduction

Article 17 of the Education Law of the People's Republic of China stipulates that the state implements a school education system consisting of kindergarten education, primary education, secondary education, and higher education. In the existing research on education leadership, scholars prefer to focus on higher education research; The research results published in recent years have gradually shifted towards secondary and primary education. However, the leadership of kindergarten principals in the kindergarten education stage is relatively limited, and there is still a gap in such research. The actual situation in each education stage is different, especially in the kindergarten education stage. The personal characteristics of the principal group, the work characteristics of kindergarten teachers, and the management system of kindergartens are all significantly different from other education stages, so the leadership in the kindergarten education stage has a certain degree of specificity.

With the gradual introduction of the concept and theory of school leadership style into China, it has had an increasingly profound impact on the educational practice of Chinese schools. A common conclusion has been drawn in research on school performance abroad that successful principal leadership is an important condition that affects teacher performance. Related studies have shown that the impact of principal leadership on teacher performance may be direct, indirect, or interactive. In view of this, it is imperative to explore the impact of principal leadership style in the context of China through empirical data, in order to provide more scientific basis for improving principal leadership and improving the quality of bilingual kindergarten education.

Transformational leadership advocates new concepts and practices, and is an important leadership model for promoting school reform. The important role of school leaders in student academic performance, teacher development, and school improvement is widely recognized by scholars. However, research on principal leadership in China started relatively late, and there is little research on principal leadership. At the same time, there is a lack of empirical research to support relevant research conclusions. Each stage of education has its own educational characteristics, especially the bilingual kindergarten

education stage, which is mainly aimed at bilingual kindergarten children and has significant differences from other stages of education. Conduct in-depth research attempts to explore the transformational leadership style of bilingual kindergarten principals in the context of China's educational modernization reform, starting with transformational leadership with humanistic development characteristics, through empirical research, in order to further improve and enrich the theory of educational leadership.

Provide possible paths for improving the transformational leadership style of the principal. Conduct in-depth research on the transformational leadership style of bilingual kindergarten principals and elucidate the inherent impact of variables.It helps to understand the current situation of bilingual kindergarten principal's transformational leadership style, clarify the impact and role of transformational leadership style in bilingual kindergarten leadership, promote the better effectiveness of bilingual kindergarten principal's transformational leadership in practice, provide scientific basis for bilingual kindergarten principal's training, and help bilingual kindergarten principals better adapt to increasingly profound educational changes, enhancing their motivation for change in basic education reform.

Provide support for improving the quality of bilingual kindergarten education. A large number of scholars have confirmed that school leadership can affect teachers' work performance. Therefore, the corresponding research not only promotes the effective use of transformational leadership styles in bilingual kindergartens, but also provides theoretical support for improving the quality of bilingual kindergarten education to a certain extent. bilingual kindergarten principals can enhance their transformational leadership style, stimulate the deep needs of bilingual kindergarten teachers, respond to the challenges faced by the current quality of bilingual kindergarten education, respond to the requirements of educational modernization for bilingual kindergarten education, promote the reform of kindergartens in the process of educational reform, and meet people's expectations for kindergarten education.

2. Research Questions

1. What are the components and indicators of principal's transformational leadership?

2. What should the model of principal's transformational leadership of bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China?

3. What is the guideline for improving principal's leadership of bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China?

3. Research Objectives

1. To determine the components and indicators of principal's transformational leadership.

2. To develop the model of principal's transformational leadership in bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China.

3. To propose the guideline for improving principal's leadership of bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China.

4. Research Method

Research Design

Used mixed method, both qualitative and quantitative, first the qualitative to determine the components and indicators of the transformational leadership through content analysis from 20 document and research related, included 9 key informants. After that quantitative method was employed to collected the empirical data from the respondent through survey questionnaire.

Population and Sample

The population included 1457 teachers of 22 bilingual kindergarten in Zhuhai city, Guangdong Province, with the same categories and characteristics. Therefore stratify random sampling was used. The sample size was determined by the tables of Krejcie and Morgan (1970). And the sample include teachers in bilingual kindergarten Zhuhai as the research object, 306 Teacher Investment.

Research Instruments

Use the Chinese website "https://www.wenjuan.com" to create a five-point rating scale questionnaire and manage it on a professional platform for online data collection. It consists of the following three parts.

Part I: To collect data. From the perspective of the literature review, it is mainly the data record table, as well as the data found from the Internet. Second, after analyzing the content from the literature review, the researcher will interview 9 experts to find factor of principal's transformational leadership bilingual kindergarten. The tool used in this part is semi-structured interview. Authority and veracity will be checked and recommended in both parts of the instrument.

Part II: Questionnaires were prepared based on the in-depth interviews in the first step and then sent to the sample group either online or by the researcher. After collecting

the corresponding number of questionnaires, the factors of principal's transformational leadership bilingual kindergarten were calculated using software tools.

Part III: we also need to analyze the validity of the questionnaire, after determining the validity (EFA) and (CFA) of the questionnaire reaches the standard, and formulated improvement strategy for principal's transformational leadership in bilingual kindergarten Zhuhai city, Guangdong Province.

All type of questionnaires will be Likert's rating scale with 5 choices.

All of these develop are to use the IOC and Cronbach's alpha coefficient to find the validity and reliability.

Validity and Reliability of the instrument

Through the questionnaire design, a total of 68 items were obtained. After the IOC of 5 experts and the data collection of 32 out-of-sample teachers and teachers from bilingual kindergarten, it was found that 42 items greater than 0.60 were retained.

Scale reliability refers to the degree to which a measuring instrument can consistently obtain similar results when measuring the same sample under similar test conditions. Cronbach's alpha coefficient will be used to measure the degree of reliability of the scale. In this study, Cronbach's α coefficient above 0.70 is acceptable. In this study, 42 items were statistically analyzed to obtain data. All items are higher than 0.80, Cronbach's alpha coefficient is 0.976, indicating that the reliability of this questionnaire is very high.

Data Collection

The steps for data collection will be as follow:

Step 1: Request permission to collect data for research to the BTU Educational Faculty.

Step 2: Request a letter of recommendation for the researcher from the BTU Educational Faculty.

Step 3: Selection the coordinating teachers to help assist in coordinating data collection in each institution. Those will be oriented to understand the details of the questionnaire administration and data collection.

Step 4: Carry out data collection with the selected samples by sending questionnaires to the coordinator teacher who will help for collect data with the selected samples in each bilingual kindergarten.

Data Analysis

Step 1: data analysis involves two steps: (1) Key word extraction and coding. To extract keywords through literature review and interview, then encode the keywords. (2) The

content analysis. The content analysis of the collected laws and regulations is carried out by using the extracted keywords.

Step 2: the statistical analysis software (SPSS and AMOS) will be employed for analyses the categorical variables. Descriptive statistics, frequency, percentage, arithmetic mean, standard deviation, and confirmatory factor analysis will be used here.

Step 3: the results of the focus group discussion were analyzed using content analysis. the qualitative researcher must categorize and interpret the data got from interviews and recordings. Points and keywords will be extracted from interview transcripts to compose guideline for the bilingual kindergarten principal's leadership Promotion Program.

5. Research Results

5.1 Result of data analysis for determineing the components and indicators of principal's transformational leadership

Research studies at this stage are primarily aimed at determining the components and indicators suitable of transformational leadership required by principals in ZhuHai, GuangDong The People's Republic of China.Which is to be the initial database before being developed the principal's transformational leadership model development in bilingual kindergarten in Zhuhai, according to the main aim of this research. It is based on data from two sections, the first of which is from documents and research related, as well as from experts both in China and abroad total 35 component items, the second part from the knowledge of highly experienced administrative luminaries 9 key informants.Data analysis relies on recorded, Semi-structured interview interviews, and tables showing components' relationships with references . Classified by documented sources and related research. This result comes from 20 typical documents and interview with 9 highly experienced academic management experts, asked questions about transformational leadership and gave guiding opinions. Based on the above analysis, 35 components can be identified.And researcher choosed by focus on the components which there were the frequencies of consensus 5 and above to consider and used to interview key informants. Of those, only 4 of the 35 components as follows. They were:

Component 1: Moralemodeling

Component 2: Charisma

Component 3: Visionary Vision

Component 4: Individualized Consideration

These 4 components are considered to still be latent variables. The researchers then took to the indicators of each component, which were based on the analysis of documents and research related to the transformational leadership required by principals. As well as interviewing 9 highly experienced academic management experts. It was found to have indicators in each component of transformational leadership for principals of bilingual kindergarten in ZhuHai. It's attributed of 68 indicators.

There were 68 indicators from literature analysis and interview of key informants. The researcher has employed content analysis. As result, total of 68 indicators were found and prepared as research instrument, a five-point rating scale questionnaire. The quality of instruments has been verified by content validity and reliability.

For the content validity of the questionnaire, after revision according to the opinion of the Advisory Committee of the Doctor of Thesis, the researchers submitted a draft questionnaire to a research instrument expert to determine the content match or IOC for five experts (list of experts shown in Appendix B), finding that all indicators derived from mentioned above. They were resolved by experts with a consistent overall opinion. The Item-Objective Congruence (IOC) was used to evaluate the items of the questionnaire based on the score range from -1 to +1. The items that had scores lower than 0.6 were revised, there are 26 items that fail below 0.60, as there are many items in the questionnaire, these 26 items have been deleted and will not be modified. On the other hand the items that had scores higher than or equal to 0.8 were reserved. As a result, it was found that there were 42 items in the questionnaire.

For reliability of questionnaire is a way of assessing the quality of the measurement procedure used to collect data. The researcher has sent out 32 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's alpha coefficient on or above 0.70 means adequate reliability to determine the internal consistency or average correlation of items in a research instrument to measure reliability of the questionnaire. As a result, Cronbach' s alpha coefficient was at 0.976 which can be used to describe the reliability of the questionnaire. It is appropriate enough to collect data from the samples in this research. And the discriminant power (Corrected Item-Total Correlation) was between 0.30- 0.89, greater than 0.3 (Field, 2005). All values meet the standard.

The researchers took the components and indicators of principal's transformational leadership of bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China.Developed into a 5-level rating scale questionnaire to be used to inquire about a sample used in research related. Consist of part I: General information of the respondents,

part II: Questionnaire about principal's transformational leadership of bilingual kindergarten in Zhuhai, and part III: Suggestions and additional comments. The respondent used in this study: Chinese teachers, foreign teachers. A total of 306 people using the questionnaire. The questionnaire asked teachers working in bilingual kindergartens in Zhuhai which transformational leadership indicators would make them more engaged in their work.

Indicators analysis of components of Transformational Leadership Model of principals as perceived by the respondents in this study. It was found that overall, there were 4 components and 42 questions the arithmetic mean ($\bar{x}$) was 3.41–4.17, indicating that the respondents had an perception on the level value of all the indicators by the arithmetic mean ($\bar{x}$) to be high to highest, standard deviation (S.D.) was between 0.7–1.04, skewness （Sk.）was between -1.49–0.13, kurtosis(Ku.) was between -0.23–2.94, and the coefficient of variation (C.V.) was between 19.90–16.05, indicating that respondents has a little different perceptions on the indicators. All the arithmetic mean ($\bar{x}$) were greater than 3, skewness and kurtosis were less than ±2 or ±3, and 10 for kurtosis, and coefficient of variation (C.V.) were less than 20%, which meet a criterion.

5.2 Result of data analysis for developing the model of principal's transformational leadership in bilingual kindergarten in ZhuHai, GuangDong, The People's Republic of China.

From responding to the questionnaire of the target group total 306 persons in each component as follows:

Component 1: Moralemodeling, this component consisted of 14 indicators namely M1 to M14.

Component 2: Charisma, this component consisted of 7 indicators namely C1 to C7.

Component 3: Visionary Vision, this component consisted of 11 indicators namely V1 to int V11.

Component 4: Individualized Consideration, this component consisted of 10 indicators namely I1 to I10.

Data analysis by using CFA (Confirmatory factor analysis) with the AMOS program, it was found that the appropriate indicators in each component.

the measurement model of Moralemodeling which was analyzed by AMOS, it's found that the best indicator of this measurement model which model fit with the empirical data, the index of Chi–square=117.16, p=0.00, GFI=0.95, AGFI=0.92, TLI=0.974, RMSEA=0.05. It's met the specifics criteria (Hair, et al, 2019, Pulpong Sooksawang, 2021). This model consisted of the 3 indicators namely M7, M8 and M9 (factors loading = 1.00, 0.94, and 0.98

respectively). Therefore, the indicators of them were chosen as a representative of this component (Arbuckle, J.L., 2012). It's the indicator used to describe latent variable: Moralemodeling.

Figure 4.2 showed that the measurement model of Charisma which was analyzed by AMOS, It's found that the best indicator of this measurement model which model fit with the empirical data, the index of Chi–square=21.55, p=0.06, GFI=0.98, AGFI=0.96, TLI=0.99, RMSEA=0.05. It's met the specifics criteria (Hair, et al, 2019, Pulpong Sooksawang, 2021). This model consisted of the 4 indicators namely C1, C2, C3, and C7, (factors loading = 0.98, 0.99, 1.00, and 0.97 respectively). Therefore, the indicators of them were chosen as a representative of this component (Arbuckle, J.L., 2012). It's the indicator used to describe latent variable: Charisma.

the measurement model of Visionary Vision which was analyzed by AMOS. It's found that the best indicator of this measurement model which model fit with the empirical data, the index of Chi–square=51.30, p=0.01, GFI=0.97, AGFI=0.94, TLI=0.98, RMSEA=0.05. It's met the specifics criteria (Hair, et al, 2019, Pulpong Sooksawang, 2021). This model consisted of the 4 indicators namely V4, V6, V7 and V8, (factors loading = 0.82, 0.88, 0.96 and 1.00 respectively). Therefore, the indicators of them were chosen as a representative of this component (Arbuckle, J.L., 2012). It's the indicator used to describe latent variable: Visionary Vision.

the measurement model of Individualized Consideration and support which was analyzed by AMOS. It's found that the best indicator of this measurement model which model fit with the empirical data, the index of Chi–square=39.40, p=0.07, GFI=0.97, AGFI=0.95, TLI=0.99, RMSEA=0.04. It's met the specifics criteria (Hair, et al, 2019, Pulpong Sooksawang, 2021). This model consisted of the 4 indicators namely I2, I5, I6 and I8, (factors loading =1.00, 0.83, 0.88 and 0.89 respectively). Therefore, the indicators of them were chosen as a representative of this component (Arbuckle, J.L., 2012). It's the indicator used to describe latent variable: Individualized Consideration.

Before analysis of the second order of confirmatory factor analysis, researcher was studied the correlation between the 15 indicators scales to determine the appropriateness of the correlation matrix to be analyzed.

whether these 15 indicators were observed whether or not a correlation can be classified as a factor and whether it is appropriate, based on statistical values, namely the Bartlett test and the KMO or Kaiser-Mayer-Olkin Measurers of Sampling Adequacy: MSA. The analysis results as shown in Table 1 as follow:

Table 1   The statistic of Bartlett and KMO index of principal's transformational leadership
of bilingual kindergarten in ZhuHai, GuangDong

KMO and Bartlett's Test

KMO		0.941
Bartlett's Test of Sphericity	Chi-Square	3417.589
	df	105
	Sig.	0

Hair et al., (1998, p. 99) reported KMO / MSA should be > 0.5. The Bartlett Test of Sphericity value is equal to 3417.589 and the KMO value is 0.941, with a value greater than 0.80, which Kim & Mueller (1978: 76) have written in their book on title "Factor Analysis: Statistical Methods and Practical Issues (Quantitative Applications in the Social Sciences) that the KMO will be examines the suitability of a sample to develop the model. The value of the KMO should be greater than 0.5 and for Bartlett's Test, it examines the population correlation matrix as an identity matrix, which is determined by its statistical significance to be less than 0.05 (p<.05).   Therefore, the results of this preliminary analysis of the data for verification before develop the model with CFA (Confirmative Factor Analysis) were considered to be good.

Figure 1   Show the second order of principal's transformational leadership model that was consistent with the empirical data
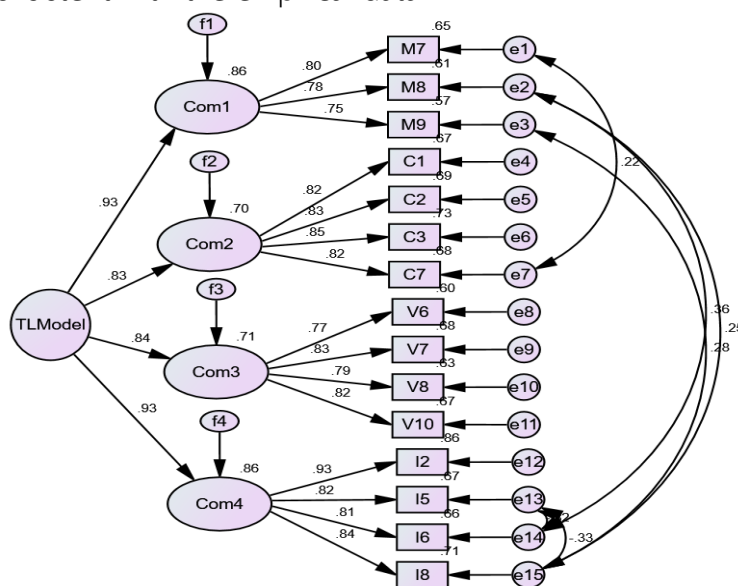
Chi-square =149.922, Relative Chi-square =1.874, Df =80, p =.000,
GFI =.937, AGFI =.905 TLI =.973, RMR =.030, RMSEA =.050

Table 2   Show statistical value of principal's transformational leadership model of of
bilingual   kindergarten in ZhuHai, GuangDong

	Latent and observable	Standardized Estimate	S.E.	CR	AVE	P	R²
Transformat ional	Moralemodeling	0.926		0.822	0.607	***	0.857
Leandership	M7	0.805					
	M8	0.779	0.062				
	M9	0.754	0.067				
	Charisma	0.835	0.070	0.898	0.689	***	0.697
	C1	0.816	0.057				
	C2	0.829	0.055				
	C3	0.854					
	C7	0.823	0.056				
	Visionary Vision	0.843	0.077	0.877	0.642	***	0.711
	V6	0.772	0.062				
	V7	0.826	0.060				
	V8	0.791	0.064				
	V10	0.817					
	Individualized Consideration	0.927	0.075	0.912	0.723	***	0.858
	I2	0.926	0.044				
	I5	0.816	0.063				
	I6	0.815	0.056				
	I8	0.840					

From Figure 1 and Table 2 above the results of the second order by CFA With the AMOS program, the following confirmative index values were obtained: Relative Chi-square $(\chi 2/df)$=1.874, Degree of Freedom (df)= 80, p = 0.000, Goodness of Fit Index (GFI) = 0.937, Adjust goodness of Fit Index (AGFI) = 0.905, Tucker-Lewis Index (TLI) = 0.9735, Root Mean Square Error of Approximation (RMSEA) =0.050. By this evaluate index meet the specified criteria, Relative Chi-square $(\chi 2/df)$ < 3(Diamantopoulos, A. et al.,2000; Schumacker, R. E. and Lomax, R. G.,2010), p > 0.05, GFI, AGFI, TLI ≥ 0.9 and RMSEA ≤ 0.05 (Jöreskog and Sörbom,1996; Diamantopoulos, A. et al., 2000; Fan and Sivo, 2009; Hair et al, 2010, Poonpong Suksawang, 2020).

Therefore, based on the results of this analysis, it can be concluded that the transformational leadership model for principals from theory and research related and empirical data was consistent. It was based on research assumptions. It can be concluded that the principal's transformational leadership that have 4 components, there are (1) Moralemodeling, (2) Charisma, (3) Visionary Vision, (4) Individualized Consideration.

Table 3 Show the rank order of Squared Multiple Correlations

Components	Squared Multiple Correlations R^2	Rank order	% Explain
Component 4: Individualized Consideration	0.858	1	85.80%
Component 1: Moralemodeling	0.857	2	85.70%
Component 3: Visionary Vision	0.711	3	71.10%
Component 2: Charisma	0.697	4	69.70%

From Table 3 in these components that important listed in the following rank order were the component 4: Individualized Consideration, the component 1: Moralemodeling, the component 3: Visionary Vision, the component 2: Charisma. And the standardized regression weights or factor loading are 0.858, 0.857, 0.711 and 0.697 respectively.

5.3 Result of data analysis for proposing the guideline for improving principal's leadership of bilingual kindergarten in ZhuHai, GuangDong.

The statistics describe and testing involved of the latent and observed variables were calculated, and 10 experts from China who have been engaged in preschool education or kindergarten management for over 10 years were selected to validate the data results. It was concluded that transformational leadership model for principals from theory and research related and empirical data was consistent. It was based on research assumptions.

The model showed that there were 4 components and 15 indicators of principal's transformational leadership model of of bilingual kindergarten in ZhuHai, GuangDong. By rank order from high to low, respectively. They were:

Component 1: Individualized Consideration, it's the latent variable that consisted of 4 indicators:

I2: The principals of the kindergarten is willing to help teachers solve problems in life and family.

I5: Principals can think from the perspective of teachers.

I6: The principals of the kindergarten can patiently guide the techers to work and

answer questions.

I8: The principals of the kindergarten pays attention to creating conditions for teachers and letting them play their own specialties.

Component 2: Morale modeling, it's the latent variable that consisted of 3 indicators: Principals adhere to the original intention of serving kindergartens and teachers.

M8: The principals are honest and upright, and does not seek personal gain.

M9: The principals do not care about personal gains and losses, and goes all out to work.

Component 3: Visionary Vision, it's the latent variable that consisted of 4 indicators:

V6: Principals have a clear understanding of kindergarten development.

V7: The principals know the development concept of the kindergarten and is willing to share it with the teachers.

V8: Principals will guide teachers in designing their own work goals.

V10: Principals support and promote creativity to reach the ultimate goal.

Component 4: Charisma, it's the latent variable that consisted of 4 indicators:

C1: The principals is open-minded and has a strong sense of innovation.

C2: Principals have a healthy and positive attitude, strong and optimistic spirit.

C3: The professional ability of the principals is excellent.

C7: The principals dare to grasp and manage, and is good at handling difficult problems

6. Discussion

Based on the research objectives, the discussion will be presented as follows:

(1) Discussion about major findings of objective 1

There were 4 components and 15 indicators of Transformational Leadership required by principals of bilingual kindergarten in ZhuHai, GuangDong which consisted of: (1) Individualized Consideration, (2) Moralemodeling, (3) Visionary Vision, (4)Charisma. The major findings were revealed as such because these components and indicators can improve the transformational leadership for principals of bilingual kindergarten in ZhuHai, GuangDong. principal's transformational leadership can give full play to the initiative and enthusiasm of everyone in the organization and improve the organization's self-regulation and adaptability, which has become the development trend of management research in present day. This research finding was in accordance with the theories or related research of: Ji meng (2014), Li

Chaoping & Shi kan(2005), Feng Cailing, Liu Lanhua, Zhang Lihua (2016) ,Meng Hui, Song Ji, Sun Zhiqiang, Wang Wei (2011) .

(2) Discussion about major findings of objective 2

The Transformational Leadership Model for principals of bilingual kindergarten in ZhuHai, GuangDong from theory and research related was consistent with the empirical data. This study developed a transformational leadership questionnaire based on the cultural background of the Zhuhai region in China. The preliminary exploratory factor analysis results showed that transformational leadership is a four-dimensional structure, including (1) Individualized Consideration, (2) Moralemodeling, (3) Visionary Vision, (4) Charisma. The reliability of each dimension of the questionnaire exceeds the required 0.70 in measurement. Further project analysis shows that the correlation between the total scores of the 15 Indicators and the corresponding dimensions is relatively high, and deleting any of the 15 Indicators in each dimension will not cause an increase in reliability, indicating that the transformational leadership model developed in this study is reasonable. The results of confirmatory factor analysis indicate that the four dimensional structural model of transformational leadership is significantly superior to the single dimensional structural model, and the load of observed variables on latent variables and error load are relatively reasonable, once again proving that transformational leadership is a four dimensional structure.This research finding was in accordance with the theories or related research of ： Lin Lin & Shi Kan (2008). Mao Jinping, Zhou Zhuozhao & Wu Yifei (2017). Li Shengnan(2019). Song Qiqi (2022). Zhang Siyu(2020).

(3) Discussion about major findings of objective 3

Through the analysis of the factors that affecting the principal's transformational leadership of bilingual kindergarten in ZhuHai, GuangDong Province, formulate guidelines for improving the principal's transformational leadership in ZhuHai, GuangDong, The People's Republic of China. The guideline includes four aspects: (1) Individualized Consideration, (2) Moralemodeling, (3) Visionary Vision, (4) Charisma. Each aspect contains 4 guiding opinions, a total of 15 guiding opinions, the content of which is consistent with the transformational leadership model obtained in this study. This research finding was in accordance with the theories or related research of ： Lin Lin & Shi Kan (2008). AlsaeediF, MaleT (2013). Tan Meijin (2015). Mao Jinping, Zhou Zhuozhao & Wu Yifei (2017). Li Shengnan (2019). Song Qiqi (2022). Zhang Siyu (2020).

7. Recommendations

7.1 Recommendations based on research findings and policy formulation

(1) Based on the results of this study, education management departments and bilingual kindergarten operators in Zhuhai, Guangdong can use change leadership indicators to train bilingual kindergarten principals in leadership skills. Enable bilingual kindergarten managers to develop into professional managers with transformational leadership skills in line with the new era.

(2) Based on the results of this study, the Zhuhai Ministry of Education and the Office of the Education Commission can use this research to include leadership skills indicators for transformational principals as a management policy, cultivating school managers to understand and understand the value of leadership. Especially the specific operation of the 15 indicators of transformational leadership has important help in bilingual kindergarten management.

(3) Based on the results of this study, investors in bilingual kindergartens can use the results of the research on transformational leadership indicators as a standard for promoting employees. For talents who meet the criteria for transformational leadership, they can be promoted to become the teaching department head, logistics director, manager, deputy principal, and principal of the kindergarten. If it fails to meet the corresponding transformational leadership indicators, it will not be promoted.

7.2 Suggestions for utilization

Leaders can refer to this model to consider their ways of managing and responding to crises, and improve themselves based on the transformational leadership model, making their leadership more good. It has practical application and promotion significance for kindergarten management.Transformational leadership the key components should be given priority by promoting and developing the key components of Individualized Consideration first, followed by Moralemodeling, Visionary Vision, Charisma, respectively. Specific principals should achieve the following: as the core leadership of the kindergarten, the behavior of principals plays an important role in the development of kindergarten teachers and even the entire kindergarten. Therefore, first of all, principals should strengthen their own character cultivation. The character of principals is a model for teachers, and principals are fair and just, consistent in words and deeds, and have noble moral character, which is setting a benchmark for teachers in a subtle way. Secondly, the professional role of principals is as educators and leaders who understand management and leadership theory. Being able to solve practical problems for teachers will generate strong psychological magnetism towards them, enhance

their admiration for principals, and enhance their non authoritative influence. Therefore, it is necessary to love learning, be humble and cautious, have a strong knowledge reserve and constantly update the knowledge system, flexibly use it, and continuously improve work ability in the process of practice, reflection, re practice, and re reflection. In addition, a sense of responsibility and mission is the driving force for progress. principals have a sense of responsibility and are serious and responsible in their work, which can infect teachers and play a driving role. The work attitude of principals can affect the attitude of teachers towards work. Therefore, principals should take their work seriously and responsibly, maintain a strong work enthusiasm, have a strong enterprising spirit, and infect teachers around them with their own spirit, inspiring everyone to explore and innovate. Finally, in order for principals to gain the trust of teachers, they must fully express their trust and understanding towards them, humbly accept their reasonable suggestions, and be able to frequently self criticize.Kindergarten principals should develop management strategies based on the actual situation of the kindergarten, combining advanced management theories with practice.

7.3 Suggestions for further research

This article obtains a transformational leadership model with theoretical and practical significance through systematic and continuous research. The aim is to develop action guidelines for building high-quality kindergartens and pursuing sustainable development. In order to further promote the understanding and application of transformational leadership in Guangzhou and Zhuhai, China, the following are some suggestions for future research:

Longitudinal study: Conduct a longitudinal study to examine the long-term impact of kindergarten principals on the work engagement of kindergarten managers, teachers, and employees. This can provide valuable insights into the sustainability and effectiveness of transformational leadership practices over the long term.

Cross cultural research: Exploring the impact of cultural factors on the performance and effectiveness of transformational leadership in bilingual kindergartens. Compare and compare the experiences of transformational leadership in different cultures, including Eastern and Western perspectives, to determine the cultural nuances required for successful implementation.

Transformational leadership in different administrative roles: Explore the application of transformational leadership principles in specific administrative roles of bilingual kindergartens, such as principal, deputy principal, financial supervisor, education

supervisor, and logistics supervisor. Investigate how to customize and apply transformational leadership to address the challenges and responsibilities of these roles.

Transformational Leadership Measurement Tool: Develop and validate a measurement tool for transformational leadership in the context of bilingual kindergartens. Create reliable and effective tools to capture the unique aspects and challenges of transformational leadership in these educational institutions, enabling more accurate evaluation and comparison of transformational leadership practices.

Comparative research: Conduct comparative research to compare the transformational leadership practices of bilingual kindergartens with other types of educational institutions or industries. Analyze the similarities and differences in the implementation, outcomes, and challenges of transformational leadership to gain a broader understanding of the effectiveness and transferability of transformational leadership principles.

Through these research suggestions, scholars and practitioners can deepen their understanding of transformational leadership among principals in ZhuHai, Guang Zhou, The People's Republic of China. In the future, researchers hope to conduct more in-depth research, and make new contributions to the future knowledge base of transformational leadership theory.

BIbliography

Guo Guanyu. (2019). **Literature review on the development direction of educational leadership in the context of globalization.** International Public Relations (84),134-135.

Huang Qing. (2011). **The style and measurement of transformational leadership.** Contemporary Economy. (3), 136-137.

Hu Shaonan, Wang Yong. (2014). **The concept, measurement, anthems and Aftereffects of principal's leadership.** Advances in Psychological Science. (22), 1975-1984.

Lin Xinxin ,Xu Yangyang. (2021). **The relationship between future job self-clarity and employee feedback seeking behavior: The impact of transformational leadership and job engagement.** Management Review. (33), 217-226.

Li Si, Li Qun. (2020). **Study on the impact of transformational leadership on employees' job involvement in small and medium-sized enterprises.** Human Resources. (244), 64-65.

Li Yanan. (2013). **The impact of different types of leadership styles on employee work engagement dedication.** Southwest University of Finance and Economics, 45-65.

Li Shengnan. (2019). **The relationship between transformational leadership style, psychological contract and organizational commitment of preschool teachers.** Shenyang Normal University. 23-40.

Luthans F, Peterson S J. (2002). **Employee engagement and leadership style: Implications for managerial effectiveness and development.** The Journal of Management Development. (21) ,376-387.

Mao Jinping, Tan Meimei. (2015). **The impact of transformational leadership style on work engagement of primary and secondary school teachers: the mediating and moderating role of psychological capital.** Research on Teacher Education. (27),14-22.

Mao Jinping, Zhou Zhuozhao & Wu Yifei. (2017). **Comparative study on the relationship between transformational leadership, sincere leadership, and work engagement of primary and secondary school teachers.** Research on Teacher Education. (29),48-54.

Meng Hui, Song Jiwen & Sun Zhiqiang. (2011). **Research on how transformational leadership affects employees' work Outcomes: A mediated moderating analysis.** Psychological Science. (34), 1167-1173.

Mei Yuhan. (2019). **Research on transformational leadership and Influencing Factors of Teaching and Research Staff in China.** East China Normal University, 98-100.

Meng Ji. (2014). **Kindergarten principal's transformational leadership behavior and its influencing factors.** Southwest University. 61-67.

Olaniran, B.& Agnello. (2008). **Globalization, educational hegemony, and higher education.** Multicultural Education & Technology Journal. (2), 68.

Pang Lijuan, Fan Mingli. (2012). **The main problems and challenges facing the current kindergarten education management system in China.** Educational Development Research. (4), 39-43.

Qin Xufang, Wang Mo. (2012). **The connotation, measurement standards and policy suggestions of inclusive kindergarten.** Studies in Preschool Education. (221), 22-30.

Song Qiqi. (2022). **The effect of transformational leadership style on the new generation of primary and secondary school teachers'work engagement-psychological contract as mediation.** shanghai normal university, 89-100.

Tan Meijin. (2015). **The relationship between transformational leadership style, teacher psychological capital, and job engagement in primary and secondary schools.** Hunan Normal University, 89-95.

Wang Jiakun. (2020). **Study on the influence of transformational leadership on employee job engagement: The role of job remodeling and job autonomy.** Harbin Engineering University, 89-100.

Wang Zhen, Chen Leni. (2015). **Transformational leadership and Job Engagement: A mediation model based on Affective Perspective.** Management Review , 120-212.

Zhang Siyu. (2020). **Research on the relationship between kindergarten principal transformational leadership behaviorand kindergarten teachers work engagement.** kindergarten type and labor relationship. 1-15.

Zhu Xiumei, Bao Mingxu & Wang Tiandong. (2015). **Dualistic perspective on the evolution and future prospects of transformational leadership research.** Research and Development Management. (20), 25-32.

Mediation Effects of Curriculum and Learning on the Relationship between Teachers' Leadership and Students' Core Competence in Chongqing Area

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ABSTRACTS

The main objectives of this study were: (1) to study the effect of factors affecting students' core competence, (2) to study the mediation effect of curriculum on the relationship between teacher leadership and students' core competence, and (3) to study the mediation effect of learning on the relationship between teacher leadership and students' core competence.

Population of this study were undergraduate students who will graduated from art colleges in Chongqing area in academic year 2023, sample were selected from 10 art colleges in Chongqing. In order to achieve these goals, the proportional stratified random sampling method was adopted, and the sample size was calculated and determined by G*Power software. The sample size were not less than 27 students in each college, and the minimum requirement sample size were 270 students. A survey questionnaire was used to collect data, and 277 questionnaires were received back, with 100% rate. Data analyses were employed descriptive statistic demographic information and structural equation modeling (SEM) for hypothesis testing.

Research findings were, (1) factor teacher leadership and learning had positively affected on students' core competence, but factor curriculum had not affected, (2) curriculum did not mediation effect on the relationship between teacher leadership and students' core competence, and (3) learning did not mediation effect on the relationship between teacher leadership and students' core competence.

1. Introduction

In the context of global educational reform and development, defining the qualities that college students should possess to meet the needs of social development is a key concern for countries and international organizations. A central debate in education revolves around whether the primary focus should be on individual-based or social-based theories. That is, should education prioritize developing individuals to meet societal needs, or should it focus on personal development? Ideally, these two approaches should complement each other. Promoting the formation and perfection of students' physical and mental abilities is essential, not just in terms of acquiring knowledge. (Zhang Na；Xie Zhenan, 2019) Core competence should be the foundational goal of education, as it significantly impacts individuals' holistic development. This is particularly relevant today, as college students face complex social competition, making core competence education vital.

The role of teachers in influencing students' core competence cannot be overstated. Teacher leadership, as American leadership scholar Warren Bennis defines it, is the ability of educators to translate vision into reality. He emphasizes that leadership is a form of influence and that everyone has the potential to be a leader. Therefore, influencing students through teacher leadership becomes a critical aspect of educating individuals and cultivating core competencies. Teachers are central to the interaction between education and students. They are essential in transmitting knowledge, guiding learning, and shaping the core competencies students acquire. Teacher leadership can make a profound impact on students, thus contributing to their holistic development. Curriculum as the Compass for Educational Development. The curriculum plays a pivotal role in shaping students' core competence. It is the blueprint for what teachers, administrators, and students are expected to accomplish. In essence, the curriculum is the compass that guides educational institutions.

In recent years, different models of core competency education have been developed worldwide, aligning curriculum with core competence. The curriculum should reflect the demands of a changing society and emphasize the cultivation of students' abilities. A well-designed curriculum can directly influence teaching and learning processes, ultimately impacting students' core competence. The marriage of education and productive labor is a fundamental principle of socialist education. Labor is central to human development, and combining education with productive labor is essential for all-around human growth. (Qian Jin,

2005) Xi Jinping, the General Secretary, emphasized the importance of linking education with productive labor to produce well-rounded individuals. This concept aligns with historical materialism, which highlights the role of labor in shaping both human development and the world's history.

As societies evolve, the complexity of labor skills and market relations increases. Knowledge transfer, often accomplished through education and practice, is crucial to the development of individuals and society. Core competence, emphasizing knowledge, skills, attitudes, emotions, and values, is essential for students and their lifelong development. Core competence should not be viewed as a single quality but as a combination of various attributes. It applies to all students, representing both personal and social values. Core competence is not static; it evolves over time and through different stages.

The world has witnessed the development of core competency frameworks to address the challenges of the information age. Organizations like the Organization for Economic Co-operation and Development (OECD) and the European Union have established core literacy frameworks, emphasizing collaboration, communication, critical thinking, and creativity (the "4C's"). These are advanced capabilities necessary for solving complex problems and adapting to unpredictable situations. In China, the "Overall Framework for the Development of Core Competencies of Chinese Students" provides a local adaptation of international frameworks. It has significantly influenced China's basic education reform, aligning educational policies with the development of students' core competencies.

The impact of teacher leadership on students' core competence is a crucial aspect of educational research. (Jiang Haiyang; Zhang Guobin, 2021) Teacher leadership encompasses influencing colleagues, principals, and the school community to enhance teaching and learning practices, ultimately improving students' learning and achievements. In the context of teacher leadership, many aspects such as curriculum design, teaching strategies, curriculum reform, and training strategies have a significant influence on students' core competence. Therefore, it's essential to study the intermediary variables of curriculum and learning separately to gauge the influence of teacher leadership more accurately. In art universities, cultivating teaching vision is vital for educators. It requires a deep understanding of the major, accurate grasp of teaching content, and a macro view of personnel training. As art education is practical and ever-evolving, teaching vision should be established based on an understanding of the dynamic nature of teaching and learning. Incorporating Art into the Framework. Art education is distinct from theoretical disciplines, emphasizing not only knowledge but also the application of skills. This complexity demands that teachers set

appropriate teaching objectives, stimulate students' motivation to learn, and help them set and achieve their goals.

Future Research and Implications. The study conducted in Chongqing art colleges and universities aims to examine the influence of teacher leadership on students' core competence. Empirical research, through a quantitative survey of students, will help gauge this influence, providing insight into how teachers can enhance leadership to improve students' core competence. By developing the teacher's leadership level, students' core competence can be significantly enhanced, ensuring the lasting development of art majors in Chongqing's colleges and universities. In conclusion, teacher leadership has a profound impact on students' core competence. In the ever-changing landscape of education, teachers play a pivotal role in shaping the abilities of the next generation. Research on the relationship between teacher leadership and students' core competence is of great practical significance, guiding the cultivation of core competencies and the development of teachers' leadership. This research can lead to more efficient teaching and contribute to the enhancement of students' core competence.

2. Research objectives

1. To study the effect of teachers' leadership on the curriculum, learning, students' core competence in Chongqing area.

2. To study the effect of the curriculum and learning on the students' core competence in Chongqing area.

3. To study the mediation effect of curriculum and learning between teachers' leadership and students' core competence in Chongqing area.

3. Research Hypothesis

H1: Teacher leadership has positive effect on Students' core competence. (Zhang Ping & Li Xiaohua, 2018)

H2: Teacher leadership has positive effect on Curriculum. (Wang Junxia, 2018)

H3: Teacher leadership has positive effect on Learning. (Zhang Wang, 2020)

H4: Curriculum has positive effect on Students' core competence. (Deng LI, 2018)

H5: Learning has positive effect on Students' core competence. (Lu Di, Xiao Shirong, 2020)

H6: Curriculum has positive effect on Learning. (Dai Rongbiao, 2020)

H7: Teacher leadership has positive effect on students' core competence via curriculum.

H8: Teacher leadership has positive effect on students' core competence via learning.

H9: Teacher leadership has positive effect on students' core competence via learning and curriculum.

4. Scope of research content

1. Scope of population in this study were Art students in Chongqing universities who were graduate in academic year 2023 in 17 colleges total students of 6,568. These students were about to finish their college education.

2. Scope of content to study about the mediation effects of the relationship between teacher leadership and students' core competence, including teacher curriculum and students' learning. Teachers' leadership was the independent variable, students' core competence was the dependent variable, and curriculum and learning were the intermediary variables.

   a. Teacher leadership:(1) Teachers' ability to grasp teaching objectives. (2) Teachers' personality charm. (3) Interact with students and stimulate enthusiasm. (4) Teachers' ability to challenge and innovate.

   b. Students' core competence:(1) Learning ability (2) Cooperation ability (3) Creativity (4) Life and Career Ability (5) Take responsibility.

   c. Curriculum: (1) Curriculum design: (2) Learning resources: (3) Curriculum evaluation:

   d. Learning:(1) Active Learning (2) Constructive learning (3) Diagnostic Learning and Reflective Learning

5. Conceptual Framework
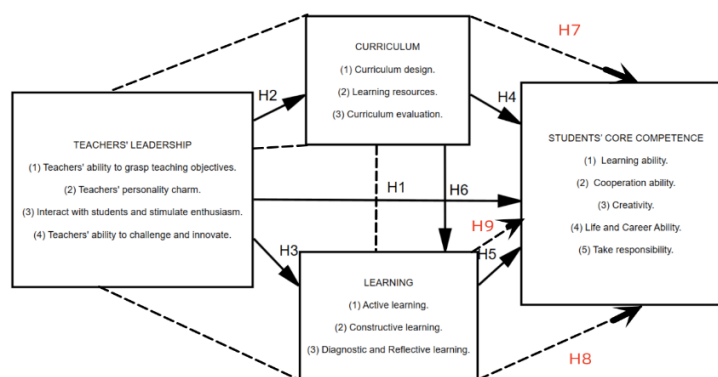
Figure 1 Conceptual framework of this research

6. Research Methodology

1. Population and sampling

The population in this study were Art students in Chongqing universities who were graduate in academic year 2023 in 17 colleges total students of 6,568. These students were about to finish their college education. The multi-stage random sampling was used for samples selection. The colleges and universities were unit of sampling at stage 1 which been random selected by 10 colleges and universities. In stage 2 the sampling unit, been Art students and the cluster size was calculated by using the Optimal Design (OD), the sufficient cluster size were 27 students, so researcher had more than 270 samples, Finally, the selected sample is 277.

2. Research Instrument

The researcher development Instruments as follow:

(1) Research literature

(2) Build and develop the operational definitions of the project.

(3) The researcher used a five-point rating scale questionnaire.

(4) Experts judge the validity of the content. The IOC's qualified value was 0.6-1.0, with a total of 150 questions, and the result after IOC was 82 questions.

(5) Try out: Modify the developed project according to the results of IOC review. A sample population of not less than 30 non-sample was invited to try and further confirm the feasibility of the designed project. (Reliability and Validity) The Cronbach's alpha was 0.993.

(6) Use software to evaluate the reliability of instruments. Data analysis through SPSS statistics, M-plus and G-power.

3. Data collection procedure

Data were collected by respondents through questionnaires. Respondents have two weeks to fill out the questionnaire and return. However, to ensure the expected response rate, a reminder was issued a week later. A total of 277 data were collected, the completion of data collection was 100%.

4. Data Analysis

Data analysis is a crucial step in the research process that involves transforming raw data into meaningful insights, patterns, and conclusions. It aims to extract relevant information from collected data to answer research questions, test hypotheses, and draw valid conclusions. The data analysis process varies depending on the type of data (quantitative or qualitative), the research objectives, and the chosen research methodology.

The overall population for this study total students of 6,568. The sample size was determined utilizing Optimal Design (OD) , culminating in a total of 277 samples. Subsequent data collection transpired, with the collected data undergoing analysis via SPSS software.

To accomplish the goals of this research, diverse statistical methods were employed. For instance, descriptive statistics, mean values, and standard deviations were utilized to scrutinize each factor. The potential multi-collinearity among predictors was assessed through factor correlation. The correlation coefficient was deployed to ascertain the direction and magnitude of students' decision-making factors. Logistic regression analysis was employed to explore the comparative impact of predictor variables on students' core competence.

7. Results

In measurement models specification in this study, the researcher identified 4 factors and 15 observation variables: (T) Refer to Teacher Leadership. (S) Refer to Student Core Competency. (C) Refer to Curriculum. (L)   Refer to Learning.

(1) TAA   Teachers' ability to grasp teaching objectives.

(2) TBB   Teachers' personality charm.

(3) TCC   Interact with students and stimulate enthusiasm.

(4) TDD   Teachers' ability to challenge and innovate.

(5) SAA   Learning ability

(6) SBB   Cooperation ability

(7) SCC   Creativity

(8) SDD   Life and Career Ability

(9) SEE   Take responsibility.

(10) CAA   Curriculum design

(11) CBB   Learning resources.

(12) CCC   Curriculum evaluation

(13) LAA   Active Learning

(14) LBB   Constructive learning

(15) LCC   Diagnostic Learning and Reflective Learning

Demographic Information

It was summarized that there were 147 male students, accounting for 53.1% of the sample size, there were 130 female students, accounting for 46.9% of the total. The Working experience levels of the samples were: 76 people used to have working experience (27.4%),

201 people have no working experience (72.6%). The age levels of the samples were: 9 people less than 23 years old (3.2%), 145 people were 23 years old (52.3%), 103 people were 24 years old (37.2%), 20 people more than 24 years old (7.2%), so the largest samples group was 23 years old and 24 years old. The Major of the samples was: 111 people were Fine Art Major (40.1%), 89 people were Design Major (32.1%), 32 people were Music Major (11.6%), 36 people were Drama Major (13%), 9 people were Other Major (3.2%). In terms of university, 88 students were from Sichuan Fine Arts Institute(34.8%), 28 students were from Chongqing University (10.1%), 41 students were from Southwest University (14.8%), 8 students were from Chongqing Institute of Science and Technology (2.9%), 27 students were from Chongqing Normal University (9.7%), 5 students were from Changjiang Normal University (1.8%),18 students were from Chongqing University of Arts and Sciences (6.5%),11 students were from Chongqing Three Gorges College (4.0%),47 students were from Foreign Business College of Chongqing Normal University (17%),4 students were from Chongqing Jiao tong University (1.4%)

Table 1 Descriptive statistics and Multivariate normality test

Variables	`X	S.D.	%CV ☐	SK	KU	Level
TAA	4.26	0.675	15.85%	-1.182	0.825	Highest
TBB	4.25	0.673	15.84%	-1.315	1.234	Highest
TCC	4.30	0.614	14.28%	-1.365	1.421	Highest
TDD	4.26	0.687	16.13%	-1.380	1.263	Highest
SAA	4.24	0.716	16.89%	-1.245	1.026	Highest
SBB	4.05	0.783	19.33%	-1.138	1.003	High
SCC	4.08	0.799	19.58%	-0.972	0.224	High
SDD	4.14	0.755	18.24%	-1.123	0.723	High
SEE	4.20	0.679	16.17%	-1.015	0.482	Highest
CAA	4.21	0.627	14.89%	-0.986	0.534	Highest
CBB	4.20	0.680	16.19%	-1.098	0.918	High
CCC	4.25	0.648	15.25%	-1.253	1.191	Highest
LAA	4.00	0.775	19.53%	-0.894	0.469	High
LBB	4.04	0.800	19.80%	-0.982	0.361	High
LCC	3.95	0.838	21.26%	-0.959	0.168	High
Mardia's coefficient	T S C L (Multivariate normality)			39.24	292.63	

Multivariate data normality was assessed with Mardia's coefficient for TSCL, yielding values of 39.24 (SK) and 292.63 (KU). To determine univariate normality, skewness values within the range of -2 to +2 and kurtosis values between -10 and +10 were considered acceptable (Collier, 2020, p. 166). The calculated mean values for questionnaire items ranged notably from 3.95 to 4.30, with LCC having the lowest and TCC the highest averages, close to the maximum score of 5. This indicates that the questionnaire represented high-quality characteristics aligning with the research objectives and offering valuable reference data. Standard deviation, affected by variations in observation values, ranged from 0.614 to 0.838 for each observation variable, reflecting data deviation from the mean. Means, standard deviations, and coefficient of variation percentages ranged between 14.28% and 21.26%, indicating questionnaire data exhibited a normal distribution. In terms of univariate normality, skewness, reflecting data distribution asymmetry, ranged between -0.894 and -1.253, well within the acceptable range of -2 to 2. Furthermore, kurtosis, signifying the distribution curve's peak, ranged from 0.168 to 1.421, indicating an acceptable, relatively flat distribution (Collier, 2020, p. 166).
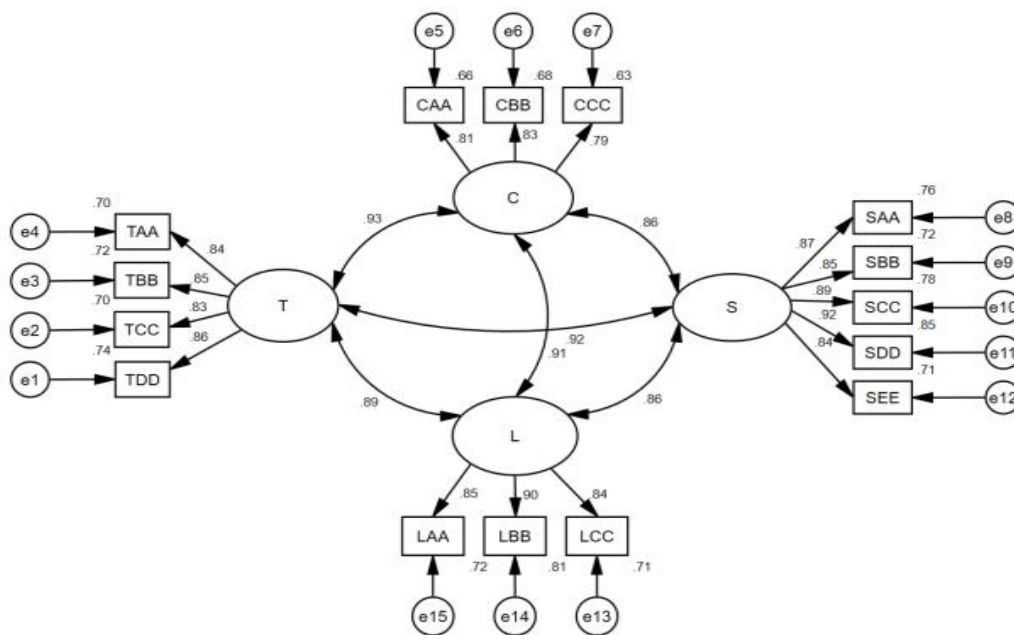
Figure 2 CFA model of mediating effect (standardized model)

The mediating model of this research was established by using the structural equation modeling tool Mplus. Through this model, Chi-Square=171.642, df=84, Chi/df=2.043, p.=0.000, RMSEA=0.061, CFI=0.978, TLI=0.972, SRMR=0.012, these indicators shown that the measurement model fit good the empirical data, so we can assume that the model was

correct.

Table 2 Measurement model fit valuation after modifying.

Measure	Estimate	Threshold	Interpretation
CMIN	171.642	--	--
DF	84	--	--
CMIN/DF	2.043	Between 1 and 3	Excellent
CFI	0.978	>0.95	Excellent
RMSEA	0.012	<0.06	Excellent

Table 2 shows that the model fit and factor loading data excellent.

Table 3 Factor loading of Four Latent Variables in Unstandardized and Standardized

95% Confidence Intervals

Latent	Observed	Estimate	SE	Lower	Upper	β	z	p
T	TDD	1.000	0.0000	1.000	1.000	0.861		
	TCC	0.866	0.0479	0.773	0.960	0.835	18.1	< .001
	TBB	0.967	0.0517	0.866	1.069	0.850	18.7	< .001
	TAA	0.958	0.0524	0.856	1.061	0.840	18.3	< .001
S	SEE	1.000	0.0000	1.000	1.000	0.841		
	SDD	1.219	0.0583	1.105	1.334	0.921	20.9	< .001
	SCC	1.241	0.0638	1.116	1.366	0.886	19.5	< .001
	SBB	1.161	0.0647	1.034	1.288	0.846	18.0	< .001
	SAA	1.096	0.0578	0.982	1.209	0.873	19.0	< .001
C	CAA	1.000	0.0000	1.000	1.000	0.813		
	CBB	1.102	0.0697	0.966	1.239	0.826	15.8	< .001
	CCC	1.007	0.0676	0.875	1.140	0.792	14.9	< .001
L	LAA	1.000	0.0000	1.000	1.000	0.849		
	LBB	1.094	0.0555	0.985	1.203	0.900	19.7	< .001
	LCC	1.073	0.0608	0.954	1.192	0.843	17.7	< .001

The analysis results in **Table 3** show the unstandardized and standardized factor loading of the 15 observed variables on the 4 factors. The results in Table 4.5 show that the load of each observed variables was statistically significant, and the standardized value was greater than 0.70, indicating that each observed variable is a good indicator to measure each factor. The indicator TDD has a better effect on T (0.861) ; The indicator SDD has a better effect on S (0.921) ; The indicator CBB has a better effect on C (0.826) ; The indicator LBB has a better effect on L (0.900) ;

Table 4 The Square Matrix of Intercorrelation Between Latent Variables

	L	S	C	T
L	1.000			
S	.865	1.000		
C	.906	.861	1.000	
T	.888	.923	.931	1.000

The correlation matrix analysis results of variables in **Table 4** show that the correlation coefficients between Variables L and S, L and C, L and T, S and C, S and T, C and T were 0.865-0.923, indicating that there was a high correlation between variables (Patrick Schober,el al., 2018, pp. 1763-1768)

Table 5 The Composite Reliability (α and CR), The Average Variance Extracted (AVE).

Latent Variable	No.	α	CR	AVE
T	4	0.91	0.910	0.717
C	3	0.85	0.852	0.657
S	5	0.94	0.942	0.764
L	3	0.90	0.899	0.747

Reliability (α and CR)

In this model, composite reliability was used to evaluate the reliability of the measurement model, and the cut-off criterion was 0.70 (Hair, et. al, 2017). The data analysis in Table 4.8 shows that the α values were 0.91, 0.85, 0.94 and 0.90, the CR values were 0.910, 0.852, 0.942 and 0.899 respectively, indicating that the reliability of the measurement model was very high.

Convergent validity

Reliability (**α**) coefficient Cronbach's Alpha and Average Variance Extracted, which determine the degree of convergence between variables and their component indicators, were referred to as convergent validity (AVE). The coefficient Cronbach's Alpha (**α**) values of variables T, C, L, and S were 0.91, 0.85, 0.94 and 0.90; The CR values of variables T, C, L, and S were 0.910, 0.852, 0.942 and 0.899, respectively, as shown in the above table, and they were all higher than 0.7. (Collier, 2020, p. 87). The model variables exhibited strong internal convergent validity, as evidenced by the fact that the AVE values of variables T, C, L, and S were 0.717, 0.657, 0.764 and 0.747, respectively, and were all greater than 0.5. (Collier, 2020, p. 83).

Hypothesis testing
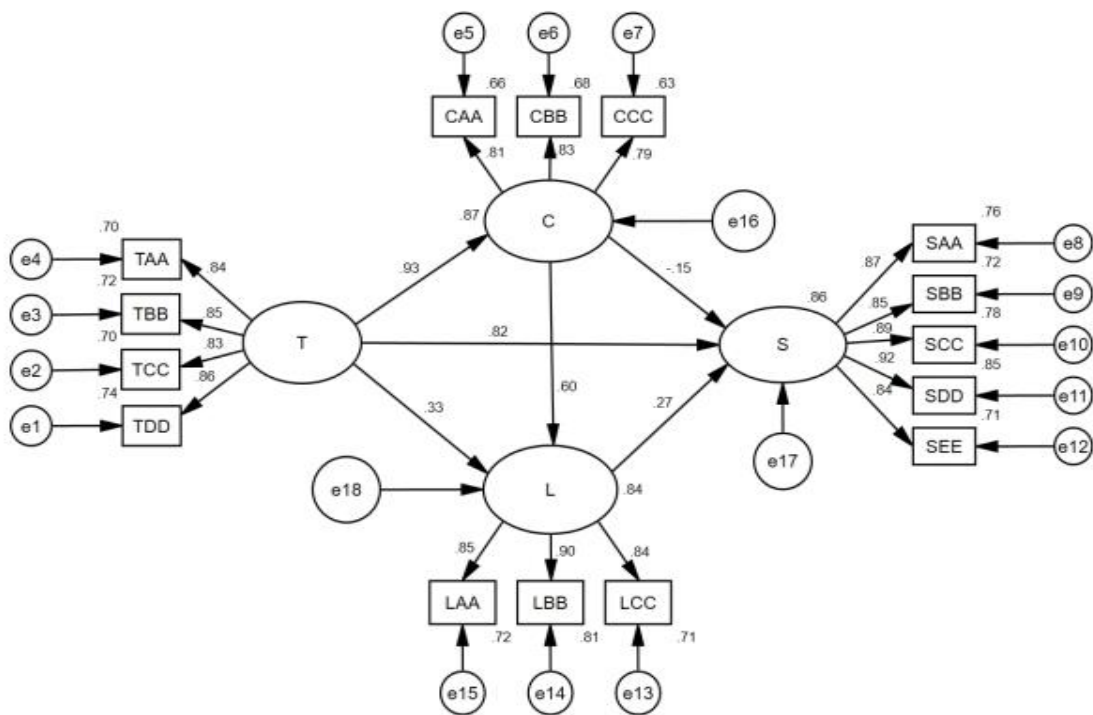
Figure 3 SEM of mediating effect (standardized)

The researcher tested the fit of the structural model and found that the fit of the structural model was as follows: (Chi-Square=171.642, df=84, Chi/df=2.043, p.=0.000, RMSEA=0.061, CFI=0.978, TLI=0.972, SRMR=0.012) The fit of the structural model was acceptable.

Table 6 The Hypotheses Testing

Direct effects	unstanda rdized	standardi zed	S.E.	C.R	P-value	Hypotheses
T⟶S	.906	.821	.167	5.134	***	H1
T⟶C	.837	.931	.056	14.869	***	H2
T⟶L	.383	.330	.202	1.901	.057	H3
C⟶S	-0.181	-.145	.226	-.790	.429	H4
L⟶S	.254	.268	.110	2.322	**	H5
C⟶L	.774	.599	.230	3.362	***	H6

Significance Indicators: **$p<0.050$, ***$p<0.010$, (Gaskin& Lim, 2018)

According to the analysis results in Table 4.9, the significance results (P value) of the direct hypothesis of HI/H2/H6 in this study were all less than 0.05, indicating that the five direct hypotheses in this study were all valid. The normalized path coefficients of HI/H2/H6 were set to be 0.821,0.931,0.599, respectively. The P values all were ***($P<0.010$). It shows that T has significant direct impact on S, T has significant direct impact on C, C has significant direct impact on L.

Table 7 The effect decomposition in the indirect effects

Label	Description	Estimate	SE	Lower	Upper	β	z	p
H9(H2+H6+H5)	T ⟹ C ⟹ L ⟹ S	0.165	0.097	-0.025	0.354	0.149	1.701	0.089
H7(H2+H4)	T ⟹ C ⟹ S	-0.149	0.188	-0.518	0.220	-0.135	-0.793	0.428
H8(H3+H5)	T ⟹ L ⟹ S	0.097	0.054	-0.008	0.203	0.088	1.806	0.071
H6+H5	C ⟹ L ⟹ S	0.197	0.115	-0.030	0.423	0.160	1.704	0.088

The indirect effect of T on S through C was -0.149 with 95% confidence interval [-0.518,0.220] excluding 0. This indicates that T has no indirect effect on S through C.

The indirect effect of T on S through L was 0.097, with 95% confidence interval [-0.088,0.203] excluding 0. This indicates that T has no indirect effect on S through L.

The indirect effect of C on S through L was 0.197, with 95% confidence interval [-0.030,0.423] excluding 0. This indicates that C has no significant mediating effect on S through L.

The indirect effect of T on S through C and L was 0.165, with 95% confidence interval [-0.025,0.354] excluding 0. This indicates that T has no significant mediating effect on S through C and L.

Table 8 Decomposition effect of variable T C L on S.

Variable	Direct Effect	Indirect Effect	Total Effect	Correlation	Spurious
T	0.906	0.102	1.008	0.923	-0.085
C	-0.145	0.174	0.029	0.861	0.832
L	0.268	-	0.268	0.865	0.597

According to According to the analysis results in Table 4.11, it was found that T, C and L has spurious effect, T was-0.085, C was 0.832, L was 0.597, respectively.

8. Conclusion

Through data analysis, we can also see that Teacher Leadership has no significant positive effect on Learning. Curriculum has no significant positive effect on Students' Core Competence. And Learning has no significant positive effect on Students' Core Competence.

Through data analysis, we can see that Curriculum and Learning have no significant mediation effects between Teachers' Leadership and Students' Core Competence. However, through effect decomposition, we can see that Curriculum and Learning has an unknown spurious effect on Students' Core Competence.

9. Discussion

(1) In line with the research objective of exploring the impact of teacher leadership on curriculum, learning, and students' core competence, the study revealed that teacher

leadership significantly influences the curriculum and students' core competence, yet it does not have a significant impact on learning. Teacher leadership was identified as a foundational element for building core competence, emphasizing its importance in guiding curriculum reform and enhancing teacher professional growth. The results align with previous research highlighting the role of teacher leadership in promoting student learning (Zhang Ping,

Li Xiaohua, 2018; Roger Goddard, Yvonne Goddard, Eun Sook Kim, Robert, 2015; Ronald H. Heck, Philip Hallinger, 2014).

(2) Regarding the research objective of investigating the influence of curriculum and learning on students' core competence, the findings indicate that learning and curriculum do not significantly affect students' core competence. Teacher leadership, curriculum, and students' learning are interconnected, with teacher leadership influencing core competence through curriculum design. Deepening curriculum reform and cultivating core literacy require a thorough understanding of teachers' curriculum leadership. Scholars emphasize the interplay between educational theory, curriculum leadership, professional knowledge, and real-time teaching and learning monitoring (Sang Lei, 2020; Xu Fenghua, Chen Junyuan, 2021; A. Barbu, O.C. Dochia, G. Militaru, D.C. Deselnicu, 2023; Allan A. Glatthorn, Floyd Boschee, Bruce M. Whitehea, 2018).

(3) In pursuit of the research objective examining the mediating role of curriculum and learning in the relationship between teacher leadership and students' core competence, the study found that curriculum significantly impacts learning, but learning does not significantly affect students' core competence. Notably, curriculum and learning do not mediate the connection between teacher leadership and students' core competence. However, the analysis indicates the presence of unknown spurious factors contributing to this relationship. Further exploration is warranted to identify these factors (Zhang Wang, 2020).

10. Recommendations

Recommendations for Policy Formulation: The study underscores the crucial role of teacher leadership in shaping students' core competencies, prompting policy recommendations for policymakers. To enhance teacher leadership and foster students' core competencies, the following steps were advised:

(1) Training and Developing Teacher Leadership: Government and school management authorities should offer regular teacher leadership training to enhance educators' leadership skills, including educational leadership, teamwork, communication, problem-solving, and decision-making. Encouraging teachers to engage in professional development activities such as seminars and research projects is vital for continual leadership improvement.

(2) Recruitment and Selection: During teacher recruitment, emphasize personality traits and communication skills. Implement a rigorous selection process to ensure the hiring of teachers with a positive influence and strong interpersonal relationships.

(3) Establish a Mentor Program: Create mentorship programs that pair experienced teachers with novice teachers, allowing the transfer of leadership skills and educational experience to newcomers.

(4) Incentive Policies: Governments can introduce incentive policies to attract and retain high-quality teachers, including competitive compensation, career development opportunities, and other benefits that motivate teachers to continuously enhance their leadership and educational capabilities. These policy recommendations contribute to the improvement of teacher leadership, thereby benefiting the development of students' core competencies.

Recommendations for Practical Application: To practically apply the concept of teacher leadership, several key areas are addressed:

(1) Mastery of Teaching Objectives: Ensure clear teaching objectives are established, aligning with curriculum requirements and student proficiency levels. Effective communication of these objectives to students, alongside personalized learning, aids in reaching individual learning goals.

(2) Building Positive Relationships: Cultivate a positive, respectful, and supportive classroom environment, encouraging open communication, respecting student views, and stimulating their curiosity.

(3) Interactive Teaching: Promote classroom interaction through questioning, group discussions, and problem-solving activities, fostering student participation and self-confidence.

(4) Challenging and Innovative Teaching: Encourage the use of educational technology, interdisciplinary education, practical projects, and case studies to enhance teaching innovation.

(5) Continuous Assessment and Improvement: Regular feedback and assessment of the curriculum and student evaluations contribute to continuous improvement. By implementing these suggestions in the classroom, teachers can better inspire students and cultivate their core competencies.

Recommendations for Further Research: This study acknowledges its limitations and proposes areas for future research:

(1) Sample Size and Representativeness: Future studies should consider expanding sample sizes and evaluating the representativeness of samples to enhance the validity of findings.

(2) Changing Social Values: The study suggests considering the evolving nature of social values and cultural concepts, which may affect the relevance and importance of research questions over time.

(3) Intermediate Role of Curriculum and Learning: Due to limited research in the field, future studies should delve deeper into understanding the intermediate role of curriculum and learning in the relationship between teacher leadership and student core competencies. Further investigation can explore demographic and organizational differences to better comprehend this complex relationship.

By addressing these aspects, future research can refine our understanding and inform practical strategies for improving students' core competencies through teacher leadership.

Bibliography

A. Barbu,O.C. Dochia,G. Militaru,D.C. Deselnicu. (2023). **LEADERSHIP IN EDUCATION: A CASE STUDY OF SUCCESSFUL TEAM LEARNING ACTIVITIES.** Conference name: 15th International Conference on Education and New Learning Technologies.

Allan A. Glatthorn, Floyd Boschee, Bruce M. Whitehea. (2018). **Curriculum Leadership: Strategies for Development and Implementation.** Printed in the United States of America.

Deng Li. (2018). **Research on American Skills Education Reform in the 21st Century.** Doctoral thesis of East China Normal University.

Dai Rongbiao. (2020). **The Growth Ways of Senior High School Teachers' Curriculum Leadership under Core Literacy.** Symposium on Teacher Education Capacity Building in 2020, p.315-316.

Jiang Haiyang; Zhang Guobin. (2021). **The Construction of Young and Middle-aged Teachers in Colleges**. MEITAN HIGHER EDUCATION, p. 82-87.

Lu Di, Xiao Shirong. (2020). **Research on the Development of Teachers' Curriculum Leadership under the Background of 5C Core Literacy.** Journal of Jinzhou Medical University (Social Science Edition), p.86-90.

Qian Jin. (2005). **On the Ulitiy of Labour.** Social Sciences Academic Press.

Roger Goddard, Yvonne Goddard, Eun Sook Kim, Robert. (2015). **A Theoretical and Empirical Analysis of the Roles of Instructional Leadership, Teacher Collaboration, and**

Collective Efficacy Beliefs in Support of Student Learning. American Journal of Education, p.501-530.

Ronald H. Heck, Philip Hallinger. (2014). **Modeling the longitudinal effects of school leadership on teaching and learning.** Journal of Educational Administration, p.653-681.

Sang Lei. (2020). **Research on Vocational Core Literacy of Higher Vocational Students and Its Cultivation.** Doctoral thesis of Nanjing Normal University.

Wang Junxia. (2018). **Connotation and Promotion Strategies of Teachers' Teaching Leadership under the Background of Core Literacy.** Journal of Hunan University of Humanities, Science and Technology, p.114-117.

Xun Fenghua, Chen Junyuan. (2021). **K-VPI Teachers' Curriculum Leadership from the Perspective of Core Literacy: Model Construction and Connotation Interpretation.** Nanjing social sciences, p.149-158.

Zhang Na**；** Xie Zhenan. (2019). **Review and Prospect of the Research on Core Literacy of College Students in China.** Journal of Chifeng University (Soc.Sci), p.126-130.

Zhang Wang. (2020). **Teaching Reform Oriented by Core Literacy Goal and Principal's Teaching Leadership.** Journal Of Educational Institute of Jilin Province, 1-8.

Zhang Ping & Li Xiaohua. (2018). **On the Return and Promotion of Teachers' Curriculum Leadership from the Perspective of Core Literacy.** Contemporary Teacher Education, p.55-62.

Zhang Wang. (2020). **Teaching Reform Oriented by Core Literacy Goal and Principal's Teaching Leadership.** Journal Of Educational Institute of Jilin Province, p. 1-8.

The Mediating Effect of Entrepreneurial Self-efficacy on the Relationship between Social Environment and Educational Program Study on Entrepreneurial Intention of Art College Graduates in Shandong Province

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ABSTRACT

The objectives of this research were: 1) to explore the components of social environment factor, educational program study factor, entrepreneurial self-efficacy factor and entrepreneurial intention factor; 2) to develop the model of the mediating effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates in Shandong province and 3) to verify the effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates.

The population of this research were art college graduates from six art colleges in Shandong Province in 2023, totaling 11,775. The sample was 418, determined by G* power software and used stratified random sampling method. The data was collected by 5-point Likert rating scale questionnaire and data analyzed by descriptive statistics, CFA and SEM.

The results showed that: 1) The components of entrepreneurial intention were entrepreneurial interest, entrepreneurial tendency, entrepreneurial preparation and entrepreneurial target. The components of social environment were government policy, cultural and social norms, financial support and market openness. The components of educational program study were entrepreneurship course, entrepreneurship practice and teaching technique. The components of entrepreneurial self-efficacy were innovation efficacy, opportunity recognition efficacy and relationship coordination efficacy. 2) The model fit well

with empirical data (df=70, CMIN=133.886, CMIN/df=1.913, CFI=0.981, RMSEA=0.047). 3) The social environment, educational program study and entrepreneurial self-efficacy had direct effect on entrepreneurial intention. The social environment and educational program study had indirect effect on entrepreneurial intention through entrepreneurial self-efficacy as mediating effect.

Keywords: Entrepreneurial Intention, Social Environment, Educational Program Study, Entrepreneurial Self-Efficacy

1. Introduction

Shandong Province is the second most populous province in China, with the highest number of university graduates in the country. According to statistics, the total number of graduates from Shandong universities in 2023 exceeded 800000 for the first time, reaching 813000, an increase of 18000 compared to the same period last year. At present, there are 66 art universities in China and six art universities in Shandong Province. Although various colleges were constantly expanding their enrollment scale, the large number of students was in stark contrast to the low employment rate. Taking Shandong University of Arts as an example, according to statistics, the employment rate of undergraduate graduates in 2022 was 75.32% of the total, the employment situation of art graduates was very serious.

The research of the entrepreneurial intentions of potential entrepreneurs has gradually become a new hot topic in global entrepreneurship research. Although some research results have been obtained in the exploration of entrepreneurial intention, there were few researches directly on the entrepreneurial intention of art college graduates, the content was relatively backward, and the attention to this group was not enough. There were still many problems to be developed and explored. In addition to this, although some researches had begun to examine the effect of other variables on entrepreneurial intention, there were still many ambiguous aspects of the relationship between each variable.

Based on the actual situation of art graduates in Shandong Province, this research verified the influencing factors of entrepreneurial intention of art graduates, analyzed the intrinsic motivation of art college graduates' entrepreneurial behavior, and discussed the fundamental reasons that restrict art college students' entrepreneurial behavior. This research is conducive to better guide and cultivate the entrepreneurial intention of college students, improve the entrepreneurial ability and employment competitiveness of graduates, and alleviate the employment pressure of art graduates.

2. Research Questions

1) What were the components of social environment, educational program study, entrepreneurial self-efficacy and entrepreneurial intention?

2) What was the model of the mediating effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates in Shandong province?

3) What was the mediating effect of the factors that affect the entrepreneurial intention of art college graduates?

3. Research Objectives

1) To explore the components of social environment factor, educational program study factor, entrepreneurial self-efficacy factor and entrepreneurial intention factor.

2) To develop the model of the mediating effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates in Shandong province.

3) To verify the effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates.

4. Research Hypothesis

H1: The social environment had a positive direct effect on the graduates' entrepreneurial intention.

H2: The educational program study had a positive direct effect on the graduates' entrepreneurial intention.

H3: The entrepreneurial self-efficacy had a positive direct effect on the graduates' entrepreneurial intention.

H4: The social environment had a positive direct effect on the entrepreneurial self-efficacy.

H5: The educational program study had a positive direct effect on the entrepreneurial self-efficacy.

H6: The entrepreneurial self-efficacy had an indirect effect on the relationship between social environment and graduates' entrepreneurial intention.

H7: The entrepreneurial self-efficacy had an indirect effect on the relationship between educational program study and graduates' entrepreneurial intention.

5. Conceptual Framework
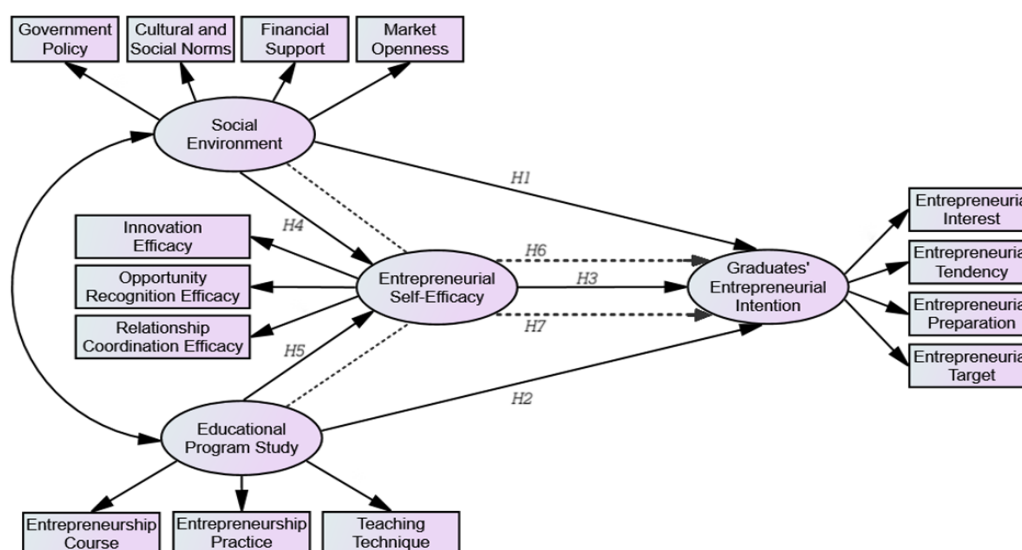
Figure 1 Conceptual framework of this research

6. Methodology

This research adopted quantitative research. There were three processes involved in research: research plan preparation (planning stage), research procedures, and research reports. Details were as follows:

Research Design

Part 1: To explore the components of social environment factor, educational program study factor, entrepreneurial self-efficacy factor and entrepreneurial intention factor.

In this part, researcher reviewed the relevant theories and research on the entrepreneurial intention of college graduates through literature review, identified the constituent factors of college graduates' entrepreneurial intention, and studied many factors that affect employment intention, including social environment, education program study, and entrepreneurial self-efficacy.

Part 2: To develop the model of the mediating effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates in Shandong province.

Base on the part 1, researcher used the components of college graduates' entrepreneurial intention and the factors that affect entrepreneurial intention to determine the model of the factors influence on the entrepreneurial intention and building the instrument for collecting data.

Part 3: To verify the effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates

On the research, researcher analyzed the questionnaire results through CFA and SEM, and studied the factors that affect the entrepreneurial intention of art college graduates.

This research will be divided into the following sections: (1) population and sampling; (2) Instrument development; (3) Data collection; (4) Data analysis and interpretation.

Population and sample

The population of this research were the graduates from six art colleges in Shandong Province in 2023, and the total number of students was 11,775. The samples were 418 students determined by G* power software at power of test .80 and used stratified random sampling.

The creation of research instruments

The researcher employed a two-part questionnaire. Part 1: Demographic variables (checklist), Part 2: Relevant variables (including SE, EPS, ESE, EI) question responses (five-point rating scale). The quality of the questionnaire was evaluated by content validity and reliability. For content validity, it was checked by 5 experts and analysed using item-objective congruence (IOC). The value of each item was ≥ 0.50. For reliability, analysed by Cronbach's alpha there were between 0.960 to 0.976.

Data Collection

The researcher sent Likert (5-point) rating scale questionnaires to the respondents. This research taked 418 graduates from 6 art colleges in Shandong province as research samples and collected data through online questionnaire distribution. Questionnaires were sent online.

Data analysis

Data for demographic variables were analysed using descriptive statistics, frequencies, percentages, and mean, standard deviation (SD.) and inferential statistical analysed by confirmatory factor analysis (CFA), and structural equation modelling (SEM). Through final quantitative data analysis, the model fit well with empirical data on the indicators as follows: CMIN, df, CMIN/df, CFI, TLI, SRMR and RMSEA.

7. Results

The results on this research were as follows：

1) The basic information of respondents as table 1.

Table 1: The demographic profile of respondents

No.	Characteristic		Frequency	Percentage	Cumulative Percent
1	Gender	Male	225	53.8	53.8
		Female	193	46.2	100.0
	Total		418	100	
2	Family living area	Urban	218	52.2	52.2
		Non-urban	200	47.8	100.0
	Total		418	100	
3	Family engaged in entrepreneurship	Yes	211	50.5	50.5
		No	207	49.5	100.0
	Total		418	100	
4	Entrepreneurial experience	Yes	208	49.8	49.8
		No	210	50.2	100.0
	Total		418	100	

From Table 1, it was summarized that among the 418 respondents, 225 (53.8%) were males and 193 (46.2%) were females. 218 (52.2%) lived in urban areas and 200 (47.8%) lived in non-urban areas. There were 211 (50.5%) families engaged in entrepreneurship, and 207 (49.5%) families did not engage in entrepreneurship. 208 (49.8%) had entrepreneurial experience, while 210 (50.2%) had no entrepreneurial experience.

2) Descriptive statistic from the questionnaires

Table 2: The descriptive of each component

	$\bar{X}$	S.D.	%CV	Skewness		Kurtosis	
				Statistic	S.E.	Statistic	S.E.
SE1	4.047	0.775	19.15%	-1.312	0.119	1.522	0.238
SE2	3.849	0.901	23.41%	-1.064	0.119	0.569	0.238
SE3	3.984	0.833	20.91%	-1.254	0.119	1.533	0.238
SE4	3.929	0.865	22.02%	-0.980	0.119	0.413	0.238
EPS1	3.856	0.952	24.69%	-0.999	0.119	0.713	0.238
EPS2	3.981	0.878	22.05%	-1.153	0.119	0.931	0.238
EPS3	3.689	1.005	27.24%	-0.785	0.119	-0.156	0.238
ESE1	3.964	0.770	19.42%	-0.858	0.119	0.612	0.238
ESE2	3.806	0.853	22.41%	-0.419	0.119	-0.979	0.238

	$\overline{X}$	S.D.	%CV	Skewness		Kurtosis	
				Statistic	S.E.	Statistic	S.E.
ESE3	3.844	0.907	23.60%	-1.189	0.119	0.813	0.238
EI1	4.058	0.829	20.43%	-1.350	0.119	1.447	0.238
EI2	3.787	0.973	25.69%	-0.918	0.119	0.115	0.238
EI3	3.885	0.909	23.39%	-1.266	0.119	1.164	0.238
EI4	3.853	0.936	24.29%	-0.979	0.119	0.287	0.238

From the table 2, the descriptive statistic and data quality were show by the $\overline{X}$ between 3.689-4.058 at high level, the Skewness value between -1.350 to -0.419, Kurtosis value between -0.979 to 1.533 that the data were normality distribution.

Table 3 The intra correlation of indicators of each factor as follows**:**

	SE1	SE2	SE3	SE4	EPS 1	EPS 2	EPS 3	ESE 1	ESE 2	ESE 3	EI 1	EI 2	EI 3	EI 4
SE1	1													
SE2	.74**	1												
SE3	.54**	.67**	1											
SE4	.56**	.71**	.72**	1										
EPS 1	.34**	.38**	.37**	.41**	1									
EPS 2	.39**	.42**	.40**	.40**	.64**	1								
EPS 3	.22**	.33**	.33**	.36**	.60**	.64**	1							
ESE 1	.40**	.42**	.41**	.49**	.40**	.52**	.40**	1						
ESE 2	.27**	.32**	.31**	.33**	.35**	.39**	.36**	.65**	1					
ESE 3	.32**	.32**	.29**	.34**	.38**	.46**	.33**	.69**	.65**	1				

	SE1	SE2	SE3	SE4	EPS 1	EPS 2	EPS 3	ESE 1	ESE 2	ESE 3	EI 1	EI 2	EI 3	EI 4
EI1	.32**	.36**	.41**	.36**	.27**	.45**	.31**	.39**	.33**	.36**	1			
EI2	.23**	.25**	.28**	.30**	.25**	.34**	.28**	.33**	.30**	.36**	.65**	1		
EI3	.30**	.35**	.42**	.37**	.34**	.44**	.32**	.40**	.31**	.35**	.71**	.57**	1	
EI4	.26**	.35**	.40**	.38**	.28**	.37**	.29**	.38**	.31**	.29**	.66**	.59**	.66**	1

From Table 3, it can be seen that the correlation between variables was significant through the correlation analysis of 14 items, more variables showed at moderate correlation between 0.22 to 0.74.

3) The measurements model

Model Measurement standard

CMIN=133.886(p =.000) ; DF=70; GFI =.956
RMSEA=.047 ;CFI=.981;NFI=.961; TLI=.975
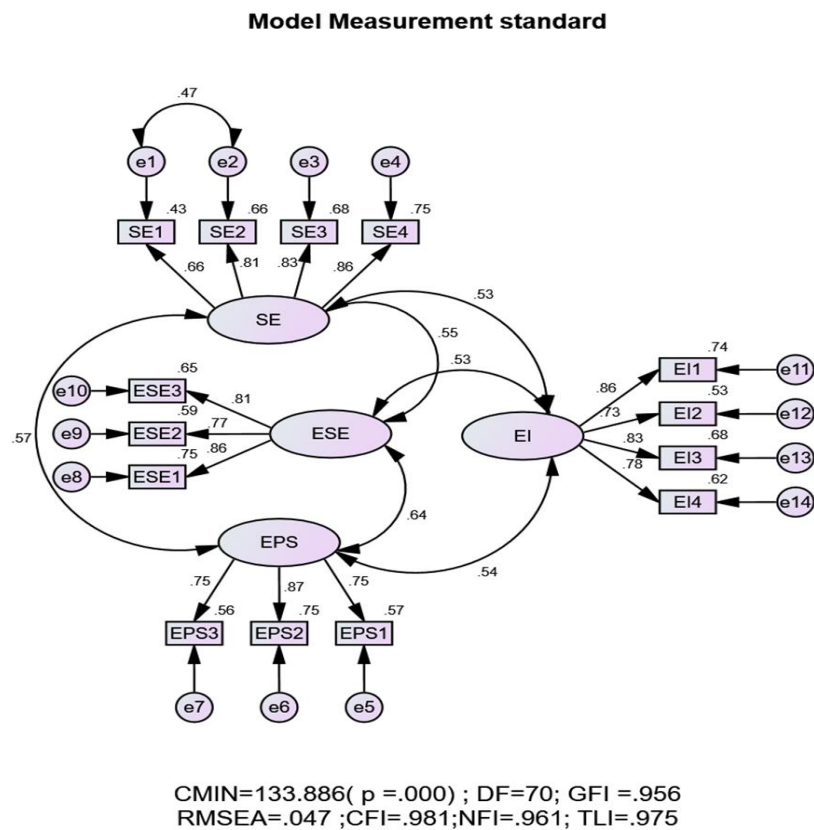
Figure 2 Confirmatory factor model(standardized)

From The figure 2, it shows about the criterions for the measurements model fit well with the empirical data as the table 4.

Table 4: Measurement Model indicators

Measure	Estimate	Threshold	Interpretation
CMIN	133.886	--	--
df	70	--	--
CMIN/df	1.913	>1 Excellent, >3 Acceptable	Excellent
CFI	0.981	>0.95 Excellent	Excellent
TLI	0.975	>0.95 Excellent	Excellent
SRMR	0.033	<0.08 Excellent	Excellent
RMSEA	0.047	<0.06 Excellent	Excellent

Note: Hu and Bentler (1999, "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives") recommend combinations of measures: CFI>0.95 and SRMR<0.08.

From Table 4, the Chi-square (CMIN) of test statistics used to test the difference between the hypothesis model and the empirical data was 133.886 and the df was 70. The relative chi-square (CMIN/df) was 1.913 which less than 5. The comparative fit index (CFI) was 0.981 which more than 0.95. RMSEA was 0.047, less than 0.08. They were excellent. According to the standard of model fit well with the empirical data.

Table 5: The measurement model quality

	CR	AVE	MSV	SE	EPS	ESE	EI
SE	0.871	0.631	0.325	**0.794**			
EPS	0.833	0.626	0.405	0.570***	**0.791**		
ESE	0.854	0.661	0.405	0.549***	0.636***	**0.813**	
EI	0.877	0.641	0.292	0.533***	0.540***	0.527***	**0.800**

Note: (***p<0.001). The value in bold in the upper right corner is the square root of the AVE value. (Fornell & Lacker 1981).

1) Composite Reliability

From Table 5, it was summarized that the composite reliability (CR) of 4 factors ranged from 0.833 to 0.877 which there were over 0.70. It pointed out that all factors were acceptable.

2) Validity

(1) Convergent validity

From Table 5, it was summarized that the average variance extracted (AVE) of the 4 factors ranged from 0.626 to 0.661 which were over 0.5. As a result, it pointed out all factors had convergent validity, and the measure model had quality in terms of content validity.

(2) Discriminant validity

In this research, the Fornell-Larcker criterion was used measure of discriminant validity and the square root of all AVE was greater than the correlation coefficient between all the other latent variables. As a result, it showed that the factors had good discriminant validity.

Structural Equation Models
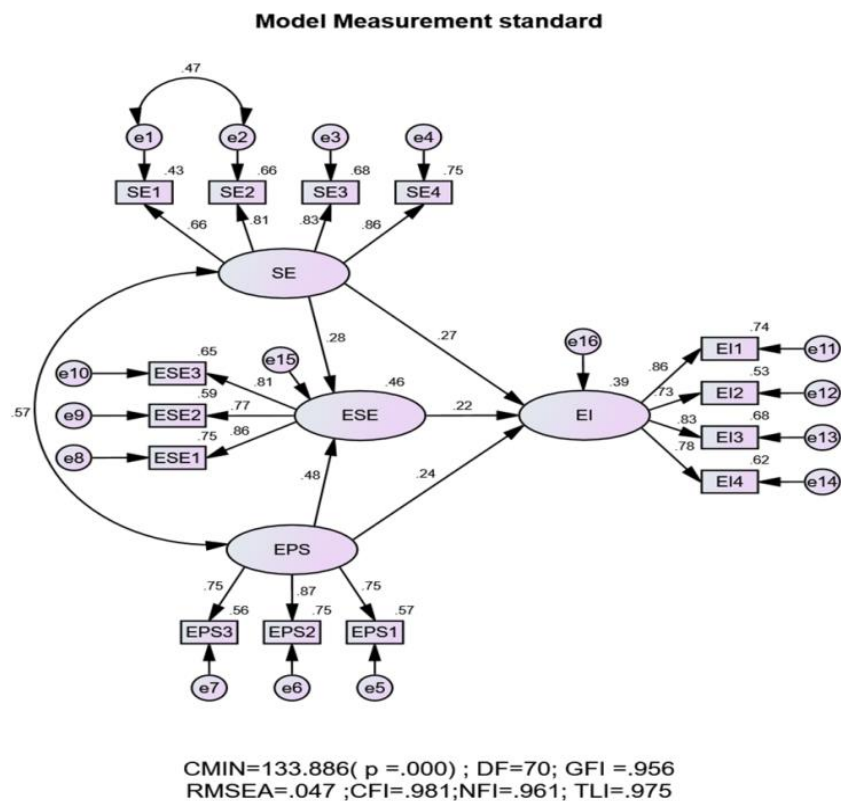
Figure 3. Running results of structural equation model (standardized).

From Figure 3, it showed that the structural equation model with latent variables represented the direct effect of Social Environment (SE) and Educational Program Study (EPS) as exogenous variable and Entrepreneurial Self-Efficacy (ESE) as endogenous variable mediated the effect of the relationship between Social Environment (SE), Educational Program Study (EPS) and Entrepreneurial Intention (EI).

It was summarized that the analysis of structural equation model in standardized on the purpose of hypothesis testing, and effect decomposition.

The fitting index of model operation was shown in the table 6. The fitting index were as follows: CMIN/df=1.913, TLI=0.975, NFI=0.961, GFI=0.956, CFI=0.981, RMSEA=0.047. In summary, the indicators were showed the structural equation model fit on the empirical data at an excellent level.

Table 6 Structural equation model fit evaluation

Measure	Estimate	Threshold	Interpretation
CMIN	133.886	--	--
df	70	--	--
CMIN/df	1.913	1-3 Excellent, >3 Acceptable	Excellent
CFI	0.981	>0.95 Excellent	Excellent
TLI	0.975	>0.95 Excellent	Excellent
SRMR	0.033	<0.08 Excellent	Excellent
RMSEA	0.047	<0.06 Excellent	Excellent

In summary, from the results, the indicators showed the structural equation model fit with the empirical data at an excellent level.

Hypothesis testing

(1) Testing for direct effects hypothesis

Table 7 Hypothesis testing of direct effects.

Direct Effects			Unstandardized	Standardized	S.E.	C.R.	p	Hypothesis
EI	<---	SE	0.378	0.271	0.090	4.182	***	H1
EI	<---	EPS	0.241	0.244	0.072	3.338	***	H2
EI	<---	ESE	0.238	0.223	0.074	3.214	**	H3
ESE	<---	SE	0.361	0.276	0.082	4.398	***	H4
ESE	<---	EPS	0.444	0.479	0.060	7.371	***	H5

**p<0.01, ***p<0.001.

Hypothesis testing for H1: The social environment had a positive direct effect on the graduates' entrepreneurial intention. According to Table 7, it can be found that the path coefficient of the effect of SE on EI in unstandardized and standardized were 0.378 and 0.271

respectively, and was statistically significant (p<0.001), which pointed out that the hypothesis was right.

Hypothesis testing for H2: The educational program study had a positive direct effect on the graduates' entrepreneurial intention. From Table 7, it was summarized that the path coefficient of the effect of EPS on EI in unstandardized and standardized were 0.241 and 0.244 respectively, and was statistically significant (p<0.001), which pointed out that the hypothesis was right.

Hypothesis testing for H3: The entrepreneurial self-efficacy had a positive direct effect on the graduates' entrepreneurial intention. From Table 7, it was summarized that the path coefficient of the effect of ESE on EI in unstandardized and standardized were 0.238 and 0.223 respectively, and was statistically significant (p<0.01), which pointed out that the hypothesis was right.

Hypothesis testing for H4: The social environment had a positive direct effect on the entrepreneurial self-efficacy. From Table 7, it was summarized that the path coefficient of the effect of SE on ESE in unstandardized and standardized were 0.361 and 0.276 respectively, and was statistically significant (p<0.001), which pointed out that the hypothesis was right.

Hypothesis testing for H5: The educational program study had a positive direct effect on the entrepreneurial self-efficacy. From Table 7, it was summarized that the path coefficient of the effect of EPS on ESE in unstandardized and standardized were 0.444 and 0.479 respectively, and was statistically significant (p<0.001), which pointed out that the hypothesis was right.

(2) Testing for indirect effects hypothesis

Table 8 Hypothesis testing of indirect effects

Indirect Effects				Estimate	Lower	Upper	p	Hypothesis
EI	<---	ESE	<--- SE	0.062	0.018	0.139	**	H6
EI	<---	ESE	<--- EPS	0.107	0.041	0.213	**	H7

*p<0.05, **p<0.01

Hypothesis testing for H6: The SE had an indirect effect on EI via ESE.

Hypothesis testing for H7: The EPS had an indirect effect on EI via ESE.

From Table 8, it was summarized that the estimated effect was indirect effects and had statistically significant (p<0.01). It shown that the Entrepreneurial Self-Efficacy (ESE) factor was mediating effect between SE and EPS on EI,

Table 9 Decomposition of effects factors SE on EI

Parameter	Estimate	Lower	Upper	p	Effect proportion
Direct effect	0.271	0.126	0.410	**	81.38%
Indirect effect	0.062	0.018	0.139	**	18.62%
Total effect	0.333	0.186	0.468	**	

**p<0.01

Table 10 Decomposition of effects factors EPS on EI

Parameter	Estimate	Lower	Upper	p	Effect proportion
Direct effect	0.244	0.074	0.419	*	69.52%
Indirect effect	0.107	0.041	0.213	**	30.48%
Total effect	0.351	0.205	0.489	**	

**p<0.01

From Table 9, it was summarized that the decomposing effects of Social Environment (SE) on graduates' Entrepreneurial Intention (EI) of direct effect and indirect effect of 0.271 and 0.062 respectively, and the total effect with 0.333(Standardized total effects). And direct effect and indirect effect accounted for 81.38% and 18.62% of the total effect, with had statistically significant (p<0.01). On the table 10, the effects of Educational Program Study (EPS) on graduates' Entrepreneurial Intention (EI) of direct effect and indirect effect of 0.244 and 0.107 respectively, and the total effect with 0.351. And direct effect and indirect effect accounted for 69.52% and 30.48% of the total effect, with had statistically significant (p<0.05). ESE had an effect on the relationship between SE and EPS on EI.

8. Conclusion

1) The components of entrepreneurial intention factor were entrepreneurial interest, entrepreneurial tendency, entrepreneurial preparation and entrepreneurial target. The components of social environment factor were government policy, cultural and social norms, financial support and market openness. The components of educational program study factor were entrepreneurship course, entrepreneurship practice and teaching technique. The components of entrepreneurial self-efficacy factor were innovation efficacy, opportunity recognition efficacy and relationship coordination efficacy. All the components were at high level.

2) After modification the measurement model fit well to the empirical data (df=70, CMIN=133.886, CMIN/df=1.913, CFI=0.981, RMSEA=0.047). The composite reliability (CR) value between 0.833-0.877, validity of model (AVE) was between 0.626-0.661.

3) The social environment, educational program study and entrepreneurial self-efficacy had direct effect on entrepreneurial intention with significance (p < 0.01). The social environment and educational program study had indirect effect through entrepreneurial self-efficacy of 18.62% and 30.48% respectively.

9. Discussion

Research Objective 1: To explore the components of social environment factor, educational program study factor, entrepreneurial self-efficacy factor and entrepreneurial intention factor.

Based on literature and related research, the research founding was:

1) The components of entrepreneurial intention were entrepreneurial interest, entrepreneurial tendency, entrepreneurial preparation and entrepreneurial target. This finding was partially consistent with the research results of Wang Ruiyu (2016), who used a multivariate measurement method to study entrepreneurial intention, designing and conducting research on the Entrepreneurial Intention Scale measurement items from the perspectives of entrepreneurial goals, entrepreneurial preparation, and entrepreneurial perseverance.

2) The components of social environment were government policy, cultural and social norms, financial support and market openness. This finding was consistent with the research results of Zhao Yuting (2016). She summarized relevant research and believed that the entrepreneurial environment includes seven dimensions: financial support, government policies, entrepreneurial projects, education and training, domestic market, social culture, and scientific research transfer. Her research considers the college environment and social environment as two major aspects of environmental factors.

3) The components of educational program study were entrepreneurship course, entrepreneurship practice and teaching technique. This finding was consistent with the research results of Huang Shanming (2017), who conducted research from the perspective of entrepreneurship education in colleges, believing that entrepreneurship education can be divided into two dimensions: entrepreneurship curriculum and entrepreneurship practice.

4) The components of entrepreneurial self-efficacy were innovation efficacy, opportunity recognition efficacy and relationship coordination efficacy. This finding was consistent with the research results of Liu Mingxiang (2018). He proposed that college students'

entrepreneurial self-efficacy includes three dimensions: innovation efficiency, management efficiency and relationship coordination efficiency.

Research Objective 2: To develop the model of the mediating effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates in Shandong province.

In recent research, it has been found that the factors affecting graduates' entrepreneurial intention of art colleges in Shandong Province were social environment, educational program study and entrepreneurial self-efficacy. To further determine the relationship between social environment, educational program study, entrepreneurial self-efficacy and entrepreneurial intention, a structural equation model of these variables was established according to the existing research results. The results showed that after the measurement model was modified, the model fitted the empirical data well. After inspection, the quality of the measurement model was good.

The above results were consistent with the following references and can be revealed. According to the research by Wang Ruiyu (2016), the researcher used entrepreneurship theory as a starting point, sorted out relevant literature, constructed a research model on the influencing factors of college students' entrepreneurial intention, and explored the main factors affecting college students' entrepreneurial intention. The viewpoint is basically consistent with the model in this research.

Research Objective 3: To verify the effect of entrepreneurial self-efficacy on the relationship between social environment and educational program study on entrepreneurial intention of art college graduates.

In this research was found that: The social environment had a positive direct effect on the graduates' entrepreneurial intention (H1). The educational program study had a positive direct effect on the graduates' entrepreneurial intention (H2). The entrepreneurial self-efficacy had a positive direct effect on the graduates' entrepreneurial intention (H3). The social environment had a positive direct effect on the entrepreneurial self-efficacy (H4). The educational program study had a positive direct effect on the entrepreneurial self-efficacy (H5).

Furthermore, the results suggested that the relationship between social environment, educational program study, entrepreneurial self-efficacy and graduates' entrepreneurial intention was consistent with expectations. social environment, educational program study and entrepreneurial self-efficacy can positively influence graduates' entrepreneurial intention. Social environment and educational program study can positively affect entrepreneurial self-efficacy. The entrepreneurial self-efficacy was consistent with expectations. Social

environment and educational program study had partial indirect effect on graduates' entrepreneurial intention, the entrepreneurial self-efficacy was mediator (H6) (H7).

According to the following references, it was basically consistent with this conclusion. Shi Xiaohui (2018) found that the entrepreneurial environment has a significant positive impact on entrepreneurial self-efficacy, but the impact of education and training on entrepreneurial self-efficacy was not significant. The reason was that students who have received entrepreneurship education in colleges, as well as training in entrepreneurship and business skills provided by government and social intermediaries, will acquire more entrepreneurial knowledge and skills, become more rational and professional, and therefore evaluate and judge their entrepreneurial abilities and conditions rationally, resulting in varying levels of entrepreneurial self-efficacy. Huang Shanming (2017) found that entrepreneurial education has a significant positive effect on entrepreneurial self-efficacy and entrepreneurial intention, and entrepreneurial self-efficacy has a partial mediating effect between entrepreneurial education and entrepreneurial intention. Wang Yan (2018) confirmed that entrepreneurship education in universities has the greatest impact on college students' entrepreneurial intention, followed by individual entrepreneurial quality, social entrepreneurial environment and family entrepreneurial atmosphere. Yao Zuchan (2019) also believed that entrepreneurial self-efficacy can play a mediating role in the relationship between social environment and entrepreneurial intention. Therefore, it is particularly important to increase the promoting effect of external entrepreneurial environment on college students' entrepreneurial self-efficacy, and then strengthen the influence path of self-efficacy on entrepreneurial intention.

10. Recommendation

1) College students need to change their traditional employment concepts, recognize the role and significance of entrepreneurship in employment, clarify that entrepreneurship is an effective method of employment and an effective form of alleviating employment pressure.

2) The government should make full use of public media platforms to publicize entrepreneurship policies and facilitate college students to grasp and understand them. This could provide the support and help of entrepreneurship-related policies, enhance the willingness of college students to start businesses, and increase the occurrence of college students' entrepreneurial behavior.

3) College students should systematically learn entrepreneurial knowledge according to their own characteristics, needs and actual situation. They could choose to participate in entrepreneurship related courses and competitions, cultivate entrepreneurial abilities, and

improve their own qualities. At the same time, college students could participate in campus entrepreneurship clubs to learn entrepreneurship related knowledge in entrepreneurship groups and entrepreneurship practice.

4) College students should change the traditional concept of employment, broaden their vision of employment, expand the scope of employment to more fields, innovate their thinking mode, keep pace with the times, and pay attention to entrepreneurial behavior in thought and action. Compared to other entrepreneurs, college students pay more attention to their entrepreneurial interests and value realization. Therefore, teachers should fully understand the entrepreneurial cognition of college students, clarify their entrepreneurial needs and motivations, and provide targeted entrepreneurial suggestions.

11. Recommendation for further research

Although this research comprehensively analyzed the influencing factors of entrepreneurial intention of art college graduates in Shandong Province, there were still some shortcomings that need to be further improved in future research.

In order to further enhance the persuasiveness of the model towards college students, subsequent research should expand the scope and quantity of sample collection, such as establishing control groups between different genders, majors, and universities, with the aim of discovering the potential differences in entrepreneurial intention among different genders, professional knowledge, and thinking styles of the sample subjects. In addition, the sampling scope of this research needs to be strengthened, and in future studies, further samples could be collected for more detailed regional division and dimensional subdivision.

The "entrepreneurial intention model of art college graduates" established in this research is static, not dynamic. Therefore, the research results have certain limitations, and there is still much to be improved in future research. In view of this, future research could include selecting specific college student participants, tracking and observing their level of social entrepreneurial intention over a period of time, and identifying potential influencing factors of intention through dynamic processes. Finally, follow up on the actual entrepreneurial behavior of the subject. Although the influencing factors of intention level provide a good indicator for future behavior, the actual entrepreneurial level varies in different fields or environments. Therefore, further research could be conducted to explore the relationship between intention and entrepreneurial behavior.

BIbliography

Hu LT& Bentler PM. (1999). **Cutoff criteria for ft indexes in covariance structure analysis: conventional criteria versus new alternatives.** Struct equation modeling: multidisciplinary J. 6(1):1–55.

Fornell, C. & Larcker, D. F. (1981). **Evaluating structural equation models with unobservable variables and measurement error.** Journal of Marketing Research. 18(1), 39-50.

Huang Shanming. (2017). **The impact of entrepreneurship education on college students' entrepreneurial self-efficacy and entrepreneurial intention.** Master's degree thesis, University of Electronic Science and Technology of China, Chengdu.

Liu Kaili. (2021). **Research on the influence of entrepreneurship education on college students' entrepreneurial intention.** Master's degree thesis, Shanxi University of Finance and Economics, Taiyuan.

Liu Mingxiang. (2018). **Research on the Influencing Factors of Entrepreneurial Intention of Female College Students under the Background of Mass Entrepreneurship and Innovation—Taking Henan as An Example.** Master's degree thesis, Zhengzhou University, Zhengzhou.

Shi Xiaohui. (2018). **Research on the relationship between college students' entrepreneurial environment, entrepreneurial self-efficacy and entrepreneurial intention.** Master's degree thesis, Beijing Jiaotong University, Beijing.

Wang Yan. (2018). **A research on the influencing factors of college student's entrepreneurial intention.** Master's degree thesis, Southeast University, Nanjing.

Wang Ruiyu. (2016). **Entrepreneurial intention factors affecting college students in university.** Master's degree thesis, Qilu University of Technology, Jinan.

Yao Zuchan. (2019). **Relationship between perception of policy environment, entrepreneurial self-efficacy, social support and entrepreneurial intention: based on the evidence of applied colleges and universities in Fujian province.** Master's degree thesis, Xiamen University, Xiamen.

Zhao Yuting. (2016). **Research on the influence of entrepreneurial environment on entrepreneurial intention of college students.** Master's degree thesis, Dalian University of Technology, Dalian.

Young Teachers' Professional Development Model in Art Colleges and Universities under Liaoning Province

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ABSTRACT

The objectives of this research were: (1) to explore the components and indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province; and (2) to propose the young teachers' professional development model in Art Colleges and Universities under Liaoning Province.

The research was a mixed methodology, including qualitative and quantitative research. The population of the research was full-time art teachers from 28 Public Art Colleges and Universities under Liaoning Province. There were a total of 3,137 person. The stratified random sampling technique was used to select samples, for totaling 400 samples. The key informants consisted of persons, who had more than 8 years' work experience and highly experienced in academic management, they were obtained by purposive sampling. The instruments used for data collection were semi-structured interview form, and a five-point rating scale questionnaire. The statistics used for data analysis were descriptive statistics and Confirmative Factor Analysis.

The research findings revealed that: (1) there were 5 components and 15 indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province, which consisted of "Career planning", "Practice and growth", "Self development awareness", "Professional skills improvement", and "Advance with times"; and (2) the proposed the young teachers' professional development model in Art Colleges and Universities under Liaoning Province was congruent with the empirical data. The value of

Relative Chi-square (χ2/df) = 1.197, Degree of Freedom (df) = 62, Statistical Significance (p) = 0.137, Goodness of Fit Index (GFI) = 0.976, Tucker-Lewis Index (TLI) = 0.997, Comparative Fit Index (CFI) = 0.998, Root Mean Square Error of Approximation (RMSEA) =0.022, met the criterion. And the key components had the weight between 0.76-0.96 higher than 0.70.

Keywords: Professional Development Model, Young Teachers, Art Colleges and Universities, Liaoning Province

1. Introduction

Since the 1950s, teacher development has gradually been regarded as a core element of education reform, and even as the "core of school and teaching reform, which can maximize the reconstruction and revitalization of a country's educational hope." Therefore, emphasizing teacher development has become an important trend in education reform in developed countries (Pan, 2007). With the advent of the knowledge economy, education plays an increasingly important role and has become an important social engine. The quality of education is directly related to the development of future society, and the embodiment of education quality - talent directly affects the progress of technology and the competition of the country, and the key factor in talent cultivation lies in teachers. The report of the 18th National Congress of the Communist Party of China pointed out that "education is the cornerstone of national rejuvenation and social progress", especially emphasizing the need to strengthen the construction of the teaching staff. In the context of the popularization of higher education, the team of university teachers is constantly growing, and higher requirements have been put forward for the quality of the teaching staff. It can be said that the current demand for university teachers in society is no longer satisfied with simple quantitative or short-term on-the-job training, but it is necessary to establish a development perspective that emphasizes more professional characteristics. As a profession and a specialized profession, the professional development of university teachers depends on their own acquired knowledge and knowledge accumulation. The inherent meaning requires them to achieve lifelong and sustainable learning and improvement, and therefore, there is a greater need for timely knowledge growth and updating mechanisms. It can be seen that the discussion and exploration of the professional development of university teachers not only conforms to the needs of the times, but also has important practical significance. In recent years, with the popularization of art majors in Chinese universities and

the expansion of the scale of major universities, the demand for art teachers has further increased.

The professional development of young teachers determines the upper limit for the future development of universities. Young teachers must be the key to the long-term development and bright future of universities. At present, there are still certain problems in the training process of young teachers in art colleges in Liaoning Province. In addition to low salaries for teachers, related research facilities are also not synchronized, greatly limiting the development of young teachers. In addition, although Liaoning Province is an important geographical location on the map of China, it is not the core geographical location. Insufficient policy efforts have led to an abnormal shortage of resources for the development of young teachers, making them feel responsible in the development process. A feeling of having no place to serve the country. Young teachers usually hope to develop and contribute to the school, but they have enough energy. In addition, there are insufficient channels for young teachers to relearn in Liaoning Province, and the promotion channels for young teachers are also limited. Therefore, young teachers have to leave Liaoning Province or China to find more ways to continue education, but they often face a problem. The problem is that when some young teachers encounter universities with higher salaries during their learning process, they will leave Liaoning Province and choose a better region. With the passage of time, the number of young teachers in art colleges in Liaoning Province continues to decrease, directly leading to the loss of youth strength in the development of universities, and the future of universities is also in jeopardy. This research aims to identify the factors that affect the professional development of young teachers through research on this issue, and propose reasonable professional development suggestions on this basis, so that young teachers can find ways to improve their professional level and avoid the occurrence of the aforementioned problems. As a member of the young teachers in art colleges in Liaoning Province, the problems and professional development faced by the researcher are more representative. The researcher deeply feel the difficulties in the professional development of young teachers, as well as many influencing factors in the development process, which directly lead to difficulties in their own development level. Young teachers in art colleges are a special group in the teaching staff of universities. In addition to undertaking a large amount of education, teaching, research, and social services, their own professional abilities are also closely related to their teaching abilities. Therefore, promoting the professional development of young teachers in art colleges is related to the effectiveness of teacher human resources and the improvement of higher education quality. The specific practical

significance includes: (1) conducting empirical analysis on the impact of social environment, workplace, and personal factors on the professional development of art teachers. (2) Evaluate the overall situation of art teachers' professional development and the influencing factors of sub group structure characteristics. (3) Explore policy measures at the social, school, and individual levels to promote the professional development of art school teachers. The purpose of choosing this topic is to overcome current difficulties, explore the problems encountered in professional development, find solutions to these problems, and provide new ideas for the professional development of young teachers at Liaoning Art College.

This research summarized and analyze the theoretical scope and influencing factors of the professional development of young teachers, especially art teachers, in art universities in Liaoning Province. The specific theoretical significance includes: (1) improving and forming theoretical research on the professional development of teachers in art colleges in Liaoning Province. This dissertation defines the connotation of the professional development of young teachers at Liaoning Academy of Arts, and summarizes the structure, stages, and influencing factors of the professional development of young teachers at Liaoning Academy of Arts. (2) On the basis of theoretical reference and data analysis, a theoretical framework has been constructed to research the components and corresponding indicators of the professional development of young teachers in Liaoning Academy of Arts. (3) A model for the professional development of young teachers in art colleges in Liaoning Province was established, and the theoretical model was validated using empirical analysis results.

2. Research Questions

1. What are the components and indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province?

2. What are the young teachers' professional development model in Art Colleges and Universities under Liaoning Province?

3. Research Objectives

1. To explore the components and indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province.

2. To propose the young teachers' professional development model in Art Colleges and Universities under Liaoning Province.

4. Research hypotheses

Young teachers' professional development model in Art Colleges and Universities under Liaoning Province was congruent with the empirical data.

5. Research Method

5.1 Research Design

Used mixed method, both qualitative and quantitative, first the qualitative to explore the components and indicators of young teachers' professional development through content analysis from 20 literature and research related, included interview 7 key informants. After that quantitative method was employed to collect the empirical data from the respondent through survey questionnaire.

5.2 Population and Sample / Key Informants

(1) This research used the purposive sampling method by selected 7 key informants who had title of Professor and Associate Professor, and more than 8 years' work experience for in-depth interviews. They were educational experts from China, and relatively senior in teaching, academia, and scientific research. And all work in Art Colleges and Universities under Liaoning Province, and they were highly experienced in academic management.

(2) The population in this study, they were full-time art teachers in 28 Public Art Colleges and Universities under Liaoning Province, totalling 3,137 teachers. The sample group obtained by proportional stratified random sampling. The sample size was determined by using G*Power program, totally 400 teachers.

5.3 Research Instruments

Researcher used semi-structured interview form, and a five-point rating scale questionnaire. The quality of questionnaire was assessed by validity and reliability. For content validity, it was checked by five experts and analysed by Item-Objective Congruence (IOC). For the reliability, it was analysed by Cronbach's alpha coefficient.

5.4 Data Analysis

The researcher used descriptive statistics to describe the demographic variables and inferential statistics, for the model of young teachers' professional development. CFA would be employed for finding and estimate the parameter in this situation.

6. Research Results

Step (1) Exploring the components and indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province. It was a qualitative research. The researcher has studied related literature about the concept, principles, and theories, related research on young teachers' professional development about 20 literature as well as in-depth interview from 7 key informants who has title of Professor and Associate Professor, and more than 8 years' work experience. They were educational experts from China, and relatively senior in teaching, academia, and scientific research. Purpose sampling method was employed. Semi-structured interview form and data record form was used. And highly experienced academic management experts 5 person who had more than 10 years' work experience in classifying and screening all the components comprehensively. Data collection was performed by the researcher. The collected data was analyzed by content analysis.

Step (2) Proposing the young teachers' professional development model in Art Colleges and Universities under Liaoning Province. It was a quantitative research. The researcher used the components and indicators of young teachers' professional development from step (1) to prepare an instrument as a questionnaire as to collect data from samples in order to propose the model of young teachers' professional development in Art Colleges and Universities under Liaoning Province. Population consisted of 3137 who were full-time art teachers in Public Art Colleges and Universities under Liaoning Province. They came to 28 Public Art Colleges and Universities under Liaoning Province. The sample size was approximate 400 samples, determined by the G*Power program, with a stratified random sampling technique.

The researcher employed a questionnaire which composed of three parts; Part I: General information of the respondents (8 items). Part II: Questionnaire about Young Teachers' Professional Development in Art Colleges and Universities under Liaoning Province (45 items). Part III: Suggestions and additional comments. Instrument was developed as a questionnaire. The quality of questionnaires were assessed by content validity and reliability. For the content validity, it was checked by five experts and analyzed by Item-Objective Congruence (IOC). The item value was ≥ 0.60. For the reliability, it was analyzed by Cronbach alpha at 0.960. The questionnaires were sent by online, E-mail, and researcher.

The data of demographic variables were analyzed by descriptive statistics, frequency, and percentage. The components and indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province were analyzed by descriptive statistics; Arithmetic Mean ($\bar{x}$), Standard Deviation (S.D.), Skewness (Sk.), Kurtosis (Ku.) and Coefficient of Variation (C.V.).

The inferential statistics used in the analysis included KMO and Bartlett's Test. The components and indicators of young teachers' professional development were analyzed by Confirmatory Factor Analysis (CFA) to reduce irrelevant indicators, with a statistically ready-made program (SPSS) and AMOS program to analyze models. The value of Relative Chi-square (χ2/df) = 1.197, Degree of Freedom (df) = 62, Statistical Significance (p) = 0.137, Goodness of Fit Index (GFI) = 0.976, Tucker-Lewis Index (TLI) = 0.997, Comparative Fit Index (CFI) = 0.998, Root Mean Square Error of Approximation (RMSEA) =0.022, all in line with specified criteria. As shown in Figure 1.
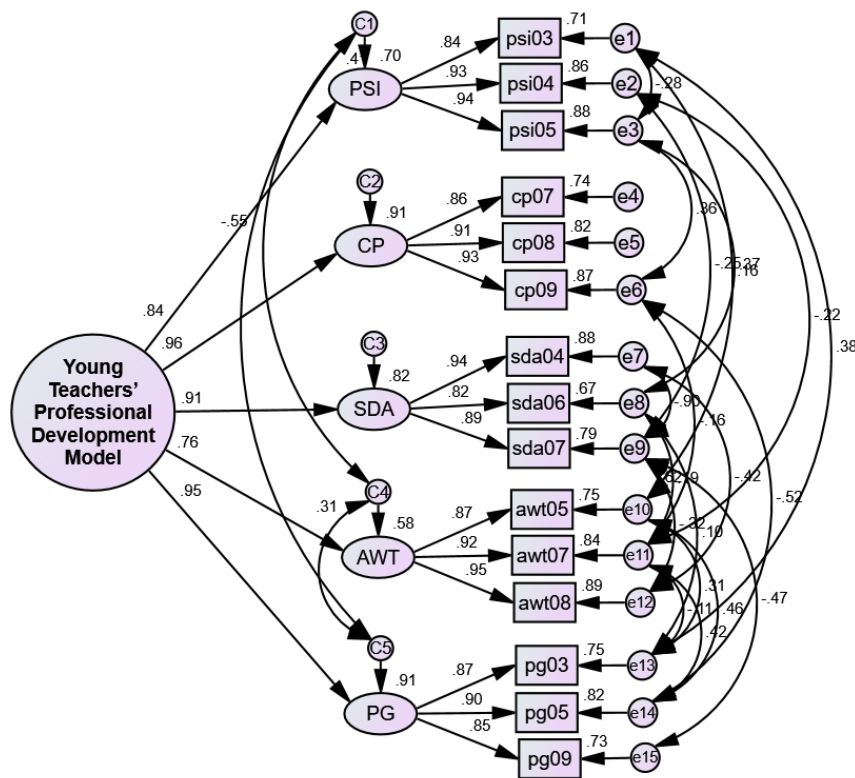
Chi-square =74.240; df =62;
Relative Chi-square =1.197; P =.137; GFI =.976;
AGFI =.954; TLI =.997; CFI =.998; RMSEA =.022;

Figure 1 Show the second order of young teachers' professional development model that was congruent with the empirical data

From the research objectives, major findings were revealed as follows:

1. There were 5 components of young teachers' professional development in Art Colleges and Universities under Liaoning Province which consisted of: (1) Career Planning, (2) Practice and Growth, (3) Self Development Awareness, (4) Professional Skills Improvement, and (5) Advance with Times.

2. There were total 15 indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province. Details were as follows:

Component 1: Career Planning, it was the latent variable that consisted of 3 indicators:

(1) Young teachers can learn to manage, optimize management, and improve efficiency.

(2) Young teachers can exert their personal subjective initiative and actively plan their career development plans.

(3) Young teachers can adjust their mentality in work, learn to face problems with calm and open-minded attitude, and rationally face job burnout.

Component 2: Practice and Growth, it was the latent variable that consisted of 3 indicators:

(1) Young teachers can coordinate and balance various factors in practice, and continuously grow.

(2) Young teachers can have the identity of professional mission.

(3) Young teachers can actively promote the reform of management systems and enhance their enthusiasm for scientific research, innovation, and practice.

Component 3: Self Development Awareness, it was the latent variable that consisted of 3 indicators:

(1) Young teachers can pay attention to the process and experience of one's own life growth, and stimulate one's active learning awareness.

(2) Young teachers can have a positive awareness of seeking truth and carry out self-education.

(3) Young teachers can motivate individuals' internal motivation and self-development needs through appropriate external incentive mechanisms.

Component 4: Professional Skills Improvement, it was the latent variable that consisted of 3 indicators:

(1) Young teachers can achieve self-improvement through innovative driving forces.

(2) Young teachers can focus on the meaning and value of one's own life.

(3) Young teachers can have professional concept, professional emotion, professional orientation and professional self.

Component 5: Advance with Times, it was the latent variable that consisted of 3 indicators:

(1) Young teachers can make systematic planning for future development goals.

(2) Young teachers can further strengthen the professionalism in the new era.

(3) Young teachers can optimize the institutional environment for professional growth and development.

This research result was concluded that young teachers' professional development model in Art Colleges and Universities under Liaoning Province from theory and research related was congruent with the empirical data. It was based on research assumptions.

7. Discussion

7.1 Discussion about major findings of objective 1

There were 5 components and 15 indicators of young teachers' professional development in Art Colleges and Universities under Liaoning Province which consisted of: (1) Career Planning, (2) Practice and Growth, (3) Self Development Awareness, (4) Professional Skills Improvement, and (5) Advance with Times. The major findings were revealed as such because these components and corresponding indicators can enhance the young teachers' professional development in Art Colleges and Universities under Liaoning Province or the whole country. This topic has important practical significance in this research field. Young teachers are the backbone of the future development of universities. Cultivating young people is particularly important. The professional development of young teachers determines the upper limit for the future development of universities. Young teachers must be the key to the long-term development and bright future of universities. This paper can help Liaoning Province or national art universities cultivate young teachers, provide reasonable suggestions and training methods, and its purpose is to solve the problems of the development of various art majors. Provide innovative training programs for universities.

7.2 Discussion about major findings of objective 2

      The young teachers' professional development model in Art Colleges and Universities under Liaoning Province from theory and research related was congruent with the empirical data. The major findings were revealed as such because this model helps to construct a teacher evaluation index system that conforms to the characteristics of the art discipline. Guided by the theory of teacher professional development and the concept of development evaluation, with the goal of promoting teacher professional development, researching the construction process of the evaluation index system for university teachers can systematically classify the level of teacher professional development. The selection of evaluation indicators and the process of system construction provide a reference for constructing a teacher evaluation system that conforms to the characteristics of art disciplines in Liaoning Province. As shown in Figure 2.

Figure 2 Professional development model mind map for young teachers of Art Colleges and Universities under Liaoning Province

8. Recommendations

      Professional development of young teachers in Art Colleges and Universities under Liaoning Province is a complex process, influenced by multiple factors. Research shows that both individual and school environment and social environment play an important

role in the professional development activities of young teachers. In order to promote the professional development of young teachers, we need to consider the influence of school environment and social environment, and formulate corresponding policies and measures according to the development stage of young teachers. At the same time, the creation of external environment can create good conditions for the professional development of young teachers, and young teachers themselves also need to show their autonomy and endogenous motivation, and constantly improve their professional knowledge and ability. Through these efforts, the professional development of young teachers in Art Colleges and Universities under Liaoning Province can be promoted.

Through systematic and sustained research, this dissertation obtained a set of young teachers' professional development model with theoretical and practical significance. It can help young art teachers' professional development, improve their professional fields, and enable them to move forward on the path of professional improvement that is no longer confusing. Provide reasonable suggestions and training methods for cultivating young teachers in art universities in Liaoning Province or across the country, with the aim of solving the development problems of various art majors. Can help universities retain outstanding young teachers. It helps to construct a teacher evaluation index system that conforms to the characteristics of art disciplines, systematically categorizes the professional development level of teachers, and provides a reference for constructing a teacher evaluation system that conforms to the characteristics of art disciplines in Liaoning Province. Indicating the direction for art colleges in Liaoning Province or nationwide, as a talent cultivation goal for various universities, and providing effective guidance plans for cultivating teacher strength, teacher evaluation, and professional improvement, so that each teacher can find the best path for their own development. By formulating a professional development plan based on young art teachers and constructing a model for the professional development of young teachers in art colleges in Liaoning Province, an improvement strategy can be implemented to promote the comprehensive development of teachers. It can be seen that the discussion and exploration of the professional development of university teachers not only conforms to the needs of the times, but also has important practical significance.

The results of this research found that 3 of the 5 components had the highest comprehensive statistical values, namely, "Career Planning", "Practice and Growth" and "Self Development Awareness".

1. "Career Planning", it consists of:

(1) Young teachers can learn to manage, optimize management, and improve efficiency.

(2) Young teachers can exert their personal subjective initiative and actively plan their career development plans.

(3) Young teachers can adjust their mentality in work, learn to face problems with calm and open-minded attitude, and rationally face job burnout.

2. "Practice and Growth", it consists of:

(1) Young teachers can coordinate and balance various factors in practice, and continuously grow.

(2) Young teachers can have the identity of professional mission.

(3) Young teachers can actively promote the reform of management systems and enhance their enthusiasm for scientific research, innovation, and practice.

3. "Self Development Awareness", it consists of:

(1) Young teachers can pay attention to the process and experience of one's own life growth, and stimulate one's active learning awareness.

(2) Young teachers can have a positive awareness of seeking truth and carry out self-education.

(3) Young teachers can motivate individuals' internal motivation and self-development needs through appropriate external incentive mechanisms.

The management direction has been pointed out for the professional development of young teachers in art colleges in Liaoning Province, the professional development goals have been clarified, a talent development and training plan has been formulated, and an evaluation system has been constructed. In the future, young teachers can improve their professional level and growth model based on the above three aspects, constantly supervise and improve themselves. Enable young teachers in higher education in Liaoning Province and even across the country to maximize their own value. It has a broad impact and reference value on the educational development of the country, society, and universities, such as young teachers, leaders, relevant personnel, and students.

In the future research, we will further explore the professional development of young teachers from the following four aspects:

Firstly, thoroughly investigate the specific needs of young teachers. Understanding the needs, challenges and expectations of young teachers in professional development through qualitative research methods, such as in-depth interviews or focus group discussions. This provides a more comprehensive understanding of their mental state,

career goals and stages of development, providing the basis for the development of targeted support measures.

Secondly, explore the relationships of individual characteristics and professional development. Quantitative research methods, such as questionnaires, are used to investigate and analyze the relationship between young teachers' individual characteristics (e. g., gender, age, educational background) and their professional development. This can help identify possible differences and needs of different groups in professional development, providing a basis for personalized support measures.

Thirdly, to investigate the impact of the school environment on the professional development. By observing and investigating school environmental factors, such as educational resources, leadership support, and professional development opportunities, to research the degree and mode of the influence of school environment on the professional development of young teachers. This helps to understand the level of school support for young teachers and the existing space for improvement, and to provide a basis for improving school management and providing targeted support measures.

Finally, compare the situation of different art colleges. Comparative studies among multiple art colleges to explore the educational models, professional development support mechanisms and practical experiences of different colleges. This helps to obtain a wider range of data from a cross-college perspective, provide a basis for experience exchange and reference between colleges, and promote the professional development of young teachers.

Through the in-depth exploration of the above research suggestions, we can further understand the professional development of the young teachers of Liaoning Art College, and provide a strong basis for the formulation of more effective policies and measures. This will help to enhance the professional quality and ability of young teachers and promote their long-term development in the field of art education.

BIbliography

Ada. (2009,218). **Analysis and thinking on the structure and layout of Higher Education in Liaoning Province.** Modern education management major, aged 10,32-35 years old.

Cao, Maojia, J.H. (2021,03). **Analysis of Dynamic System of Professional Development of Young Teachers in Universities**. educational science,pp.89-96.

Chun, Fang. (2020, 05). **Analyze the dilemma and countermeasures of the young college teachers from Maslow's demand theory**. university,pp.140-141.

Clarke,B.R. (1994). **Higher Education System-a transnational research of an academic organization**. Hangzhou: Hangzhou University Press.

Cui, Jingjing. & QingyingJia. (2019,08). **Analysis of the ways to improve the ability of young college teachers in the new Era.** China Adult Education Press, p. 3.91-93.

Ding, Yunhua. & Fu Yong. (2013, 05). **Professional development of young teachers in colleges and universities: the symbiosis of power supply and booster.** Coal Higher Education Press, p. 3.87-90.

Guohua, Z. (2015, 06). **Research on the problems and countermeasures existing in the professional development of young teachers in college education.** Higher Education Major in Jiangsu Province, p. 3.85-87.

He,W. (2017,2 years). **Disadvantages and perfection of university teachers' scientific research performance evaluation.** China University Science and Technology News, p. 3.140-142.

Honglai, Y. (2019, 09). **Innovative research on teaching management in art colleges.** Modern Enterprise, pp.132-133.

Jin, Qi. & Zhang Xin. (2009, 2). **Analysis and thinking on the structure and layout of Higher Education in Liaoning Province.** In Modern Educational Management, p. 3.32-35.

Jie, Feng, G. (2020, 09). **Research on Teacher Leadership Based on Undergraduate Classroom Teaching.** In The Education and Teaching Forum, p. 3.60-61.

Kang, Hanyu. (2018,04). **Research on the Career Development Path of Young Teachers in Universities under the Background of "Internet + Education".** In Modern Educational Science, p. 3.44-47.

Li, Hai. & Xiaochun CAI.(2018,12). **Wisdom from experience to practice: the necessity and realization path of teachers' experience sublimation.** The Contemporary Educational Science, pp.44-47.

Liu, Huibin. (2016,01). **On Career Development motivation of Young Teachers: Systematic Analysis based on Demand Theory.** In The China Higher Education Review, p. 3.131-139.

Mao, Yuan. (2017,01). **Outline of university teacher development: concept, connotation, method, organization and motivation.** The Higher Education Research Journal, p. 3.62-65.

Mingxue, C. (2016, 02). **Improving the teaching ability of young teachers.** Higher Education Major in Jiangsu Province, p. 3.110-112.

Pan, Maoyuan. (2007,01). **Discussion on the development of university teachers.** Chinese University Teaching, p.5-8.

Qing, Lanjiang. (2011,5). **Take the satisfaction of teaching quality and its influencing factors as an example.** Journal of the National College of Education Management, page 3.75 - 78.

Rong. (2015,02). Current situation analysis and countermeasures of college teachers' professional identity. China Adult Education Press, p. 3.107-108.

Surname,G. (2018,11). **The practical dilemma and realization path of teaching and academic ability development of young teachers in colleges and universities.** The Contemporary Educational Science, pp.65-68.

Shijian Chen, New York. (2013, 06). **System construction and implementation way of university teacher development.** Of Educational Studies, p. 100.

Su, Cheng, L.X. (2015, 04). **Research on the development of young teachers at Stanford University.** American Higher Education Exploration Press, p. 3.57-61.

The Ministry of Education of Liaoning Province. (2020,420). **Education development overview in Liaoning Province in 2019.**

Wang, Xiqiang. (2017,02). **Application objective analysis of the professional development ability of young teachers.**, The University and Education Review, p. 3.105-108.

Wu, Qinghua University Press. (2013,04). **From training to development: the transformation of the training of young teachers in colleges and universities.** Research in Higher Engineering Education, p.141-144.

Xiao, Liang. (2017). **Research on the Academic Value Training of Young Teachers in Colleges and Universities.** Chengdu: Southwest Jiaotong University.

Yang, Daoyu. (2013, 06). **A Study on the Dynamic Mechanism of Teacher Professional Development.** Educational Review, pp.45-47.

Ying, Ying. (2021, 01). **Research on the Construction of Young Teachers.** Studies in Educational Development, p. 3.57-63.

Yong, Edge. (2015,6). **Career development community: an ideal area for the career development of young college teachers.** Higher Education Major in Jiangsu Province, p. 3.88-90.

Yuan, Yue,. & Foreign Minister. (2018,12). **Analysis of university teacher professional development based on self-orientation.** China Adult Education Press, p. 3.140-143.

Z. Rain red.(2018, 08). **Study on the dynamic mechanism and path of the professional development of young teachers in colleges and universities.** Master thesis of Heilongjiang Provincial Education Research Institute.27-29.

Zhang, Minjie, W.R. (2019,10). **Exploration of the teaching development path of young teachers in colleges and universities based on SWOT Model.** Journal of Shandong Institute of Agricultural Engineering, p.188-122.

Zhu, Ningbo, C.M. (2017,04). **Text analysis of the young teacher training policy in colleges and universities in China.** educational science,pp. 62-68.

The Indicators of Construction Development for the National First-class on Design Majors in University under Hunan Province

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ABSTRACT

The purpose of this study is to: (1) explore the constituent factors of the construction and development indicators of national first-class majors design in Hunan universities; (2) To constructed indicators and development model of national First-Class on majors design in universities under Hunan Province.

This research was a mixed method study, divided to 3 stages: 1) for explore the components and indicators of national first-class major design in universities, this stage studied from literature review and 8 experts interview by purposive selection. 2) for factors analysis by questionnaires, the population were full-time teachers, from 9 universities in Hunan Province, Total 615. The sample was determined by Krejcie and Morgan (1970), obtained a total of 269 teachers and using stratified sampling techniques. The data collection with a five-scale rating questionnaire; And 3) for Delphi Technique (3 rounds) with 17 experts to validation the model. The statistical for data analysis includes frequency, percentage, mean, standard deviation, exploratory factor analysis, median, inter-quartile rang analysis and content analysis.

The research found that: (1) The development indicators for the national first-class professional construction of major design in universities under Hunan Province were composed of five components when analysis by Exploratory factor analysis (EFA) were F1 construction, F2 construction, F3 construction, F4 construction and F5 construction; (2) The components and indicators for development model of national first-class majors design in universities under Hunan Province after used Delphi technique were consist of 5 components

and given the new name as follows: 1) Hi-performance construction had 5 indicators, 2) Understanding construction had 7 indicators, 3) New normality had 5 indicators, 4) Actualization acceptance had 14 indicators and 5) Non-stop development had 5 indicators, and was called "HUNAN Model".

Keywords*:* Design Majors, First-class Indicators, Hunan Model

1. Introduction

In order to revitalize undergraduate education in an all-round way, improve the ability of talents training in colleges and universities, realize the conformal development of higher education, promote the construction of new engineering, new medical science, new agricultural science and new liberal arts, strengthen first-class undergraduate programs, build first-class majors and train first-class talents. On April 9, 2019, the General Office of the Ministry of Education of China officially issued the Notice on the Implementation of the "Double Thousand Plan" for the Construction of First-class Undergraduate Majors, which plans to build about 10,000 national first-class undergraduate majors and about 10,000 provincial first-class undergraduate majors from 2019 to 2021.

The construction plan of 10,000 national first-class majors, accounting for about 20% of more than 56,000 professional in colleges and universities, 20% of the majors after several years of construction, by 2022, China will have 20% of the majors can reach the world-class level, promote the realization of connotative development of China's higher education, and build a powerful country in higher education.

So, this paper focuses on the construction and development indicators of the national first-class of majors design in Hunan colleges and universities. 1) Conduct research on the construction of indicators such as orientation and construction planning of first-class major design, construction of teaching staff, personnel training and curriculum setting, teaching level and teaching facilities, professional management norms, and first-class training quality, so as to establish a scientific overall framework and theoretical system for the quality index system of construction of first-class majors design in Hunan universities. 2) The theoretical research on the index system of first-class major design in colleges and universities in Hunan can make up for the lack of theoretical basis for the construction and management of first-class major design in colleges and universities, and develop on major design effectiveness and promote the construction of majors design.

2. Research Objectives

1. To explore the components and indicators of national first-class major design in Hunan universities.

2. To constructed components and indicators development model of national First-Class on major design in universities under Hunan Province.

3. Research Methodology

1. Population and Sampling

This study adopts a combination of quantitative and qualitative research methods. On the first step used the interview method from 8 experts by purposive selected. The second step used online questionnaire survey platform "Questionnaire Star", questionnaires were distributed to the college of 9 national first-class professional colleges and universities in Hunan Province. The population were teachers and administrators in university under Hunan province, total 615, the sample determined by Krejcie and Morgan table (1970), total 269 and using stratified random sampling technique from college administrators and full-time teachers. The data correction by a five rating scale questionnaire survey, Questionnaires were sent online and by mail to the respondents. The third step of research used verify with 17 experts by Delphi Technique (3 rounds) to propose the model of national first-class professional construction and development indicators.

2. Research instrument

The questionnaire used a five-point scale. It was represented on a scale from 1 to 5. totaling 79 item, There were content validity of the item-objective congruence (IOC) each item were between 0.60-1.00 by five experts, after tryout on 38 respondents the reliability by Cronbach alpha coefficient evaluated had overall reliability of the questionnaire was 0.965.

3. Data analysis

For the first step and first goal of research. The researchers used content analysis in the in-depth interview and used content analyzed. The second step used arithmetic mean, standard deviation and exploratory factor analysis, and the third step for verified the national first-class professional construction and development model of majors design in universities under Hunan province by Delphi techniques applied with median, inter-quartile deviation.

4. Research framework
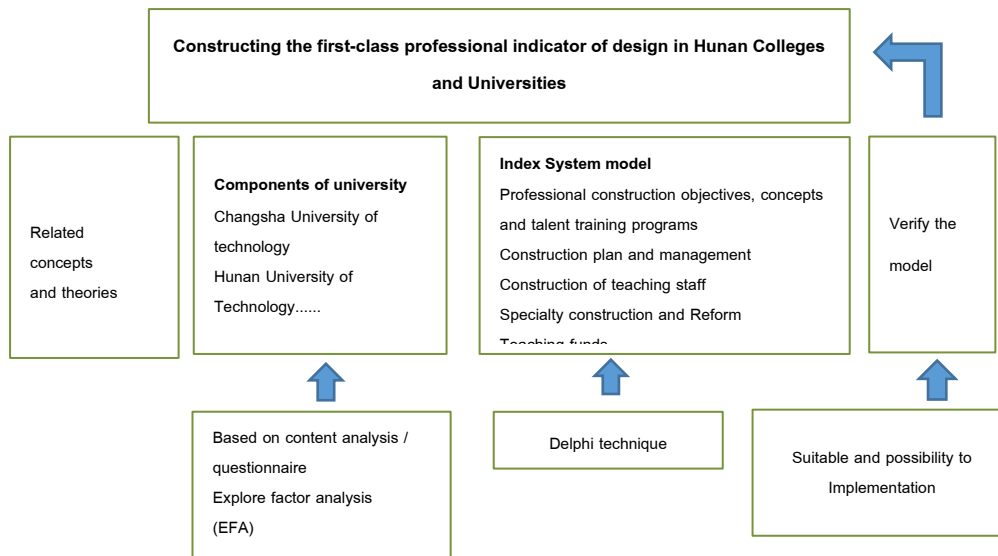
Figure 1 Research frame work

5. Research results

The research result divided to 3 parts as follows;

1). Demographic information

The demographic data of the respondents (n = 269) shows that the gender distribution of the respondents is 56.51% female and 43.49% male, indicating that the gender distribution of the sample is relatively balanced; Age distribution, mainly concentrated in the 30-49 years old, especially 40-49 years old accounted for the highest proportion (35.69%); In terms of education level, master's degree (59.11%) and doctor's degree (20.82%) account for a relatively high proportion, which is in line with the characteristics of university staff; In terms of working experience, the proportion of 5 years or less (40.15%) is relatively high, while the proportion of 15 years or more reaches 33.83%; The sample participants were mainly full-time teachers, accounting for 77.32%, followed by the person in charge of the college (9.29%), which met the data requirements of this survey; In terms of the working universities of the sample, the general university of Hunan Province and the key university of Hunan Province are the main ones, accounting for 82.53% of the sample.

2) Explore the components of the construction and development indicators of national first-class majors design in Hunan universities;

2.1) Base on literature review and interview, there were 79 indicators for national first-class majors design in Hunan universities

2.2) from exploratory factor analysis (EFA)

(1) The results of factor analysis feasibility test of 79 questionnaires showed that KMO value was 0.969, and Bartlett's test reached the significance level ($p<0.001$), indicating that the sample data were suitable for exploratory factor analysis. The specific data results are shown in Table 1.

Table 1: KMO values and Bartlett sphericity test results.

KMO sample adequacy side		0.969
Bartlett's test	Approximate chi-square distribution	35145.894
	Degrees of Freedom	3081
	Salience	0.000

(2) Table 2' Shows the characteristic values, variance percentage and cumulative variance percentage of the components of the national first-class design major construction development index of universities in Hunan Province

Table 2: Total variance interpretation.

Components	Initial eigenvalues			Extract the sum of squares of loads			Rotate the load sum of squares		
	Total	Percent variance	Cumulative %	Total	Percent variance	Cumulative %	Total	Percent variance	Cumulative %
F1	57.940	73.342	73.342	57.940	73.342	73.342	19.126	24.210	24.210
F2	1.888	2.390	75.732	1.888	2.390	75.732	12.433	15.738	39.949
F3	1.554	1.967	77.698	1.554	1.967	77.698	12.198	15.441	55.390
F4	1.269	1.606	79.304	1.269	1.606	79.304	11.091	14.039	69.428

F5	1.011	1.280	80.585	1.011	1.280	80.585	8.813	11.156	80.585

Extraction method: principal component analysis.

(3). After data were analysis by EFA technique about reducing and simplifying data. The criteria for selecting factors can be determined by eigenvalue and cumulative variance contribution rate were found that;

The proportion of the first factor explained variance extracted in this study is 24.21%, which is lower than the 40% required by the common method bias test, indicating that there is no serious data homology error in the questionnaire data. In this study, principal component analysis was used to extract factors, and the maximum variance method was adopted to rotate the extracted factors, taking the eigenvalue greater than 1.0 as the standard to extract the common factors, and extracting 5 factors from 79 items. The specific results are shown in Table2. Among them, item Q1, Q2, Q3 and other components of factor 2, the main stated problems are summarized as the positioning and construction planning of national first-class design majors in universities under Hunan Province, which can be classified as first-class professional construction; Item Q10, Q13, Q25 and other components of factor 3, the main content was the level and ability of first-class professional teaching teachers related aspects, that is, classified as first-class professional teachers teaching level; Q11, Q12, Q14 and Q15, constitute factor 4 which is mainly concerned with the construction and development of first-class professional teaching team, so it can be summarized as teaching team construction; Q30, Q31, Q32 and other questions constitute factor 1, which mainly contains the contents of the training program and system of first-class professional students, and can be classified as the first-class student training system; Q42, Q43, Q44 and other items constitute factor 5, which mainly covers the objective conditions related to the first-class professional teaching infrastructure and can be summarized as first-class teaching infrastructure.

To sum up, the cumulative variance explanation rate after rotation of the above five factors reaches 80.58%, and the common degree of each item was above 0.7, there were five factors and 47 indicators for the construction and development of first-class design majors in universities in Hunan Province and use for develop by Delphi technique on the next step.

6. Delphi results

Using the Delphi technique applied to verify the suitability of components and indicators of the national first-class professional construction and development for majors design in universities under Hunan province. which has 17 experts, who have over 15 years of experience and excellent performance in the construction and management of majors design in college and universities both inside and outside Hunan Province, and have a wide influence in the academic community. There are experts in the field of majors design professional construction, including dean, vice dean, professional leader, professor, associate professor, management personnel, and full-time teachers, on the first of Delphi applied researcher used all the 5 components and 36 indicators from the last step gave to the experts consider for agree or disagree, then were selected only the indicators that have more 80% with agree, the result as shown in Table 3.

Table 3: 17 experts' opinions and conclusions on the components and indicators.

component		Item	% Agree with
High performance	Q1	The first-class major orientation is in line with Hunan's "three high and four new" construction and national economic development, and in line with the development orientation and school-running direction of the transformation of the university's talent training goal.	88.52
	Q4	The goal and graduation requirements of first-class professional personnel training are based on Hunan, in line with the school's school-running orientation and the needs of national and regional economic, social, industrial and enterprise development, to cultivate high-quality composite specialized personnel.	84.79
	Q5	Graduation requirements can support training objectives, and can be decomposed and implemented in the whole process of talent training.	92.66

	Q7	Promote the integration of design education and teaching with 5G, artificial intelligence, media and other information technologies.	100
	Q8	Introducing excellent traditional culture and regional cultural resources into the design education system is a new path for the construction of design specialties.	84.79
understanding	Q13	The person in charge of the specialty has the title of professor and doctoral degree or above, and is familiar with the development trend of the professional field of the discipline.	88.52
	Q27	Teachers have published papers or monographs or approved invention patents in domestic Chinese core journals or CSSCI source journals, SCI, EI, SSCI, CSCD and other indexed journals, and have published more than 10 academic monographs.	89.75
	Q28	Establish a platform and mechanism for teacher development, and the number of teachers going abroad for exchange, study visits, participation in international conferences, and collaborative research shall not be less than 6.	89.75
	Q37	Approved national and provincial first-class undergraduate courses (including online, offline, online and offline mixed, virtual simulation, social practice five categories of gold courses), provincial not less than 2, national not less than 1.	88.52
	Q68	Students have published papers or obtained more than 3 approved invention patents in domestic Chinese core journals or CSSCI source journals, SCI, EI, SSCI, CSCD and other journals.	100
	Q69	Students have participated in discipline competitions and innovation and entrepreneurship activities sponsored by various government	100

		education departments, industry associations and enterprises, and won more than 46 national awards and more than 100 provincial awards.	
	Q71	The employment rate of graduates is more than 93%, the professional counterpart rate is more than 75%, and the contract signing rate is more than 93%.	97.46
	Q12	Internal training of high-level talents and young teachers in the aspects of policies and measures are effective, such as professional title assessment, on-the-job young teachers to study for a doctor, sea (environment) training and further study.	100
	Q14	Give full play to the demonstration effect of professional leaders in team building, teaching and research, industry activities, social services, etc.	100
New normal	Q20	First-class professional teachers have the consciousness of curriculum reform and innovation, are competent in theory, practice and integrated teaching, and achieve a high degree of classroom teaching goals.	98.75
	Q23	Strengthen the construction of teaching and research departments and other basic teaching organizations, and regularly carry out research on teaching reform and school-enterprise cooperation projects.	98.75
	Q24	The team or individual won the title of famous teacher or excellent teacher at or above provincial and ministerial level or won the award of teaching skills competition at or above provincial and ministerial level or was approved as a provincial teaching team.	100
	Q32	Formulate the curriculum standards (syllabus) of the core courses of the major, and effectively	97.21

connect the course content with the professional standards.

	Q34	Embody the first-class professional characteristics in the professional curriculum system and practical teaching, and cultivate students' innovative spirit and practical ability.	98.75
	Q48	Promote school-enterprise cooperation and industry-university cooperation, introduce real projects to promote practical teaching, and combine curriculum teaching with social service projects. For example, serving rural revitalization, non-genetic inheritance, cultural and creative design, etc.	100
	Q50	Build a collaborative education platform for design majors of "government, school, bank and enterprise".	100
	Q51	Strengthen the construction of resources for mass entrepreneurship and innovation education, improve the education model of innovation and entrepreneurship, and cultivate students' innovative spirit and practical ability.	100
Actualization acceptance	Q53	Establish a committee of teaching committee and a committee of professors, set up full-time teaching supervision, guide the whole process of professional construction and teaching, and fulfill the responsibility of quality assurance, supervision and evaluation.	98.47
	Q58	Improve the teaching management system and quality self-monitoring system at the three levels of school, college and department, and the teaching quality management system runs in an orderly manner.	100
	Q59	Leaders, experts, peers and students, as the main	98.75

		body of teaching quality monitoring, jointly monitor and periodically evaluate the level of teaching quality.	
	Q61	We will establish a diversified mechanism for coordinating education between government, industry, universities and research, and optimize the organizational structure and governance model of "joint contribution, co-management and sharing".	100
	Q64	Improve the index system for evaluating the employ ability of college students majoring in design, including educational background, professional ability, personal ability, professional quality and job-hunting ability.	98.75
	Q73	The teaching team actively participates in the research and development of technical projects and services of industrial enterprises, and has achieved good economic and social benefits.	85.21
	Q77	Actively undertake high water discipline competitions or academic conferences to enhance professional reputation and social influence.	98.75
	Q78	Promote foreign exchanges, and organize students to participate in activities such as exchanges, study visits, international conferences, cooperative research, summer camps and other activities of high-level universities at home and abroad.	100
	Q79	Promote Chinese-foreign cooperation programs in running schools (including double degree programs, exchange programs, etc.) to cultivate international application-oriented senior professionals in design.	98.75
No stop development	Q42	Promote the integration of information technology and teaching process, and strengthen the construction of information-based teaching environment and resources.	100

	Q44	Increase the collection construction of professional books and digital resources, with an average of more than 8 books per student and a high circulation rate to realize resource sharing.	98.75
	Q45	Build the "studio system" teaching model for first-class majors in design.	82.17
No stop development	Q46	Build first-class laboratories and training bases, the number of facilities and equipment is commensurate with the scale of the school, the experiment and training rate is 100%, and the average utilization rate of the training base is more than 70%. It has the functions of practical teaching, discipline competition and social service.	98.75
	Q47	Actively promote the construction of national and provincial practice teaching bases (experimental teaching demonstration center, virtual simulation experiment center, engineering practice base, etc.), and add 1 national or provincial center.	100

On the table 3; show the opinion of experts that agree with more than 80% on Delphi (first round) which the experts' opinions had agree with more than 80%, total 36 indicators and disagree on 11 indicators (there were suggestion to combine some of indicator together), the result show that on the table 3.

For the next step of Delphi (second round), researcher using the expert's opinions set to a 5-level rating scale questionnaires and sends its to the experts again for verify and confirm their opinions. Among them, 1 point was given for strongly disagree, 2 points was given for disagree, 3 points were given for neutrality, 4 points were given for agree, and 5 points were given for strongly agree. Analyze expert opinion scores by mean, S.D., median and quartile rank analysis. If the median was >3.41 and IR<1.50, it means that it was the correct or appropriate component and indicator.

The results on this step found that, the average score of each question item among the 17 experts is generally between 4.4 and 4.8 points, and most of them have an average score of second around was 4.7 points; At the same time, the standard deviation of

each item's score is controlled between 0.4 and 0.7, and the trend of each item's score data set is relatively obvious. Based on this step, it could be seen that the attitudes of the 17 experts towards various indicators are relatively consistent, and the experts hold a consensus or strong agreement on most of the questions. In addition, except for the median values of the 17 experts' opinions all the questions were agree or very agree. The median scores of the expert opinions in all questions were greater than 3.41, and the quartile moments of the expert opinions scores in each question were less than 1.5. so, the results on this step had only 36 indicators were suitable as indicators for the construction and development of first-class majors design category, the researcher was forward to the third round again and the result shown in Table 4.

This round of research collected sample data from 17 experts on the perspectives of various indicators for the construction and development of first-class majors design in universities under Hunan province. The analysis results show that: the average score of each indicators of the 17 experts was between 4.6 - 5.0 points, the median score of 17 experts' opinions on each indicators was between 4.8 - 5.0, That show, the median score of expert opinions on all items was greater than 3.5, and the inter-quartile deviation of expert opinion scores on each item was between 0-0.5 with less than 1.5, In summary, a total of 36 indicators had suitable and using as indicators for the construction and development of   first-class majors design category. And there were given the new name of 5 component, The results were shown in Table 4.

Table 4: Statistical Analysis of Expert Opinion Scores (round 3)

Component	Question items	Minimum value	Maximum value	Average	S.D.	Median	Quartile moment
	Q1	4	5	4.53	1.007	5	0.25
	Q2	4	5	4.53	1.007	5	0.25
High performance	Q3	4	5	4.65	0.493	5	0.25
	Q4	5	5	5.00	0	5	0
	Q5	4	5	4.65	0.606	5	0.25
	Q6	5	5	5	0	5	0
	Q7	5	5	5	0	5	0
understsndin	Q8	5	5	5	0	5	0

Component	Question items	Minimum value	Maximum value	Average	S.D.	Median	Quartile moment
g							
	Q9	4	5	4.76	0.562	4.5	0.25
	Q10	4	5	4.65	0.606	4.5	0.25
	Q11	4	5	4.65	0.606	4.5	0.25
	Q12	5	5	5.0	0	5	0
	Q13	4	5	4.78	0.618	4.5	0.25
	Q14	5	5	5.0	0	5	0
New-normal	Q15	5	5	5.0	0	5	0
	Q16	4	5	4.69	0.507	4.5	0.25
	Q17	5	5	5.0	0	5	0
	Q18	5	5	4.76	0	5	0.5
	Q19	5	5	4.76	0	5	0.5
	Q20	5	5	4.76	0	5	0.5
	Q21	4	5	4.75	0.618	4.5	0.25
	Q22	5	5	5	0	5	0
Actualization acceptanc	Q23	5	5	5	0	5	0
	Q24	4	5	4.71	0.470	4.5	0.25
	Q25	5	5	5.0	0	5	0
	Q26	5	5	0	00	5	0
	Q27	5	5	0	0	5	0
	Q28	4	5	4.85	0.493	4.5	0.25
	Q29	4	5	4.71	0.470	4.5	0.25
	Q30	5	5	0	0	5	5
	Q31	4	5	4.71	0.588	4.5	0.25
	Q32	5	5	0	0	5	0
	Q33	5	5	0	0	5	0
No stop development	Q34	4	5	4.76	0.437	4.5	0.25
	Q35	4	5	4.89	0.507	4.5	0.25

Component	Question items	Minimum value	Maximum value	Average	S.D.	Median	Quartile moment
	Q36	4	5	4.71	0.470	4.5	0.25

From table 4, the expert not edit and confirm the answer with median were >4.00 and IR were at <1.50, so can summary as follow;

The Indicators of Construction Development model for the national first-class on majors design in university under Hunan province, there were 5 components consisted of

1) High performance construction and 5 indicators, as follows;

1.1) The first-class major orientation was line with Hunan's "three high and four new" construction and national economic development, and in line with the development orientation and school-running direction of the transformation of the university's talent training goal.

1.2) The goal and graduation requirements of first-class professional personnel training are based on Hunan, in line with the school's school-running orientation and the needs of national and regional economic, social, industrial and enterprise development, to cultivate high-quality composite specialized personnel

1.3) Graduation requirements can support training objectives, and can be decomposed and implemented in the whole process of talent training.

1.4) Promote the integration of design education and teaching with 5G, artificial intelligence, media and other information technologies.

1.5) Introducing excellent traditional culture and regional cultural resources into the design education system is a new path for the construction of design specialties.

2) Understanding construction and 7 indicators as;

2.1) The person in charge of the specialty has the title of professor and doctoral degree or above, and is familiar with the development trend of the professional field of the discipline.

2.2) Teachers have published papers or monographs or approved invention patents in domestic Chinese core journals or CSSCI source journals, SCI, EI, SSCI, CSCD and other indexed journals, and have published more than 10 academic monographs.

2.3) Establish a platform and mechanism for teacher development, and the number of teachers going abroad for exchange, study visits, participation in international conferences, and collaborative research shall not be less than 6.

2.4) Approved national and provincial first-class undergraduate courses (including online, offline, online and offline mixed, virtual simulation, social practice five categories of gold courses), provincial not less than 2, national not less than 1.

2.5) Students have published papers or obtained more than 3 approved invention patents in domestic Chinese core journals or CSSCI source journals, SCI, EI, SSCI, CSCD and other journals.

2.6) Students have participated in discipline competitions and innovation and entrepreneurship activities sponsored by various government education departments, industry associations and enterprises, and won more than 46 national awards and more than 100 provincial awards.

2.7) The employment rate of graduates is more than 93%, the professional counterpart rate is more than 75%, and the contract signing rate is more than 93%.

3) New normal construction and 5 indicators as;

3.1) Internal training of high-level talents and young teachers in the aspects of policies and measures are effective, such as professional title assessment, on-the-job young teachers to study for a doctor, sea (environment) training and further study.

3.2) Give full play to the demonstration effect of professional leaders in team building, teaching and research, industry activities, social services, etc.

3.3) First-class professional teachers have the consciousness of curriculum reform and innovation, are competent in theory, practice and integrated teaching, and achieve a high degree of classroom teaching goals.

3.4) Strengthen the construction of teaching and research departments and other basic teaching organizations, and regularly carry out research on teaching reform and school-enterprise cooperation projects.

3.5) The team or individual won the title of famous teacher or excellent teacher at or above provincial and ministerial level   or won the award of teaching skills competition at or above provincial and ministerial level or was approved as a provincial teaching team.

4) Actualization acceptance construction and 14 indicators as;

4.1) Formulate the curriculum standards (syllabus) of the core courses of the major, and effectively connect the course content with the professional standards.

4.2) Embody the first-class professional characteristics in the professional curriculum system and practical teaching, and cultivate students' innovative spirit and practical ability.

4.3) Promote school-enterprise cooperation and industry-university cooperation, introduce real projects to promote practical teaching, and combine curriculum teaching with social service projects. For example, serving rural revitalization, non-genetic inheritance, cultural and creative design, etc.

4.4) Build a collaborative education platform for design majors of "government, school, bank and enterprise".

4.5) Strengthen the construction of resources for mass entrepreneurship and innovation education, improve the education model of innovation and entrepreneurship, and cultivate students' innovative spirit and practical ability.

4.6) Establish a committee of teaching committee and a committee of professors, set up full-time teaching supervision, guide the whole process of professional construction and teaching, and fulfill the responsibility of quality assurance, supervision and evaluation.

4.7) Improve the teaching management system and quality self-monitoring system at the three levels of school, college and department, and the teaching quality management system runs in an orderly manner.

4.8) Leaders, experts, peers and students, as the main body of teaching quality monitoring, jointly monitor and periodically evaluate the level of teaching quality.

4.9) We will establish a diversified mechanism for coordinating education between government, industry, universities and research, and optimize the organizational structure and governance model of "joint contribution, co-management and sharing".

4.10) Improve the index system for evaluating the employ ability of college students majoring in design, including educational background, professional ability, personal ability, professional quality and job-hunting ability.

4.11) The teaching team actively participates in the research and development of technical projects and services of industrial enterprises, and has achieved good economic and social benefits.

4.12) Actively undertake high water discipline competitions or academic conferences to enhance professional reputation and social influence.

4.13) Promote foreign exchanges, and organize students to participate in activities such as exchanges, study visits, international conferences, cooperative research, summer camps and other activities of high-level universities at home and abroad.

4.14) Promote Chinese-foreign cooperation programs in running schools (including double degree programs, exchange programs, etc.) to cultivate international application-oriented senior professionals in design.

5) Non stop development and 5 indicators as;

5.1) Promote the integration of information technology and teaching process, and strengthen the construction of information-based teaching environment and resources.

5.2) Increase the collection construction of professional books and digital resources, with an average of more than 8 books per student and a high circulation rate to realize resource sharing.

5.3) Build the "studio system" teaching model for first-class majors in design.

5.4) Build first-class laboratories and training bases, the number of facilities and equipment is commensurate with the scale of the school, the experiment and training rate is 100%, and the average utilization rate of the training base is more than 70%. It has the functions of practical teaching, discipline competition and social service.

5.5) Actively promote the construction of national and provincial practice teaching bases (experimental teaching demonstration center, virtual simulation experiment center, engineering practice base, etc.), and add 1 national or provincial center.

7. Conclusion

From the 5 components and 31 indicators; could conclusion to the model as

<div align="center">"HUNAN Model"</div>

H Refer to "High performance" (5 indicators)

U Refer to "Understand" (7 indicators)

N refer to "New - normal" (5 indicators)

A refer to "Actualization acceptance" (14 indicators)

N refer to " Non - stop development" (5 indicators)
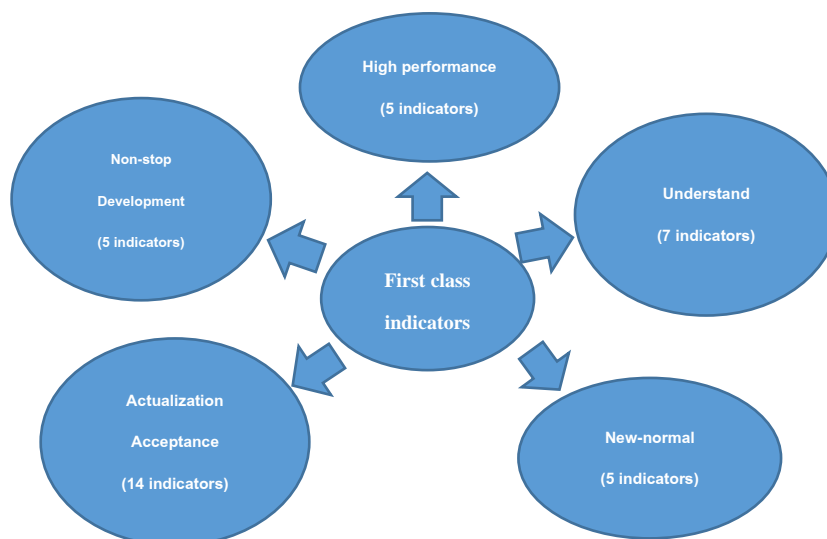
Figure 2 show the model of components and indicators for the national first-class major of design in Hunan colleges and universities

8. Discussion

The model of components and indicators for the national first-class major of design in Hunan colleges and universities, there were consisted with 5 main components namely; 1) high performance construction, the first class university must be team high performance for faster or better than others (Tugba Yanaz, 2022) 2) Understanding construction, they had same and clearly about vision and mission of the organization according share vision on 7s McKinsay model (Waterman,1982), 3) New - normal construction, the organization must be change or transform way of working follows up globalization and innovation (Cheryl Allen 2023) 4) Actualization acceptance construction, Self actualization acceptance could help to growth and successful (Smit,2008) and 5) No stop development. On the world of competition today and the further there fore the universities cannot stop developing (Kay Cheng Soh, 2017).

9.Suggestion

While studying the development indicators of the national first-class major of design in Hunan colleges and universities, we should think about the construction management of first-class major of design. Preferential policies can be formulated from the government level and the university level to guide and promote the continuous improvement and development of the construction of national first-class design majors in colleges and universities in Hunan, cultivate high-quality composite first-class design talents to meet the needs of the development of national and local economic, cultural and creative industries, and promote the formation of a high-level talent training system.

BIbliography

Cheryl, Allen. (2023). **Culture & Transformation.** Atos UK&I, june 2023. Http://www.atos.net

Kay, Cheng. Soh. (2017). **World University Rankings.** Singapore. World scientific Publishing., Co. Pte. Ltd.

Smit, G. (2008). **What is Perceptgenesis Really About.** Germany, walter de Gruyter Gmbh 2023.

Tugba, Yanaz. (2022). **High Performing Team**. Sep 14, 2022. www;//entrepreneur.com.

Waterman, R. (1982). **The seven elements of strategic fit.** Journal of business strategy, 3,68-72.

Zheng, Guiyu. (2014). **Reform and research on the talent training model of progressive school-enterprise cooperative design-taking environmental design major as an example.** Decoration, (10), 120-121.

Innovative Empowering Leadership Guidelines for Administrators'
High Performance in the Universities under Jilin Province

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ABSTRACT

This research aims to explore the establishment of the innovative empowering leadership guidelines for administrators' high performance in the universities under Jilin Province.

This study was a combination of quantitative and qualitative research methods. In the first step, the purposive sampling method was selected 13 key informants, consisted of administrators, presidents and vice professors with more than 10 years' experience in Jilin Province. The second step: sample was 358 administrators and teachers, determined sample size with Krejcie and Morgan's table, and obtained by the stratified random sampling technique. The third step, the 7 key informants included deans and directors from different universities in Jilin Province by purposive sampling method. The instruments used for data collection were in-depth interview form, five-point rating scale questionnaires and focus group discussion form.

Results of research were found that: the innovative empowering leadership guidelines for administrators' high performance in the universities under Jilin Province include: (1) policy and resources support, (2) autonomy, (3) encourage teamwork, (4) participative decision making, (5) coaching, (6) enhancing the meaningfulness of work, (7) open communication, (8) professional development opportunities, (9) perceived organizational support. By implementing innovative and empowering leadership guidelines for administrators, universities were likely to enhance the overall education quality.

Keywords: Innovative Empowering Leadership, Guidelines, Administrators, High Performance, Universities, Jilin Province

1. Introduction

In today's dynamic and ever-evolving educational landscape, the role of university administrators has grown increasingly complex and multifaceted. Within the vibrant academic milieu of Jilin Province, where institutions of higher learning play a pivotal role in shaping the future of the region, the need for innovative and empowering leadership among administrators has never been more critical. As the crucible of knowledge dissemination, innovation, and societal transformation, universities in Jilin Province require effective leadership that not only steers these institutions through challenges but also empowers administrators to excel in their roles. This research embarks on a comprehensive journey to understand the essence of innovative empowering leadership and its tangible effects within the academic context of Jilin Province.

Empowering leadership has garnered significant attention as an influential leadership style that empowers teachersto take initiative, make decisions, and contribute their unique perspectives and talents. Empowering leaders create an environment where individuals feel valued, trusted, and supported, which enhances their motivation and engagement (Kong, D.T., 2020). The concept of empowering leadership has been developed from a series of theories and concepts, and a review by Cheong et al. (2019) reviews this process in detail. The concept of empowering leadership was first introduced by Manz et al. (1980). Specifically, Manz and Sims (1980) developed the concept of self-management from the perspective of social learning theory, on the basis of which Manz (1986) further constructed the theory of self-leadership, and later Manz and Sims (1989 and 1991) developed the concept of "super leadership".Super leaders are generally considered by academics to be the prototype of empowered leadership (Salam et al., 1996; Vecchio et al., 2010). In their 1996 manuscript (published in 2003), Pearce et al. expanded the traditional transactional and transformational leadership types into four leadership types: transformational, transactional, direct, and empowering, thus making "empowering leadership" stand alone as a specific type of leadership that is clearly differentiated from the other leadership types.

In the context of universities, empowering leadership is believed to positively impact faculty innovative behavior by creating an environment that encourages risk-taking, autonomy, and creativity. When teachers perceive their leaders as empowering, they are more likely to

feel empowered themselves and exhibit innovative behaviors that can positively impact the learning experience of their students.

Jilin Province is located in the northeastern part of China, sharing borders with Russia and North Korea, having an area of approximately 187,400 square kilometers (72,300 square miles). Jilin Province is home to several prestigious universities offering a wide range of academic disciplines, including Jilin University, Northeast Normal University, Yanbian Universitiy, and Changchun University of Technology etc. The existing culture within universities in Jilin Province may not be conducive to empowering leadership. A culture that values conformity and compliance over innovation and empowerment can be a significant obstacle to implementing this leadership style. Meanwhile, When administrators are given more autonomy and decision-making power, there can be ambiguity regarding their roles and responsibilities. This lack of clarity can lead to confusion and potentially hinder effective leadership. Therefore, there is am urgent need for the administrators in Jilin Province to improve their empowering leadership.

This article aimed to improve and promote the innovative empowering leadership for administrators' high performance in the universities under Jilin Province. The guidelines are likely to focus on developing innovative and empowering leadership skills among educational administrators. This can lead to improved decision-making, communication, and team management abilities. With empowering leadership guidelines in place, administrators may become more effective in their roles. They can better manage academic programs, administrative processes, and student services, leading to a more efficient university environment. Administrators with high performance are more likely to provide adequate support and resources to faculty and staff members. This can result in improved job satisfaction and motivation among university employees.

2. Research Purposes

To propose the innovative empowering leadership guidelines for administrators' high performance in the universities under Jilin Province.

Benefit of Research

To provide guidance for the innovative empowering leadership for administrators' high performance in the universities under Jilin Province and even in China.

3. Research Process

Step 1: Exploring the variables of empowering leadership of administrators in universities under Jilin Province.

Step 2: Quantitative analysis of the factors affecting empowering leadership of administrators in universities under Jilin Province.

Step 3: Based on the results of the quantitative analysis in the second step, propose the innovative empowering leadership guidelines for administrators' high performance in universities under Jilin Province, and organize focus discussion to arrive at the final guidelines.

Population and Sample

1. 13 key information providers from universities in Jilin Province conducted in-depth interviews as key informants.

2. According to the Krejci and Morgan tables, 358 administrators and teachers were obtained by the stratified random sampling technique.

3. 7 experts, as 3 deans and 4 directors who come from different universities in Jilin Province, confirmed the innovative empowering leadership guidelines.

Instruments

Semi-structured interview form

A five-point rating scale questionnaire

Focus group outline

Data analysis

1. To extract keywords through literature review and in-depth interview by content analysis.

2. Conduct a descriptive analysis of the questionnaire results to find out the current situation and influencing factors of empowering leadership of administrators in universities under Jilin Province. Based on the results of the step, the researchers will propose preliminary guidelines for the innovative empowering leadership of administrators' high performance in universities under Jilin Province.

3. The researchers organized experts to conduct focus discussion and came up with the final guidelines for the innovative empowering leadership of administrators' high performance in universities under Jilin Province.

4. Conclusion and discussion

Section 1 Result of Content Analysis for Variables

From the outline of variables from review of literature and related research, there were 9 main variables, and 55 sub-variables. Then, identified 15 relevant studies by famous scholars for analysis. Define the criteria for selecting variable in the model: select variable with a probability greater than 50% as effective elements, among 55 variables with a probability greater than 50%.

The research had prepared in-depth interview form to conduct interview from 13 key informants obtained by purposive sampling method according to a prescribed access framework, transcribed and classified the data, and then enumerated and classified the variables using Braun & Clarke's topic coding approach (Braun & Clarke, 2006). As 2 presidents, 2 administrators and 9 vice professors in universities.

Based on interviews with key informants, The researcher chose percentage variables that were greater than or equal to 50%, resulting in 45 variables. 9 new variables were obtained by removing the duplicate content with the literature review. Accordingly, the factors influencing empowering leadership in universities under Jilin Province newly found including 9 sub-variables. The literature review and in-depth interviews with key-informants, selected 64 effective variables, repeated comparison.

As for the content validity of the questionnaire, had sent the questionnaire to 5 research experts for verification. Consistency of project objectives (IOC) used to evaluate items in the questionnaire on a score range from +1 to -1. Revisions were made for items with scores below 0.5. On the other hand, scores higher than or equal to 0.5 points were retained. Results A total of 61 questionnaires were found as table 1.

Table 1: Literature review and in-depth interview variable as expert IOC selection

NO.	Variables	NO.-Variables	Variables
1	Government support	31	Consult teachers
2	Policy guidance	32	Share responsibility
3	Management philosophy	33	Build consensus
4	Clear Definition	34	Organize events or platforms
5	Decision-making framework	35	Allocate resources
6	Feedback mechanisms	36	Internal coaching programs
7	Training and development	37	Hire external coaches
8	Accountability and responsibility	38	Training for leaders

NO.	Variables	NO.-Variables	Variables
9	Digital tools	39	Promote interdisciplinary collaboration
10	Knowledge repositories	40	Connect goals with smaller goals
11	Cultural development initiatives	41	Emphasize importance
12	Recognition and reward systems	42	Emphasize the big picture of the job
13	External consultants and experts	43	Align values
14	Mentoring and coaching	44	Ensure teachers' job security
15	Training programs	45	Establish regular channels
16	Feedback platforms	46	Encourage feedback
17	Encourage Self-reward	47	Promote a heard and valued culture
18	Encourage Independent Action	48	Organize events
19	Encourage personal development support	49	Organize town hall meetings or forums
20	Encourage self-development	50	Offer workshops, seminars, and courses
21	Self-directed Decision Making	51	Provide resources
22	Provide collaborative tools	52	Provide information and support
23	Encourage cross-functional collaboration	53	Offer sabbaticals or fellowships
24	Provide team-building opportunities	54	Collaborate with external experts
25	Encourage peer mentorship	55	Provide financial support or allowances
26	Promote a culture of trust	56	Allow flexible scheduling or reduced teaching loads
27	Resolve conflicts promptly	57	Values the goals
28	Set team-based performance metrics	58	Expect help from the university

NO.	Variables	NO.-Variables	Variables
29	Work together	59	Consider best jobs to grow teachers' potential
30	Refer to teachers	60	Help teachers in trouble
31	Consult teachers	61	Give a raise

Section 2: Result of Data Analysis for Research Objective 1.

To study the components of empowering leadership of administrators in universities under Jilin Province.

Part I: Result of Data Analysis on Questionnaire: Demographic Information.

By analyzing the distribution and structure characteristics of 5 universities in Jilin Province, the proportion of males and females was basically the same. In terms of age, 124 people were 35-44 years old, so there were more young and middle-aged faculty in the universities. Among the positions of the respondents, 144 associate professor accounted for 40.6%, with the highest proportion, followed by 113 people with lecturer, accounting for 31.8%. The maximum number of Education Background of Master was 269 people, accounting for 75.8 %, followed by 68 people with Doctor, accounting for 19.2 %. Among the respondents, the maximum number of working experiences of more than 15 years was 185 people, accounting for 52.1 %, followed by 97 people with 10-15 years, accounting for 27.3 %. The maximum number of position of teachers was 298 people, accounting for 83.9 %, followed by 57 people with administrators, accounting for16.1 %.

Part II Result of Data Analysis on Questionnaire: Exploratory Factor Analysis.

Firstly, Kaiser-Meyer-Olkin (KMO) and Bartlett test were conducted.

The results of KMO test in the following figure show that the value of KMO is 0.934, which is greater than 0.6, satisfying the prerequisite requirements for factor analysis, indicating that the data can be used for factor analysis studies. The data passed the Bartlett's test of sphericity ($p<0.05$), indicating that the data in this study is suitable for factor analysis. Meanwhile, the results of Bartlett spherical test show that the P-value of significance is 0.000, which is significant at the level, the null hypothesis is rejected, the correlation is variable, the factor analysis is effective, and the degree was suitable as table 2.

Table 2: The KMO test and the Bartlett's test

KMO	0.934	
Bartlett test	Approx. Chi-Square	16700.995

	df	1830
	p value	0.000

Secondly, Cronbach's **α** coefficient value of the final questionnaire was tested. As can be seen in the table below, the dimensions of the questionnaire in this study and the total Cronbach's Alpha coefficient are all greater than 0.7, which indicates that the questionnaire has a high degree of reliability as a whole.

Table 3: Cronbach's **α** coefficient value

Items	Cronbach's **α**
PRS	0.972
AUT	0.905
ET	0.931
PDM	0.901
COA	0.932
EMW	0.926
OC	0.919
PDO	0.939
POS	0.878
Total	0.949

Thirdly, the questionnaire survey data analysis results: the analysis of empowering leadership of administrators in universities under Jilin Province. The researchers analyzed the arithmetic mean and Standard Deviation, that is, the arithmetic mean, standard deviation Skewness Kurtosis and level of each variable, by comparing the derived arithmetic mean with a criterion based on Beste concept.

Table 4: Descriptive statistics

Items	$(\bar{x})$	S.D.	Sk.	Ku.	Level
PRS1	3.530	1.242	-0.434	-0.824	High
PRS2	3.450	1.344	-0.463	-0.962	Moderate
PRS3	3.540	1.324	-0.508	-0.848	High
PRS4	3.440	1.359	-0.379	-1.088	Moderate
PRS5	3.450	1.269	-0.396	-0.889	Moderate

Items	($\bar{x}$)	S.D.	Sk.	Ku.	Level
PRS6	3.400	1.348	-0.394	-1.063	Moderate
PRS7	3.470	1.289	-0.421	-0.851	Moderate
PRS8	3.560	1.295	-0.476	-0.872	High
PRS9	3.500	1.268	-0.480	-0.782	Moderate
PRS10	3.480	1.256	-0.466	-0.768	Moderate
PRS11	3.500	1.270	-0.394	-0.932	Moderate
PRS12	3.580	1.245	-0.487	-0.735	High
PRS13	3.540	1.304	-0.478	-0.887	High
PRS14	3.530	1.261	-0.439	-0.852	High
PRS15	3.480	1.287	-0.417	-0.893	Moderate
PRS16	3.490	1.305	-0.449	-0.931	Moderate
AUT1	3.480	1.296	-0.444	-0.894	Moderate
AUT2	3.520	1.296	-0.442	-0.954	High
AUT3	3.490	1.227	-0.395	-0.784	Moderate
AUT4	3.450	1.253	-0.410	-0.820	Moderate
AUT5	3.520	1.294	-0.396	-1.004	High
ET1	3.440	1.292	-0.349	-0.949	Moderate
ET2	3.520	1.252	-0.413	-0.858	High
ET2	3.520	1.252	-0.413	-0.858	High
ET3	3.520	1.247	-0.378	-0.919	High
ET4	3.410	1.276	-0.314	-0.930	Moderate
ET5	3.480	1.258	-0.369	-0.957	Moderate
ET6	3.480	1.305	-0.470	-0.877	Moderate
ET7	3.500	1.292	-0.464	-0.860	Moderate
PDM1	3.520	1.343	-0.422	-1.067	High
PDM2	3.480	1.341	-0.408	-1.052	Moderate
PDM3	3.450	1.336	-0.408	-1.004	Moderate
PDM4	3.440	1.329	-0.425	-0.935	Moderate
PDM5	3.520	1.281	-0.400	-0.952	High
COA1	3.530	1.298	-0.524	-0.794	High
COA2	3.470	1.283	-0.342	-0.962	Moderate
COA3	3.520	1.263	-0.490	-0.816	High
COA4	3.590	1.334	-0.470	-1.034	High

Items	($\bar{x}$)	S.D.	Sk.	Ku.	Level
COA5	3.490	1.311	-0.461	-0.888	Moderate
COA6	3.520	1.258	-0.422	-0.903	High
EMW1	3.520	1.322	-0.447	-0.982	High
EMW2	3.590	1.338	-0.524	-0.948	High
EMW3	3.590	1.310	-0.484	-0.943	High
EMW4	3.550	1.327	-0.469	-0.964	High
EMW5	3.550	1.262	-0.489	-0.816	High
OC1	3.460	1.306	-0.384	-0.934	Moderate
OC2	3.520	1.274	-0.406	-0.918	High
OC3	3.450	1.300	-0.359	-0.982	Moderate
OC4	3.440	1.325	-0.327	-1.095	Moderate
OC5	3.570	1.270	-0.535	-0.762	High
PDO1	3.460	1.280	-0.396	-0.871	Moderate
PDO2	3.430	1.318	-0.326	-1.057	Moderate
PDO3	3.520	1.328	-0.446	-0.988	High
PDO4	3.470	1.378	-0.445	-1.042	Moderate
PDO5	3.530	1.291	-0.473	-0.873	High
PDO6	3.420	1.274	-0.347	-0.867	Moderate
PDO7	3.520	1.261	-0.407	-0.886	High
POS1	3.540	1.278	-0.475	-0.859	High
POS2	3.480	1.335	-0.343	-1.122	Moderate
POS3	3.540	1.254	-0.416	-0.923	High
POS4	3.430	1.312	-0.395	-0.973	Moderate
POS5	3.530	1.355	-0.435	-1.078	High

From Table 4: found that overall was at high level. (mean 3.40-3.59) and the S.D value was between 1.227 and 1.378, which indicates that the acceptance of the item was relatively consistent across all researchers. The concentrated in PRS, AUT, ET, PDM, OC, and PDO, which indicates that the respondents had a low level of acceptance of the variables.

Finally, the data in this study were rotated using the maximum variance rotation method (varimax) in order to find out the correspondence between factors and study items. The factor loadings of PDM2, POS2 and POS4 are less than 0.5, so the PDM2, POS2 and POS4

items were removed, and the commonality values of the corresponding values of the remaining items are all greater than 0.4, which indicates that there is a strong correlation between the research item and the factor, and that the factors can extract information effectively. After ensuring that the factor could extract most of the information from the research item, the corresponding relationship between the factor and the research item was analysed (when the absolute value of the factor loading coefficient was greater than 0.4, it indicated that the item had a corresponding relationship with the factor).

Table 5: Components of empowering leadership of administrators in universities under Jilin Province

No.	Components	Nominate	variables	Factor loading
1	Component 1	PRS	16	0.797-0.837
2	Component 2	PDO	7	0.797-0.853
3	Component 3	ET	7	0.789-0.835
4	Component 4	COA	6	0.813-0.847
5	Component 5	EMW	5	0.841-0.870
6	Component 6	OC	5	0.840-0.863
7	Component 7	AUT	5	0.777-0.833
8	Component 8	PDM	4	0.813-0.844
9	Component 9	POS	3	0.837-0.871
		Total	58	

From Table 5: correlation analysis was used to investigate the correlation between PRS, AUT, ET, PDM, COA, EMW, PDO, and POS, and the Pearson correlation coefficient was used to indicate the strength of the correlation. Specific analyses showed that the significance of the nine correlations of PRS, AUT, ET, PDM, COA, EMW, PDO, and POS was less than 0.05, i.e., there was a positive correlation between both PRS, AUT, ET, PDM, COA, EMW, PDO, and POS.

Based on the Exploratory Factor Analysis to extract variables to key component variables by analyzing the most likely conditions (maximum likelihood) to obtain important variables, which appeared to have acquired 9 components and 58 variables of empowering leadership of administrators in universities under Jilin Province.

Section 3: Result of Data Analysis for Research Objective 2. To propose innovative empowering leadership guidelines for administrators' high performance in universities under Jilin Province.

The focus group was chaired by the researcher. "The innovative empowering leadership guidelines for administrators' high performance in universities under Jilin Province" 7 key informants included 3 deans and 4 directors from different Higher Education by purposive sampling for condition of the components of propose innovative empowering leadership guidelines for administrators' high performance in universities under Jilin Province. The researcher sorted out and analyzed the discussions of 7 experts, choosing percentage guidelines that were greater than or equal to 50%, a total of 44 guidelines were sorted out, divided into 9 components:

Components 1: Policy and Resources Support as Government support, Policy guidance, Management philosophy, Decision-making framework, Feedback mechanisms, Training and development, Digital tools, Cultural development initiatives, Recognition and reward systems, External consultants and experts, Mentoring and coaching, Training programs, Feedback Platforms.

Components 2: Autonomy as Encourage Self-reward, Encourage Independent Action, Encourage personal development support, Encourage self-development, Self-directed Decision Making.

Components 3: Encourage Teamwork as provide collaborative tools, Encourage cross-functional collaboration, Resolve conflicts promptly, Set team-based performance metrics.

Components 4: Participative Decision Making as Work together, Build consensus

Components 5: Coaching as organize events or platforms, Allocate resources, Internal coaching programs, Hire external coaches, Training for leaders, Promote interdisciplinary collaboration.

Components 6: Enhancing the Meaningfulness of Work as Align values, Ensure teachers' job security.

Components 7: Open Communication as Establish regular channels, Encourage feedback, Organize events;

Components 8: Professional Development Opportunities as Organize town hall meetings or forums, provide resources, provide information and support, Collaborate with external experts, Provide financial support or allowances, Offer workshops, seminars, and courses, Offer sabbaticals or fellowships, Allow flexible scheduling or reduced teaching loads

Components 9: Perceived Organizational Support as Consider best jobs to grow employees' potential, Give a raise.

5. Recommendation

Recommendation for Policies Formulation

1. To foster innovative and empowering leadership among administrators. A policy direction could involve the establishment of a Leadership Development Program (LDP) for university administrators within Jilin Province. By experiential learning opportunities aimed at enhancing leadership skills, fostering innovation, and promoting collaborative decision-making. The LDP could also facilitate interactions with industry leaders and experts to expose administrators to diverse perspectives.

2. The policy could be formulated to encourage universities to review and revise the organizational structures to incorporate principles of decentralization. To promote open communication and idea sharing could encourage universities to implement digital platforms that facilitate cross-departmental and cross-functional collaboration.

3. The regular implementation of 360-degree feedback assessments, could inform professional development plans and help administrators refine their leadership approaches and administrators could benefit from exposure to external perspectives.

Recommendation for practical application

1. Emphasizes the importance of innovative and empowering leadership in driving high performance in the context of higher education institutions in Jilin Province.

2. Critical issue in the realm of university administration: the need for effective leadership strategies that can adapt to the evolving landscape of higher education. As universities continue to face complex challenges such as technological advancements.

3. The implementation of training and development programs for university administrators. To cultivate the skills and mindset required for innovative and empowering leadership. Furthermore, workshops and seminars could be organized to foster collaboration and idea sharing among administrators, enabling them to learn from each other's experiences and insights, or professional development opportunities to motivate administrators to continue the pursuit of innovative leadership practices.

4. Innovative Empowering Leadership Guidelines for Administrators' High Performance in the Universities offers practical recommendations that can significantly enhance leadership practices within university administrations. By implementing training programs, revising

decision-making processes, promoting open communication, and recognizing exemplary leadership.

Bibliography

Cheong M., Yammarino F. J., Dionne S. D., et al. (2019). **A review of the effectiveness of empowering leadership.** The Leadership Quarterly, 2019, 30(1): 34-58.

Kong, D. T., Chua, R. Y. J., Huang, L. C., & Hsu, C. H. (2020). **Empowering leadership and employee creativity: A dual-mechanism perspective.** Leadership Quarterly, 31(2), 1-15.

Manz, C. C. and Sims, H. P. (1980). **Self-management as a substitute for leadership: A social learning theory perspective.** Academy of Management Review, 5(3) :361-367

Manz, C. C. (1986). **Self-leadership: Toward an expanded theory of self-influence processes in organizations.** Academy of Management Review, 11(3) :585-600.

Manz, C. C. & Sims, H. P. (1987). **Leading workers to lead themselves: The external leadership of self-management work teams.** Administrative Science Quarterly, 32(1): 106 -129

Pearce, C. L. et. al. (2003). **Transactors, transformers and beyond: A multi-method development of a theoretical typology of leadership.** Journal of Management Development, 2003, 22(4): 273-307.

Salam, et. al. (1996). **How to make a team work: Mediating effects of job satisfaction between leadership and team citizenship.** Academy of Management Proceedings, 1996:293-297

Vecchio, R. P. et. al. (2010). **Empowering leadership: An examination of mediating mechanisms within a hierarchical structure.** Leadership Quarterly, 21(3) :530-542.

The Leadership Competency Development for Middle Administrators
of Higher Vocational Colleges under Henan Province

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ABSTRACT

This research aims to propose the managerial guidelines on leadership competencies development for middle administrators of Higher Vocational Colleges under Henan Province. This study adopts a combination of quantitative and qualitative research methods. The purposive sampling method was adopted to select 13 full-time people including two presidents, five middle-level administrators, three staff members, and three senior teachers within five Higher Vocational Colleges under Henan Province as key informants. The instrument for data collection was in-depth interviews, by frequency analysis through content analysis.

Results of research has found that: the managerial guidelines on leadership competencies development for middle administrators of Higher Vocational Colleges under Henan Province, overall had 4 components as: Leadership and Management Competency, Educational and Instructional Competency, Communication and Interpersonal Competency, and Decision-Making and Problem-Solving Competency.

Keywords: Guideline, Leadership Competency Development, Middle Administrators, Henan Province

1. Introduction

The 20th Party Congress pointed out that in order to improve the level of ensuring and improving people's livelihood, strengthen and innovate social governance, "we must give priority to the development of education", and support and regulate social forces to run education. In the new journey of building a modern socialist country in an all-round way, vocational education has a broad future and promising prospects. We will accelerate the

establishment of a modern vocational education system and train more high-quality technical and skilled personnel, skilled craftsmen, and artisans from major countries.

Corresponding to school-based management is the hierarchical management of colleges and universities. There are common interactions among multiple levels and modules in university management (Huang, 2002). Such characteristics of hierarchical management put forward higher requirements on the operation management ability and efficiency of universities.

John P. Kotter (2019), stated that leadership is the process of guiding one or more groups towards a specific direction. Professor Liang Zhong Ming (2013) suggests that leadership can be defined as a combination of various leader behaviors, such as foresight and planning, communication and coordination, sincerity and balance, and more.

The concept of leadership can be viewed from two perspectives, one is leadership and the other is leadership competency. Leadership is a kind of influence, which focuses on the relationship or state established with followers to do the right thing together, which is the goal pursued by leaders. While leadership competency is a tool or skill for leadership, and it takes into account the construction of the leader himself, paying more attention to what the leader should provide for living leadership (Qin et al. 2009).

In the university environment, leadership refers to the personal quality, way of thinking, practical experience and mastery of leadership methods of university leaders. However, there is no consensus on the connotation of middle-level leadership in higher vocational colleges, so it should be defined according to the concept of college leadership and combined with the characteristics of higher vocational colleges. This means that it is necessary to comprehensively consider factors such as the educational goals, school-running philosophy, and vocational education characteristics of higher vocational colleges to understand and define the meaning of middle-level leadership in higher vocational colleges. Tai Sik Lee (2011) proposed that competency is the ability to do a certain job, or the degree of ability. In terms of current managerial abilities, successful administrators are usually cultivated through engaging in management work. McClelland (1973) argued that competency traits can be measured in a reliable way, such as knowledge or skills, attitudes and values, motivation, traits, and self-concept.

After decades of development of higher vocational education in our country, especially the rapid development since enrolment expansion, the internal management form of higher vocational colleges needs to make corresponding adjustments to adapt to this change. Therefore, strengthening the ability building of middle-level leaders in higher vocational

colleges has become the key to improve the management efficiency and the quality of higher vocational education. Wang Fang (2009) stated that middle level administrators in schools have special leadership styles. Middle-level administrators shoulder the sacred mission and responsibility. They are not only the representatives who accept the tasks of the university, but also the decision makers who carry out the work of their departments, or the organizers who lead the faculty and staff.

For this reason, the researcher found that the competency is so important for the middle administrators and there are many competencies that have been reported. The research can provide practical guidance for the promotion of the leadership competency for middle-level administrators of higher vocational colleges under Henan Province, and provide support for them to play a better role in the leadership post. These guidelines can be used as an important reference to measure the leadership level of middle-level administrators under Henan higher vocational colleges. Through the study of leadership, it can strengthen the leadership of Party organizations in higher vocational colleges and provide important guarantee for the high-quality reform and development of Higher Vocational Colleges under Henan Province

2. Research Purposes

To propose managerial guidelines on leadership competencies development for middle administrators of higher vocational colleges under Henan province.

3. Benefit of Research

Provided guidance for the leadership competencies development for middle administrators of higher vocational colleges under Henan province and even in China.

4. Research Process

Step 1: Explore the current situation and composition of leadership competencies development for middle administrators of higher vocational colleges under Henan province. Determining the variables through in-depth interviews and literature research.

Step 2: Quantitative analysis of factors of leadership competencies development for middle administrators of higher vocational colleges under Henan province.

Step 3: Based on the results of the quantitative analysis in the second step, propose managerial guidelines on leadership competencies development for middle administrators of

higher vocational colleges under Henan province and organize experts to do Focus Group discussion to arrive at the final guidelines.

5. Population and Sample

1. 13 key information providers from 5 vocational colleges under Henan Province conducted in-depth interviews as key informants.

2. According to the Krejci and Morgan tables, 306 faculty members were elected with a stratified sampling technique from 5 universities, including presidents, middle administrators, staff members and senior teachers.

3. 9 experts confirm the managerial guidelines on leadership competencies development for middle administrators of Higher Vocational Colleges under Henan Province

6. Instruments

1. Literature review and document checklist form and In-depth interviews form.

2. IOC; Try out; Five-level rating scale questionnaire.

3. Focus Group Discussion form.

7. Data analysis

1. Content analysis was performed on the data from in depth-interviews with frequencies.

2. Conduct a descriptive analysis of the questionnaire results to find out the components of leadership competencies for middle administrators of Higher Vocational Colleges under Henan Province.

3. The focus group was moderated by the researcher on, discussion was about "managerial guidelines on leadership competencies development for middle administrators of Higher Vocational Colleges under Henan Province".

8. Conclusion and discussion

1. Variable analysis of literature review and key informants

Through a comprehensive analysis of both the literature review and in-depth interviews with key informants, a rigorous process of repeated comparison led to the selection of 68 impactful variables as shown in the Table 1 below:

Table 1: Literature review and in-depth interview variable statistics

No.	Variables
1	Government-issued Mid-level Administrators Management Policies
2	Government-issued Talent Incentive Policies
3	Government Dedicated Funds
4	Talent Selection and Appointment Policies
5	Comprehensive System for the Development of Qualities
6	Recruitment Orientation
7	Hierarchical Management Policies
8	College Diploma
9	Develop Annual Departmental Objectives
10	Formulate Strategic Planning
11	Manage Change and Innovation Projects
12	Cultivate Team Cohesion and Collaborative Atmosphere
13	Create Inclusive and Diverse College Environment
14	Complete Tasks and Objectives on Schedule
15	Conduct Vocational and Skills Training
16	Motivate Faculty Work
17	Collect Feedback to improve approaches
18	Provide Instructional Guidance
19	School Teaching Improvement and Innovation
20	Learn and Enhance One's Own Knowledge and Abilities
21	Guide Teams to Achieve Transformation Goals
22	Cultivate a Highly Cohesive and Collaborative Team
23	Utilize Educational Technology and Multimedia Resources
24	Engage In Curriculum Development and Innovation
25	Achieve Successful Experiences
26	Development in Curriculum, Teaching Innovation and Faculty Development
27	Rich Abilities in Curriculum Design
28	Communicate in a Clear and Concise Manner

No.	Variables
29	Listen to Team Members' Suggestions and Opinions
30	Explain in a Concise and Clear Manner
31	Take Effective Measures Dealing with Conflicts or Potential Communication Barriers
32	Employ Appropriate Methods Handling Conflicts or Tense Situations
33	Encouraging Faculty and Staff to Provide Feedback
34	Maintaining Effective Communication and Collaboration with Superiors, Peers, and Subordinates
35	Maintaining Cooperation and Coordination Among Different Departments
36	Further Support and Training
37	Make Wise Decisions Quickly
38	Weigh Different Options and Risks
39	Take Decisive Actions
40	Identify and Analyze the Root Causes of Problems
41	Formulate Effective Solutions and Implement Them
42	Identify and Assess Potential Risks
43	Encourage Faculty and Team Members to Participate
44	Collaborating with Other Departments or Stakeholders
45	Adjust Decisions
46	Make contributions to college development and operation
47	Roles and Responsibilities
48	Individuals' Expertise and Capabilities
49	Work Objectives and Performance Indicators
50	Training Opportunities
51	Positive Feedback and Suggestions
52	Creativity
53	Changes
54	Positive Work Environment
55	Communication and Feedback
56	Professional Development

No.	Variables
57	Leadership Development Training
58	Project Management and Execution Training
59	Individual Development Plans
60	Mentorship System
61	Cross-Departmental Collaboration
62	Challenging Projects
63	Continuous Learning and Reflection
64	Academic Exchanges and Professional Training Activities
65	Communication, Emotional Intelligence, And Interpersonal Competency
66	Cross-Cultural Leadership
67	Leadership Ethics and Moral Values
68	Continuous Feedback Mechanism

2. Result of Data Analysis of the detailed questionnaire

For the evaluation process, a 5-points rating scale questionnaire was employed. This scale allowed for a nuanced evaluation and includes key metrics as mean, and Standard Deviation. The specifics of this assessment as detailed below:

Table 2: Result of Data Analysis on Questionnaire: Descriptive statistics (n = 38)

Descriptive statistics

Items	Mean	S.D.	Sk.	Ku.	Level
ARR1	3.64	1.06183	-0.249	-0.84	High
ARR2	3.49	1.04096	-0.088	-0.826	High
ARR3	3.26	1.06676	0.197	-1.004	Moderate
ARR4	3.12	1.03785	0.269	-0.724	Moderate
ARR5	3.55	0.99085	-0.062	-0.777	High
ARR6	3.67	1.01298	-0.308	-0.757	High
ARR7	3.57	1.00616	-0.12	-0.822	High
ARR8	3.56	0.99724	-0.093	-0.795	High
ARR9	3.63	1.00001	-0.244	-0.746	High

Descriptive statistics

Items	Mean	S.D.	Sk.	Ku.	Level
ARR10	3.20	0.89188	0.219	-0.385	Moderate
ARR11	3.21	0.89869	0.209	-0.42	Moderate
ARR12	3.24	0.92528	0.211	-0.513	Moderate
ARR13	3.34	1.0407	-0.288	-0.964	Moderate
ARR14	3.20	0.93144	0.037	-0.701	Moderate
ARR15	3.20	0.90647	-0.16	-0.951	Moderate
ARR16	3.18	0.91684	0.059	-0.195	Moderate
ARR17	3.16	0.94637	-0.065	-0.104	Moderate
ARR18	3.25	0.93057	0.209	-0.534	Moderate
ARR19	3.22	0.89706	0.171	-0.45	Moderate
ARR20	4.48	0.68812	-1.096	0.398	High
ARR21	4.49	0.65404	-0.99	0.164	High
ARR22	4.52	0.64856	-1.114	0.414	Highest
ARR23	4.49	0.70704	-1.254	1.302	High
ARR24	4.49	0.69305	-1.089	0.111	High
ARR25	4.46	0.68719	-1.078	0.616	High
ARR26	4.41	0.71544	-0.903	-0.101	High
ARR27	4.45	0.73276	-1.188	0.786	High
ARR28	4.44	0.79272	-1.815	4.36	High
ARR29	2.59	1.00776	0.861	0.119	Moderate
ARR30	2.58	1.00864	0.673	-0.094	Moderate
ARR31	2.64	1.02137	0.554	-0.25	Moderate
ARR32	2.49	1.08716	0.726	-0.118	Low
ARR33	2.72	1.0448	0.673	-0.26	Moderate
ARR34	2.63	1.0449	0.499	-0.422	High
ARR35	2.68	1.08982	0.625	-0.35	High
ARR36	2.47	1.07175	0.84	0.041	Low
ARR37	2.49	0.97593	0.702	0.084	Low

Descriptive statistics

Items	Mean	S.D.	Sk.	Ku.	Level
ARR38	2.65	1.01621	0.709	-0.051	High

The research data underwent a KMO test and yielded a score of 0.907 as shown in Table 3. In the work, Kaiser and Rice employed the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) to assess the data's appropriateness for utilizing factor analysis techniques. When conducting factor analysis for testing validity, it was crucial to satisfy the prerequisite of strong item correlations.

Table 3: KMO and Bartlett Test (Researcher)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	13459.493
	df	703
	Sig.	.000

Table 4: Variance Interpretation Rate (Researcher)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.08	29.159	29.159	11.081	29.159	29.159	7.426	19.543	19.543
2	6.98	18.375	47.534	6.983	18.375	47.534	7.149	18.812	38.355
3	5.64	14.847	62.381	5.642	14.847	62.381	6.963	18.323	56.679
4	4.73	12.462	74.843	4.735	12.462	74.843	6.902	18.164	74.843

As Table 4, the factor analysis resulted in the extraction of four components, each of which exhibited eigenvalues greater than 1. These components accounted for variance interpretation rates of 19.543%, 18.812%, 18.323%, and 18.164%, respectively, following

rotation. The cumulative variance interpretation rate after rotation summed up to 74.843%.

Table 5: Factor loading (Rotated) (Researcher)

Items	Factor Loading (Rotated)			
	Factor Loading			
	Factor 1	Factor 2	Factor 3	Factor 4
ARR1		0.818		
ARR2		0.880		
ARR3		0.850		
ARR4		0.788		
ARR5		0.902		
ARR6		0.879		
ARR7		0.903		
ARR8		0.921		
ARR9		0.901		
ARR10	0.854			
ARR11	0.847			
ARR12	0.819			
ARR13	0.781			
ARR14	0.829			
ARR15	0.749			
ARR16	0.890			
ARR17	0.869			
ARR18	0.868			
ARR19	0.892			
ARR20			0.882	
ARR21			0.917	
ARR22			0.912	
ARR23			0.914	
ARR24			0.923	
ARR25			0.876	
ARR26			0.864	
ARR27			0.791	
ARR28			0.787	

Factor Loading (Rotated)

Items	Factor Loading			
	Factor 1	Factor 2	Factor 3	Factor 4
ARR29				0.713
ARR30				0.815
ARR31				0.889
ARR32				0.824
ARR33				0.859
ARR34				0.783
ARR35				0.778
ARR36				0.879
ARR37				0.807
ARR38				0.818

Note: The absolute value of loading was greater than 0.4.

Table 5 presented the extracted information regarding the factors related to the research items and their corresponding relationships. From the table above, evident that the standard loading coefficient values for all research items exceed 0.4. This signifies a robust correlation between the research items and the factors, indicating that the factors effectively capture the information.

Component 1 was described by 9 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.788-0.921. and named it "**Leadership and Management Competency**".

Component 2 was described by 10 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.749-0.892. and named it "**Educational and Instructional Competency**".

Component 3 was described by 9 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.787-0.923. and named it "**Communication and Interpersonal Competency**".

Component 4 was described by 10 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.713-0.889. and named it "**Decision-Making and Problem-Solving Competency**".

By employing a combination of qualitative research, quantitative research, and factor analysis techniques, the researcher successfully identified and delineated the

constituent components of leadership competencies relevant to middle administrators within higher vocational colleges situated in Henan Province. The process of extracting these components was accomplished through Exploratory Factor Analysis. A concise summary of these identified components can be visualized in Figure 1.
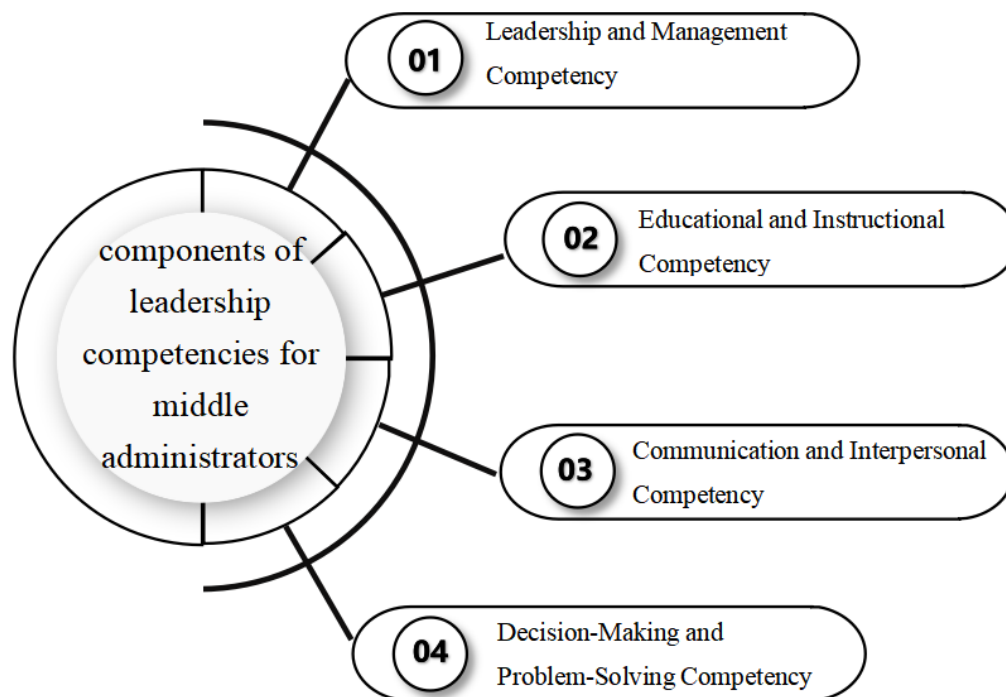
Figure 1   Components of leadership competencies for middle administrators of Higher Vocational Colleges under Henan Province

Component 1 "**Leadership and Management Competency**" consisted of 9 variables: (1) Competency of developing annual departmental objectives. (2) Competency of formulating strategic planning. (3) Competency of managing change and innovation projects. (4) Competency of cultivating team cohesion and collaborative atmosphere. (5) Competency of creating inclusive and diverse college environment. (6) Competency of completing tasks and objectives on schedule. (7) Competency of conducting vocational and skills training. (8) Competency of motivating faculty work. (9) Competency of collecting feedback to improve approaches.

Component 2 "**Educational and Instructional Competency**" consisted of 10 variables: (1) Provide instructional guidance. (2) School teaching improvement and innovation. (3) Learn and enhance one's own knowledge and abilities. (4) Guide teams to achieve transformation goals. (5) Cultivate a highly cohesive and collaborative team. (6) Utilize educational technology and multimedia resources. (7) Engage in curriculum development and

innovation. (8) Achieve successful experiences. (9) Development in curriculum, teaching innovation and faculty development. (10) Rich abilities in curriculum design.

Component 3 "**Communication and Interpersonal Competency**" consisted of 9 variables: (1) Communicate in a clear and concise manner. (2) Listen to team members' suggestions and opinions. (3) Explain in a concise and clear manner. (4) Take effective measures dealing with conflicts or potential communication barriers. (5) Employ appropriate methods handling conflicts or tense situations. (6) Encouraging faculty and staff to provide feedback. (7) Maintaining effective communication and collaboration with superiors, peers, and subordinates. (8) Maintaining cooperation and coordination among different departments. (9) Further support and training.

Component 4 "**Decision-Making and Problem-Solving Competency**" consisted of 10 variables: (1) Make wise decisions quickly. (2) Weigh different options and risks. (3) Take decisive actions. (4) Identify and analyze the root causes of problems. (5) Formulate effective solutions and implement them. (6) Identify and assess potential risks. (7) Encourage faculty and team members to participate. (8) Collaborating with other departments or stakeholders. (9) Adjust decisions. (10) Make contributions to college development and operation.

3. Focus Group Discussion

A total of nine experts actively participated in the Focus Group Discussion, which was structured around four distinct components. These components encompassed Leadership and Management Competency, Educational and Instructional Competency, Communication and Interpersonal Competency, and Decision-Making and Problem-Solving Competency. This finding was consistent with Liang Zhongming, 2013. Within these components, a total of 22 guidelines were collaboratively generated. These guidelines were distributed as follows:

- Leadership and Management Competency: 5 guidelines

- Educational and Instructional Competency: 8 guidelines

- Communication and Interpersonal Competency: 6 guidelines

- Decision-Making and Problem-Solving Competency: 3 guidelines

Component 1. There were 5 managerial guidelines which were1: 1) Project Management and Execution Training; 2) Developing cross-cultural leadership competencies; 3) Leadership development training for middle administrators; 4) Establishing precise delineations of roles and responsibilities for middle administrator; 5) Setting clear work objectives and performance for middle administrators.

Component 2. There were 8 managerial guidelines which were1: 1) Developing

effective professional development programs for middle administrators; 2) Fostering a culture of continuous learning and reflection among middle administrators; 3) Developing Individual Development Plans (IDPs) for middle administrators; 4) Establishing an effective mentorship system for middle administrators; 5) Promoting leadership ethics and moral values among middle administrators; 6) Cultivating creativity among middle administrators; 7) Developing effective training opportunities for middle administrators; 8) Fostering the expertise and capabilities of middle administrators.

Component 3. There were 6 managerial guidelines which were: 1) Developing communication, emotional intelligence, and interpersonal competency skills among middle administrators; 2) Fostering cross-departmental collaboration ability among middle administrators; 3) Fostering the ability to provide positive feedback and valuable suggestions; 4) Developing effective communication and feedback abilities; 5) Facilitating academic exchanges and professional training activities; 6) Fostering a positive work environment for middle administrators.

Component 4. There were 3 managerial guidelines which were: 1) Developing challenging projects for middle administrators; 2) Establishing a continuous feedback mechanism for middle administrators; 3) Fostering adaptability in middle administrators. This finding was consistent with Zhang Tong. (2023). Exploration of innovative development.

9. Recommendation

1. Recommendations for Policies Formulation

The diversity of policies for the leadership competency development for middle-administrators of vocational colleges under Henan Province reflects the needs and characteristics of different colleges and regions. However, this diversity in policies can lead to insufficient policy coherence, and therefore, there is a need for better coordination of the implementation of different policies to ensure the comprehensive development of middle-level administrators' leadership. In addition, the implementation of policies should be accompanied by effective evaluation and supervision mechanisms to ensure that the policies achieve the expected outcomes and to make timely adjustments when necessary.

2. Recommendations for Practical Application

By implementing these detailed recommendations, higher vocational colleges under Henan Province can ensure that leadership competency development plans for middle-level administrators are comprehensive, sustainable, and adaptable to the evolving educational landscape. This will help improve management efficiency, enhance educational

quality, and contribute to the overall development of the institution.

3. Recommendations for Further Research

There are still numerous aspects that have not been exhaustively explored within this paper, particularly in relation to the fundamental constituents of leadership competencies. The primary areas for prospective research encompass the following:

1. Longitudinal Implementation Studies.

2. Case Studies.

3. Stakeholder Perspectives.

4. Comparative Studies.

5. Crisis Leadership.

6. Cultural Context.

7. Advanced Data Analysis.

8. Evaluation Framework.

9. Ethical Leadership.

10. Student-Centered Leadership.

These future research directions can help build upon the predictive theory and contribute to a more comprehensive understanding of leadership competency development of higher vocational colleges, with a focus on practical and real-world applicability.

BIbliography

Huang Wei (2002). **School-based management: Ideas and models.** Theory and Practice of Education, 2002(1), 28-32.

McClelland, D. C. (1973). **Testing for Competence Rather than for Intelligence.** American Psychologist, 28(1), 1-14.

Liang Zhongming (2013). **Leadership General Theory: Theory and Practice.** (2nd ed.), Beijing: Peking University Press.

Qin Zhen, & Zhang Lingling. (2009). **A Comprehensive Study on Leadership Competencies.** Leadership Science, (2), 12.

Tian Huwei. (2008). **Quality perspectives and influencing factors in current undergraduate education in China: An analysis based on China's "Assessment Scheme for Undergraduate Teaching Work in Colleges & Universities.** Journal of North China Institute of Water Conservancy and Electric Power (Social Science Edition), 2008(2), 24-1.

Wang Fang (2009). **Research on Transformational Leadership Theory and Its Implications.** Leadership Science, 29, 29-31.

Xu Shuyan, Pan Zhifeng, (2008). **Exploration of Teaching Quality Evaluation System of Art Design Major**. Career Space and Time, 06, 2008.

Zhang Yingqiang. (2008). **Comprehensive deepening reforms in higher education: Reforming higher education reforms.** Chinese Higher Education Research, 2008(12), 10-2014(10).

ZHAO Yunzhen (2010). **Practice and discussion of Teaching quality Assurance and monitoring System in Medical Higher Vocational colleges.** Continuing Medical Education. 01, 2010.

Zhang Tong. (2023). **Exploration of innovative development in university education management models under new circumstances: A review of "Analysis of University Education Management and Innovative Practice.** Chinese Journal of Education, 2023.

The Teachers' Career Calling at Public Vocational Colleges in Shanghai City

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ABSTRACT

The objective of this research was to explore the components of teachers' career calling at Public Vocational Colleges in Shanghai City under the People's Republic of China.

The research methodology was a mixed-method. The key informants were 7 administrators and 6 teachers obtained by purposive sampling technique. The instrument used for data collection and analysis was an indepth interview questions and content analysis.

The research findings revealed that the components of teachers' career calling at Public Vocational Colleges in Shanghai City included: guiding force, meaning and value, altruistic, career persistence, excelsior and lifelong learning.

Keywords: Career Calling, Vocational College, Shanghai City

1. Introduction

In the new era, the career calling has become a common phenomenon, and ordinary people realize their life value under the guidance of calling. For individuals, the power of career calling is very great. It will make people realize that they are a part of the overall situation and work hard for it. The goal of work is no longer just to pursue material abundance and job promotion, but to be endowed with a higher level of spiritual pursuit. More and more people regard work as the most important way to realize their life value. This desire to realize self-worth from the career is called career calling.

The incentive effect of money and material resources on employees has become increasingly small. Listening to their inner thoughts has become an important way for employees to choose their work and life, thereby satisfying their pursuit of finding their own

sense of value from work. Especially the new generation of employees have begun to become the main force in the labor force, and they are more eager to show their talents and value in the workplace. Faced with this new concept and form of work, organizations urgently need to summon this new source of motivation to stimulate employees' work enthusiasm. It is in this social context that exploring the relationship between people and work from the new research perspective of career calling has become particularly important.

If China wants to become a manufacturing power, vocational education is particularly important, and higher vocational education is an important part of China's education system. The teaching staff is the main body of higher vocational education and the executor of professional teaching. The quality of the teaching staff is directly related to the training quality of the professional skill talents. The newly revised Vocational Education Law of the People's Republic of China, which was implemented in May 2022, stipulates that vocational education is an education type with the same important status as ordinary higher education, and proposes to strengthen the construction of teachers' ethics, create a good learning environment, and ensure the quality of education and teaching, so as to cultivate high-quality technical and skilled personnel for the country and society.

The development goals set by Shanghai require a large number of technical talents, and the cultivation of technical talents cannot be separated from the development of Shanghai vocational education. Teachers are the most core element in the vocational education system. In the past education system in Shanghai, undergraduate and graduate education were more advanced and developed, while vocational education was relatively weak, which did not meet the positioning requirements of Shanghai's future development. The work engagement, educational level, and career calling of vocational college teachers in Shanghai are relatively low, and there is still a lot of room for improvement. This study aims to conduct a multidimensional study on the career calling of vocational college teachers, in order to provide reference guidelines for educational management.

Therefore, it is of great practical and theoretical significance to study the career calling of teachers in higher vocational education.

2. Research Purpose

To explore the components of teachers' career calling at Public Vocational Colleges in Shanghai City.

3. Benefits of Research

College administrators could pay attention to the shaping of teachers' career calling. The research results are not only conducive to promoting teachers to pursue and enhance their career calling in education, internalizing their educational responsibilities into their own conscious behavior, but also conducive to college administrators to more accurately and efficiently stimulate teachers' career calling.

4. Research Process

Step1: To study the components of teachers' career calling by content analysis from literature reviews and related research.

Step2: Create a question by content analysis of component.

Step3: In-depth interview by purposive sampling, with 13 key informants who are 7 administrators and 6 teachers.

5. Population and Sample

1. The population were the teachers who worked in academic year 2023 at Public Vocational Colleges in Shanghai City.

2. Sample were Key informants for in-depth interview total 7 administrators and 6 teachers by purposive sampling, The Selection administrators with more than 3 years of management experience, and teachers with more than 5 years of teaching experiece.

6. Instruments

1. The questionnaire for Content analysis
2. The questionnaire for In-Depth interviews

7. Data analysis

Content analysis through the Chinese and international related studies, the career calling dimension structure to summary as the table 1-2, there were several main tools for measuring career calling as follows:

Table 1: Career Calling Dimension Structure

Career Calling Dimension Structure			
Classification	Author	Dimension	Object
Single-Dimension	Davidson & Caddell, 1994	I feel strong calling from bottom of my heart.	employee
	Wrzesniewski,Mccauley, & Rozin, 1997	COS(Calling Orientation Scale)	employee
	Bunderson & Thompson, 2009	NCS (Neoclassical Calling Scale)	employee
	Dik, Eldridge, & Steger, 2012	BCS (Brief Calling Scale)	college student, employee
	Dobrow & Tosti-Kharas, 2011	12-CS (12-Calling Scale)	college student, employee
Three-Dimension	Dik, Eldridge, & Steger, 2012	CVQ (Calling and Vocation Questionnaire)	college student, employee
	Tracy, 2009	Job, Family and social professional calling	employee
	Praskova, Creed, & Hood, 2015	CCS(Career Calling Scale)	college student, employee
	Zhang Chunyu, 2015	CCS(Chinese Calling Scale): 1.guiding force 2.meaning and value, 3.altruistic	college student
	Zhang Chunyu, 2015	CCS-E(ChineseCalling Scale-employee): 1.guiding force 2.altruistic 3.proactive progress	employee
Four-Dimension	Jia & Wang, 2018	1.responsibility 2.purpose and meaning	Old Scientists

Career Calling Dimension Structure			
Classification	Author	Dimension	Object
		3.prosocial behavior 4.long-term sustainability	
	Liao, Hu, & Zhang, 2014	1.mission arousal 2.altruistic dedication 3.responsibility taking 3.professional persistence	Primary and Secondary school teachers
	Tong Jing, 2014	1.intrinsic motivation 2.professional significance 3.calling experience 4.pro social	employee
Five-Dimension	Hagmaier & Abele, 2012	MCM(Multidimensional Calling Measure): 1.transcendent Guiding Force 2.identification with one's work 3.sense of Meaning 4.value-driven behavior 5.person-environment fit	employee
	Zhou Xiaoxue, 2021	1.guiding force 2.meaning and value 3.altruistic 4.career persistent 5.excelsior	skilled talent employee

       From table 1: in the current study about career calling, there were five main tools for measuring career calling from the table as below:

       1. Brief Calling Scale (BCS). This is a scale developed by Dik, and its biggest feature is that it does not explicitly indicate the source of calling, but requires participants to choose measurement items based on their own inner definition of

calling. Although the scale only has two items, it has good simultaneous and discriminative validity. There is a very high correlation between the two items.

      2. Calling and Vocation Questionnaire (CVQ). This is a scale developed by Dik and is currently one of the most frequently followed and cited. Unlike BCS, CVQ uses 12 items to measure two dimensions of career calling, and further subdivides career calling into three dimensions: transcendent calling, meaningful work, and pro social orientation. However, this scale only tested students as test samples and did not conduct research on employees in the workplace.

      3. The Multidimensional Measure of Calling (MCM). This is a test developed by Hagmaier and Abele, and is the only one conducted so far using actual workplace employees as a sample.

      4. 12-Calling Scale (12-CS). This is a scale compiled by Dobrow and Tosti-Kharas (2011), and its theoretical basis is developed from the modern perspective of calling. 12-CS has obtained strict practical testing and has reliable reliability and validity. If researchers want to measure other occupational groups, they can simply replace the job or occupational name in the entry and use it directly.

      5. The scale of Zhou Xiaoxue. This is a new scale developed by Zhou Xiaoxue in the Chinese context, which meets the measurement requirements for career calling in the Chinese context. It mainly includes five dimensions, namely guiding force, meaning and value, altruistic, career persistent, excelsior. This scale tested skilled talent employee as test samples.

Table 2: Career calling dimensions from key informants

      In-depth interview dimensions statistics: What do you think are the more important factors in teachers' career calling of public vocational college?

No.	Experts	Dimensions						
		1	2	3	4	5	6	7
		Guiding force	Meaning and value	Altruistic	Career persistence	Excelsior	Lifelong learning	Skill updates
1	Expert1	√	√	√	√	√		√
2	Expert2		√	√		√	√	√
3	Expert3	√	√		√	√		

No.	Experts	Dimensions						
		1	2	3	4	5	6	7
		Guiding force	Meaning and value	Altruistic	Career persistence	Excelsior	Lifelong learning	Skill updates
4	Expert4	√	√	√	√	√	√	
5	Expert5	√	√	√		√	√	√
6	Expert6	√	√	√	√	√		
7	Expert7	√	√		√	√	√	
8	Expert8	√	√	√		√	√	√
9	Expert9	√	√	√	√	√	√	
10	Expert10	√	√	√		√	√	√
11	Expert11	√	√	√	√	√		
12	Expert12	√	√	√	√	√	√	
13	Expert13	√	√	√	√	√		
N=13		12	13	11	9	13	8	5

From table 2 and figure 1: according to the in-depth interview dimensions, six dimensions are divided into the rationality of guiding force, meaning and value, altruistic, career persistence, excelsior and lifelong learning. Based on interviews with key information providers, the researcher chose percentage dimensions that were greater than or equal to 50%, resulting in seven dimensions.

Figure 1: Career calling dimensions from key informants

8. Conclusion and discussion

The components of teachers' career calling based on current situation include (1) Guiding force, (2) Meaning and value, (3) Altruistic, (4) Career persistence, (5) Excelsior, (6)Lifelong learning. The conclusion of these concepts as follows:

1. Guiding force emphasizes that the career calling has a power of traction and guidance. This power can be external, such as national calls, family expectations, etc., or internal, such as personal needs, striving to achieve goals, etc.

The meaning and value emphasizes the alignment of an individual's professional role with their established life goals, personal interests, and regards career calling as an extension of the individual's life meaning. This finding is consistent with Jia, W., & Wang, Z. (2018). A Case Study on the Connotation and Influencing Factors of the career calling.

2. Altruistic emphasizes the spiritual connotation of career calling to provide help and services to others and society, and a willingness to contribute, consisted with Dik, B. J., Eldridge, B. M., Steger (2012). Development and validation of the Calling and Vocation.

3. Career persistence of vocational college teachers refers to their unwavering commitment and sense of responsibility to the education industry when facing challenges, temptations, and pressures, adhering to the principles and values of education, and continuously making efforts for the growth and development of students. This finding is consistent with Liao, C., Hu, Y., Zhang, J. (2014). The Relationship between Career Calling and Professional Commitment of Primary and Secondary School Teachers.

4. The excelsior of vocational college teachers is mainly reflected in their love for the education industry, proficiency in professional knowledge, and high attention to each individual student. They not only impart skills, but also impart professionalism. Striving for excellence is a belief and a mission. They not only teach students skills, but also guide them on how to apply this spirit of excellence to their future career. This professional connotation not only has a positive impact on students' employment, but also has a profound impact on the development of society. Because teachers with this spirit of striving for excellence can cultivate students with a high sense of responsibility, excellent professional skills, and innovation, and contribute to the progress of society. And 5. The lifelong learning for vocational college teachers is mainly reflected in their continuous enthusiasm for the education industry, constantly updated knowledge and skills, and their responsibility for the comprehensive development of students. They not only need to have a solid professional

foundation, but also need to constantly update their knowledge system to keep up with the development of the industry and technological innovation. This finding is consistent with Liao, C., Hu, Y., Zhang, J. (2014). The Relationship between Career Calling and Professional Commitment of Primary and Secondary School Teachers.

The administrators should always maintain the passion and desire for learning, and integrate it throughout their career. At the same time, they also need to convey what they have learned to students, helping them establish correct learning concepts and career plans. Only in this way can teachers provide students with up-to-date education and help them achieve comprehensive development and career success. Therefore, lifelong learning is an indispensable professional requirement for vocational college teachers (Zhou, X. (2021). Research on the calling of skilled talents and its impact on creativity).

9. Recommendation

The policy should make mechanism based on guiding force, meaning and value, altruistic, career persistence, excelsior and lifelong learning to enhance teachers' career calling.

1. Regarding government policies, this research can provide more accurate policy directions and formulate policies and regulations on the promotion of teachers' career calling in a targeted manner.

2. For college management and leadership, measures for teachers' responsibility and a learning platform for improving career calling can be formulated, and the implementation is supervised. For college teachers, they can provide the key directions of teachers' teaching, formulate training courses to improve teachers' career calling, so as to improve teachers' teaching level as a whole.

3. For teachers, they could establish and enhance their career calling, enhance their sense of professional happiness, and find their own meaning in life through different training and activities.

BIbliography

Bunderson, J.S., & Thompson, J.A. (2009). **The call of the wild: zookeepers, callings, and the double-edged sword of deeply meaningful work.** Administrative Science Quarterly, 54(1), pp.32-57.

Davidson, J.C., Caddell, D.P. (1994). **Religion and the meaning of work.** Journal for the Scientific Study of Religion, 33, pp. 135-147.

Dik, B. J., Eldridge, B. M., Steger, M. F., Duffy, R.D. (2012). **Development and validation of the Calling and Vocation Que stionnaire (CVQ) and Brief Calling Scale (BCS).** Journal of Career Assessment, 20(3), pp. 242-263.

Dobrow, S. R., Tosti-Kharas, J. (2011). **Calling: The development of a scale measure.** Personnel Psychology, 64(4), pp. 1001-1049.

Hagmaier, T., Abele, A. E. (2012). **Multidimensionality of calling: Conceptualization measurement and a bicultural perspective.** Journal of Vocational Behavior, 81(1), pp. 39–51.

Jia, W., & Wang, Z. (2018). **A Case Study on the Connotation and Influencing Factors of the career calling of Chinese Senior Scientists.** Research on Science and Technology Management, 38(04), pp. 130-139.

Liao, C., Hu, Y., Zhang, J. (2014). **The Relationship between Career Calling and Professional Commitment of Primary and Secondary School Teachers.** Education Guide, (10), pp. 30-33.

Praskova, A., Creed, P. A., Hood, M. (2015). **The development and initial validation of a career calling scale for emerging adults.** Journal of Career Assessment, 23(1), pp. 91-106.

Tong, J. (2014). **The Content Structure of Career Calling and The Relationship between Related Variables.** Jinan University.

Wrzesniewski, A., Mccauley, C., Rozin, P. (1997). **Jobs, careers, and callings: People's relations to their work.** Journal of Research in Personality, 31(1), pp. 21-33.

Xie, B., Xin, X., Zhou, W. (2016). **Career Calling: A Revitalizing Research Topic.** Advances in psychological science, 24(05), pp. 783-793.

Xuan, Y. (2019). **An Empirical Research on the Influence of Transformational Leadership on Work Calling.** Wuhan University of Technology.

Zhang Chunyu. (2015). **Career Calling: Structure, Measurement, and Its Relationship with Happiness.** Southwest University.

Zhou, X. (2021). **The calling of skilled talents and its impact on creativity.** Beijing Jiaotong University.

Effectiveness Management of Jewelry Design Education in Colleges and Universities under Guangdong Province

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ABSTRACT

The purpose of this research was to propose guidelines of effectiveness management of jewelry design education in colleges and universities under Guangdong Province. This research adopts mixed methods for design. Including qualitative research and quantitative research. A total of 7 key informants from the management of jewelry design major in universities and colleges under Guangdong Province and professors engaged in related research participated in the revision and discussion of the guidance on improving teachers education management of jewelry design major. These 7 key informants had more than 10 years of teaching experience in jewelry design in colleges and universities. The instruments for data collection was in-depth interviews questionnaire, by frequency analysis, content analysis.

The results of research was found that: (1) the components of effectiveness management of jewellery design education in colleges and universities included six components as: 1) University Policy reform and innovation, 2) Educational organization management, 3) University resources management, 4)Academic excellent and learning, 5) Quality and Reputation, and 6) Financial management and resource allocation; and (2) the guidelines of effectiveness management of jewelry design education in colleges and universities under Guangdong Province was total 41 guidelines included: 1) total 7 guidelines for University Policy reform and innovation, 2) total 8 guidelines for educational organization management, 3) total 8 guidelines for university resources management, 4) total 7 guidelines for academic excellent and learning, 5) total 5 guidelines for quality and reputation, and 6) total 6 guidelines for evaluation mechanism.

Keywords: Effectiveness Management, Jewelry Design Education, Colleges and Universities, Guangdong Province

1. Introduction

Since the reform and development of China for more than 40 years, the jewelry industry in the Pearl River Delta region has developed rapidly, and Guangdong Province has become the leader of the jewelry industry in China. At present, jewelry design is still an emerging major in Chinese college education. More and more people in the industry have put forward the importance of talent training, from jewelry designers to jewelry appraisers are very short, and can not keep up with the actual development needs. Based on the professional knowledge of education management, this paper takes the jewelry major of colleges and universities in Guangdong Province, a large province of jewelry industry, as the research object, and makes a detailed case study, to discuss the advantages and disadvantages of China's current jewelry design education concept, curriculum, operation and management mode.

The problems existing in the quality management of practical teaching in Chinese universities are mainly targeted at schools and enterprises. Among them, universities mainly have problems such as imperfect management mechanism and incomplete monitoring subjects, while enterprises mainly face problems such as low participation and poor communication between schools and enterprises (Shi Guangshan, 2017).   The "Internet +" era, the society has put forward higher requirements for the management mode of universities. College administrators should change their ideas and ways of thinking, and innovate and develop the management mode in combination with the reality while formulating the school development plan and management objectives scientifically and reasonably (Zhang Tong, 2023).

The factors affecting the quality of undergraduate teaching into two dimensions for analysis. The first dimension was the external factors including the intervention of stakeholders, specific social needs, Chinese cultural traditions and internal factors including campus culture, academic environment, internal management, teaching and learning activities. The second dimension is the recessive factors including campus culture, academic environment, national cultural tradition, time background, and the explicit factors including social services, academic achievements in subjects and research, teaching management, conditions of teachers and students, and conditions of hardware facilities and equipment. Also, the comprehensive deepening reform in the field of higher education is to promote the modernization of the governance system and governance capacity of higher education (Zhang Yingqiang, 2014 and Zhong Binglin, 2011) that the government was the provider of public education services and the main body of the allocation of public education resources, and performance play a decisive role in the allocation of educational resources. such as excessive emphasis on

administrative standard, but lack of openness and transparency, and the mismatch between power and responsibilities, are all related to the offside, dislocation and excessive concentration of power of government functions. Therefore, to deepen the reform of educational resource allocation. However, to improve the evaluation system of teaching quality, and they put forward that the teaching quality evaluation standards must keep pace with The Times; strengthen the evaluation of the basic teaching quality of teachers; pay attention to the cultivation of comprehensive ability, realize the separation of teaching and examination; pay attention to the collection and feedback of students, and realize the four improvement measures of system management ".

2. Research Purposes

To propose guidelines of effectiveness management of jewelry design education in colleges and universities under Guangdong Province.

3. Benefit of Research

Provided guidance for the effectiveness management of jewelry design education in colleges and universities under Guangdong Province and even in China.

4. Research Process:

Step 1: to study the components of effectiveness management of jewelry design education in colleges and universities. Variables were identified through in-depth interviews and literature research, Step 2: quantitative analysis factors of component of effectiveness management of jewelry design education in colleges and universities under Guangdong Province, and Step 3: to organize experts to focus group discussion to arrive at the final guidelines.

Population and Sample: 1) provided from colleges and universities under Guangdong Province conducted in-depth interviews as 13 key informants, 2) sample size was 191 faculty members, elected with a stratified sampling technique, including presidents, vice-president,director and teachers.according to the Krejci and Morgan's table, and 3) confirm the guidelines for effectiveness management of jewelry design education in colleges and universities under Guangdong Province by 7 experts.

Instrument: 1) checklist form and In-depth interviews form questionnaire, and 2) five points rating scale questionnaire.

Data analysis: 1) Content analysis was performed the data in depth-interviews with frequencies, 2) Conduct a descriptive analysis of the questionnaire results with mean and Standard Deviation, and 3) focus group was moderated by the researcher on discussion about effectiveness management of jewelry design education in colleges and universities under Guangdong Province.

5. Conclusion and discussion

1. Variable analysis of literature review and key informants

Through a comprehensive analysis of both the literature review and in-depth interviews with key informants, as shown in Table 1.

Table 1: Literature review and in-depth interview.

Dimensions	Items
1. University Policy reform and innovation	1. Higher education quality assurance mechanism
	2. Innovation of talent training mode
	3. Innovation and entrepreneurship education
	4. Interdisciplinary development
	5. Teacher development support
	6. Practical education reform
	7. Education informationization
2. Educational organization management	8. Education policy formulation and planning
	9. School organization and leadership
	10. Teacher management and training
	11. Curriculum design and teaching quality assurance
	12. Education reform and innovation
	13. Monitoring and evaluation of education quality
	14. International exchanges and cooperation in education
	15. Social participation and after-school education
3. University resources management	16. Teaching facilities
	17. Research facilities
	18. Scientific research funds
	19. Internship and practice opportunities
	20. Academic exchanges and international cooperation
	21. Discipline construction and development
	22. Campus culture and art education
	23. Cooperation in social resources
4. Academic excellent and learning outcome	24. Intersecting of disciplines and integration
	25. Practical teaching
	26. Curriculum innovation
	27. Student interests and needs
	28. International courses
	29. Career development course
	30. Social needs course/Social practice course
	31. Credit and reputation
	32. Teaching effect and student results

5. Quality and Reputation	33. Academic reputation
	34. Research and innovation capabilities
	35. Student employ ability
6. Evaluation mechanism	36. Student assessment
	37. Teacher evaluation
	38. Academic achievements
	39. Student employment rate
	40. Student satisfaction
	41. Subject ranking

Table 2: Result of Data Analysis of the detailed questionnaire

    With a 5-point rating scale questionnaire assessment by mean and Standard Deviation, this assessment were as detailed below:

Variables		Correct d for item total correlation	Delete the Cronbach's Alpha value for the item	Cronbach's Alpha	Total Cronbach's Alpha
A	1	0.776	0.969	0.970	0.977
	2	0.771	0.969		
	3	0.788	0.969		
	4	0.799	0.969		
	5	0.839	0.968		
	6	0.949	0.966		
	7	0.767	0.969		
	8	0.788	0.969		
	9	0.813	0.968		
	10	0.789	0.969		
	11	0.841	0.968		
	12	0.811	0.968		
	13	0.758	0.969		
	14	0.802	0.969		
	15	0.822	0.968		
	16	0.793	0.969		
B	17	0.814	0.962	0.965	
	18	0.826	0.962		
	19	0.782	0.963		
	20	0.821	0.962		
	21	0.807	0.962		
	22	0.786	0.963		
	23	0.813	0.962		
	24	0.812	0.962		
	25	0.936	0.959		
	26	0.812	0.962		
	27	0.792	0.963		

Variables		Correct d for item total correlation	Delete the Cronbach's Alpha value for the item	Cronbach's Alpha	Total Cronbach's Alpha
	28	0.831	0.962		
C	29	0.832	0.974	0.975	
	30	0.800	0.974		
	31	0.813	0.974		
	32	0.809	0.974		
	33	0.793	0.974		
	34	0.806	0.974		
	35	0.792	0.974		
	36	0.803	0.974		
	37	0.807	0.974		
	38	0.953	0.972		
	39	0.808	0.974		
	40	0.819	0.974		
	41	0.791	0.974		
	42	0.844	0.974		
	43	0.790	0.974		
	44	0.803	0.974		
	45	0.844	0.974		
	46	0.811	0.974		
D	47	0.736	0.974	0.975	
	48	0.789	0.974		
	49.	0.805	0.973		
	50	0.800	0.973		
	51	0.791	0.974		
	52	0.769	0.974		
	53	0.784	0.974		
	54	0.794	0.974		
	55	0.824	0.973		
	56	0.790	0.974		
	57	0.791	0.974		
	58	0.810	0.973		

Variables		Correct d for item total correlation	Delete the Cronbach's Alpha value for the item	Cronbach's Alpha	Total Cronbach's Alpha
	59	0.808	0.973		
	60	0.787	0.974		
	61	0.725	0.974		
	62	0.942	0.972		
	63	0.747	0.974		
	64	0.796	0.974		
	65	0.806	0.973		
	66	0.762	0.974		
	67	0.810	0.973		
E	68	0.815	0.954		
	69	0.803	0.955		
	70	0.851	0.952		
	71	0.934	0.948		
	72	0.832	0.953	0.959	
	73	0.830	0.954		
	74	0.802	0.955		
	75	0.793	0.955		
	76	0.798	0.955		
F	77	0.815	0.970		
	78	0.795	0.971		
	79	0.842	0.970		
	80	0.795	0.971		
	81	0.778	0.971		
	82	0.787	0.971		
	83	0.786	0.971	0.972	
	84	0.801	0.971		
	85	0.798	0.971		
	86	0.826	0.970		
	87	0.951	0.968		
	88	0.830	0.970		
	89	0.789	0.971		

Variables		Correct d for item total correlation	Delete the Cronbach's Alpha value for the item	Cronbach's Alpha	Total Cronbach's Alpha
	90	0.827	0.970		
	91	0.817	0.970		
	92	0.806	0.970		

First, the data collected by the questionnaire were found that the overall Cronbach's Alpha value of the scale was greater than 0.7, and the Cronbach's Alpha values corresponding to the six dimensions were greater than 0.7, indicating that the internal consistency of the questionnaire was good, so the reliability of the results of this survey was excellent. In order to identify the correlation between each item and the population, the items where the correlation coefficient of CITC is lower than 0.3 should be deleted. After reliability test and analysis, the correlation between the items and the overall score in the questionnaire was higher than 0.3. See the table for details. The results show that most of the items were related to the population and had discrimination.

Exploratory factor analysis. KMO and Bartlett as table 3 .

Table 3: KMO and Bartlett

KMO and Bartlett		
Sample a sufficient Kaiser-Meyer-Olkin metric.		0.917
The sphericity test of the Bartlett	Approximate chi square	18772.258
	df	4186.000

The test results in the analysis table show that the KMO value of this study was 0.917, significantly greater than 0.7. However, in the Batley spherical test, the approximate chi-square value was 18772.258, and the probability of significance was 0.000, less than 0.01. The null hypothesis of the Batley sphericity test was therefore rejected, indicating that the questionnaire had a good validity structure and allows for factor analysis.

The total variance explained

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
1	29.881	32.479	32.479	29.881	32.479	32.479	14.228	15.465	15.465
2	9.549	10.379	42.858	9.549	10.379	42.858	12.818	13.933	29.398
3	8.588	9.335	52.193	8.588	9.335	52.193	11.451	12.446	41.844
4	6.663	7.242	59.435	6.663	7.242	59.435	11.349	12.336	54.180
5	5.906	6.420	65.855	5.906	6.420	65.855	8.783	9.547	63.727
6	4.882	5.306	71.161	4.882	5.306	71.161	6.839	7.434	71.161
7	0.897	0.975	72.135						
8	0.864	0.939	73.075						
9	0.801	0.871	73.946						
10	0.791	0.860	74.806						
11	0.741	0.805	75.611						
12	0.716	0.778	76.389						
13	0.699	0.759	77.149						
14	0.687	0.746	77.895						

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
15	0.664	0.722	78.617						
16	0.656	0.713	79.329						
17	0.647	0.703	80.032						
18	0.616	0.669	80.701						
19	0.612	0.666	81.367						
20	0.588	0.639	82.006						
21	0.584	0.635	82.641						
22	0.563	0.612	83.253						
23	0.551	0.599	83.852						
24	0.524	0.570	84.421						
25	0.522	0.567	84.988						
26	0.502	0.546	85.534						
27	0.487	0.530	86.064						
28	0.469	0.509	86.573						
29	0.464	0.504	87.077						

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
30	0.456	0.495	87.572						
31	0.436	0.474	88.047						
32	0.417	0.453	88.500						
33	0.396	0.431	88.931						
34	0.375	0.408	89.339						
35	0.370	0.403	89.741						
36	0.367	0.399	90.140						
37	0.357	0.388	90.528						
38	0.348	0.378	90.906						
39	0.341	0.371	91.277						
40	0.331	0.359	91.636						
41	0.321	0.349	91.986						
42	0.318	0.345	92.331						
43	0.298	0.324	92.655						
44 ●	0.293	0.319	92.973						

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
45	0.282	0.306	93.279						
46	0.271	0.295	93.574						
47	0.260	0.283	93.857						
48	0.252	0.274	94.131						
49	0.248	0.270	94.400						
50	0.239	0.259	94.660						
51	0.234	0.255	94.914						
52	0.229	0.249	95.164						
53	0.217	0.236	95.400						
54	0.211	0.230	95.629						
55	0.204	0.222	95.851						
56	0.195	0.212	96.063						
57	0.186	0.202	96.265						
58	0.180	0.195	96.461						
59	0.179	0.195	96.655						

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
60	0.174	0.189	96.845						
61	0.171	0.186	97.030						
62	0.163	0.177	97.207						
63	0.159	0.173	97.380						
64	0.153	0.166	97.546						
65	0.149	0.162	97.709						
66	0.142	0.155	97.863						
67	0.137	0.148	98.012						
68	0.133	0.145	98.156						
69	0.127	0.138	98.295						
70	0.117	0.127	98.422						
71	0.110	0.119	98.541						
72	0.106	0.116	98.657						
73	0.103	0.112	98.769						
74	0.097	0.106	98.875						

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
75	0.093	0.102	98.976						
76	0.090	0.098	99.074						
77	0.084	0.091	99.165						
78	0.080	0.086	99.251						
79	0.074	0.081	99.332						
80	0.072	0.078	99.410						
81	0.064	0.070	99.480						
82	0.061	0.067	99.547						
83	0.060	0.066	99.612						
84	0.055	0.060	99.672						
85	0.048	0.052	99.724						
86	0.047	0.051	99.775						
87	0.044	0.048	99.823						
88	0.041	0.044	99.867						
89	0.036	0.039	99.906						

element	Initial eigenvalue			Extract the squared sum and load			Rotary square sum loading		
	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%	amount to	% Of the variance	accumulate%
90	0.032	0.034	99.941						
91	0.030	0.033	99.974						
92	0.024	0.026	100.000						

Extraction method: Main component analysis.

It can be seen that there were six common factors with large eigenvalues. The results of the factor analysis also showed that the total variance interpretation rate of the factor was 71.161%, greater than 60%, from which the designed scale be considered better interpretation. And get the following diagram.
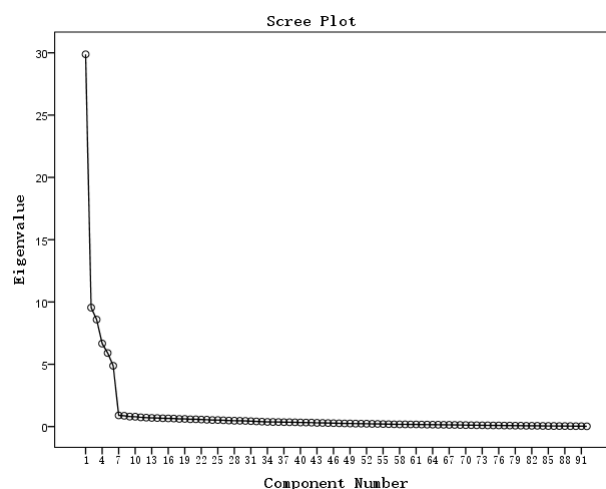
By observing the gravel diagram, found that the eigenvalue after the sixth common factor changes slowly, so it was more appropriate to select 6 common factors, and the following rotating component matrix obtained. It was concluded by rotating the composition matrix of the problems in the scale. According to the meaning of the topic in the scale and the rotating component matrix, the load value is greater than 0.5 be analyzed as an important item, the results show that the load value of each dimension was greater than 0.5, at the same time, the rotating component matrix and the results of the scale and dimensions of the research design. Therefore, the validity of the questionnaire were high and effective.

Component 1 was described by 16 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.739-0.936. and the researcher named it "**University Policy reform and innovation**".

Component 2 was described by 12 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.768-0.916 and the researcher named it "**Educational organization management**".

Component 3 was described by 18 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.749-0.944 and the researcher named it "**University resources management**".

Component 4 was described by 21 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.686-0.936 and the researcher named it "**Academic excellent and learning**".

Component 5 was described by 9 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.774-0.917 and the researcher named it "**Quality and Reputatio**n".

Component 6 was described by 16 key variables, with no value below 0.5. After rotating the axis, the variable factor loading in the component was between 0.741-0.923 and the researcher named it "**Evaluation mechanism**".

Base on the combination of qualitative research, quantitative research and factor analysis techniques, the researchers successfully and delineated the component of effectiveness management of jewelry design education in colleges and universities under Guangdong Province. The extraction process of these components is completed through EFA. A concise summary of these identified components could be visualized in Figure 1

Figure 1. Components of effectiveness management of jewelry design education in colleges and universities under Guangdong Province

Component 1   "**University Policy reform and innovation**" consisted of 7 variables.

Component 2   "**Educational organization management**" consisted of 8 variables.

Component 3   "**University resources management**" consisted of 8 variables.

Component 4   "**Academic excellent and learning**" consisted of 8 variables,

Component 5   "**Quality and Reputation**" consisted of 5 variables, and Component 6 "**Evaluation mechanism**" consisted of 5 variables.

Second: Focus Group Discussion

A total of seven experts actively participated in the Focus Group Discussion, which was structured around six distinct components. These components encompassed

Educational organization management, University resources management, Academic excellent and learning, Quality and Reputation and Evaluation mechanism. Within 41 guidelines components were collaboratively generated. The findings were in the same direction with Professor Luo Yanming (2010) pointed out that it is necessary to strengthen the monitoring and management of teaching quality, establish and perfect scientific and reasonable teaching rules and regulations, build the whole process of teaching quality monitoring mechanism, build a comprehensive teaching quality evaluation system, and establish a reasonable incentive and restraint mechanism. And accordance with Zhou Linyi and Chen Tiaotiao (2009) in the construction of art course teaching evaluation system to clear course objectives, set up the course unit teaching objectives, the single homework score is summarized into unit score should be emphasized in the teaching practice and for the cultivation of creative ability and emphasize the school service for society, serve the cultural and economic construction. As Shi Shuo (2020) colleges and universities should abandon the existing traditional backward concept of planning in the curriculum mode, and adopt and draw lessons from the teaching mode of western countries with positive impact on the effectiveness of educational effectiveness.

6. Recommendation

1. Recommendations for Policies Formulation

1. The government can increase the investment in educational resources for jewellery design majors, including support in terms of funds, equipment and venues.

2. The government may establish a teacher training program to support the training and development of teachers specializing in jewelry design.

3. The government may encourage and support cooperation projects between the jewellery design profession and enterprises in the jewelry industry and set up scholarships and funding schemes for jewellery design majors to study jewellery design majors.

2. Recommendations for Practical Application

1. to build advanced laboratories and studios for jewellery design professional education, and to provide places for students to practice and create.

2. Improve the school organization ability, so as to improve the efficiency of school management and education quality.

3. Industry-oriented curriculum: Working with companies in the jewellery industry to develop a curriculum that is closely related to market needs.

4. Construction of teachers: Strengthen the construction and training of professional teachers in jewellery design. And practical opportunities and internship programs: Establish close cooperation with jewellery companies to provide students with practical opportunities and internship programs.

5. Innovation and Entrepreneurship Support: Innovation and entrepreneurship support is provided to encourage students to set up their own business or brand in the field of jewellery design.

3. Recommendations for Further Research

There are many aspects that have not been explored in detail in this article, especially regarding the basic components of effectiveness managemen of jewelry design. To help build on predictive theory and help us more fully understand the development of effectiveness managemen of jewelry design, with a focus on practical and real-world applicability.

BIbliography

Shi Guangshan. (2017). **Investigation into the current status of practical training quality management in vocational colleges**. Doctoral dissertation, Tianjin Vocational Technical Teachers College.

Zhang Tong. (2023). **Exploration of innovative development in university education management models under new circumstances: A review of "Analysis of University Education Management and Innovative Practice.** Chinese Journal of Education, 2023.

Zhang Yingqiang. (2008). **Comprehensive deepening reforms in higher education: Reforming higher education reforms.** Chinese Higher Education Research, 2008(12), 10-2014(10).

Tian Huwei. (2008). **Quality perspectives and influencing factors in current undergraduate education in China: An analysis based on China's "Assessment Scheme for Undergraduate Teaching Work in Colleges & Universities.** Journal of North China Institute of Water Conservancy and Electric Power (Social Science Edition), 2008(2), 24-1.

Xu Shuyan, Pan Zhifeng. (2008). **Exploration of Teaching Quality Evaluation System of Art Design Major, Career Space and Time**. 06, 2008.

Luo Yanming, ZHAO Yunzhen. (2010). **Practice and discussion of Teaching quality Assurance and monitoring System in Medical Higher Vocational colleges.** Continuing Medical Education. 01, 2010.

Zhong Binglin. (2011). **How to allocate educational resources.** Guangming Daily, December 2011, p. 12.

Shi, Shuo. (2020). **Research on quality assurance and evaluation of higher education in Jiangsu: A study on the dynamic optimization and adjustment mechanism of art design majors under the perspective of high-level university construction**. Research Project.

Zheng Zuanke. (2012). **Impact of campus culture construction in universities on the comprehensive development of college students.** Journal of Jiamusi Education Institute, 2012(6), p.116.

Zhou Linyi, Chen Doubtfire. (2009). R**esearch on the evaluation System of Art Creative Courses.** Art and Design (Theory).10, 2009.

Wang Ning. (2017). **Research on quality evaluation index System of General Higher Education in China.** Education Modernization, 2017, 4 (18): 62-67.

Teachers' Incentive Factors Affecting Working Effectiveness
in Private Colleges and Universities in Shenyang City Liaoning Province

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ABSTRACT

The objectives of this research were: (1) To study the components of Teachers' Incentive and Working Effectiveness. (2) To study the Teachers' Incentive factors affecting Working Effectiveness in Private Colleges and Universities in Shenyang, Liaoning Province. (3) To propose the guideline for improving of the Working Effectiveness in Private Colleges and Universities in Shenyang, Liaoning Province.

The research methodology was mixed methodology, including qualitative and quantitative research. Population consisted of 4172 teachers and staff from 10 of private colleges and universities in Shenyang city, Liaoning Province, the People's Republic of China. Obtained by stratified sampling method, totalling 365 samples. The key informants were 9 administrators from Private Universities and public Universities, obtained through a purposive sampling method. The expert for Focus Group Discussion were comprised of 7 experts to confirm model. The instruments used for data collection included a five-point rating scale questionnaire and validation checklist. Statistics for data analysis were Exploratory Factor Analysis and Multiple Indicators Multiple Causes model.

The research findings revealed that; (1) There were 3 components of Teachers' Incentive and 4 components of Teachers' Working Effectiveness. (2) The 3 have an impact factor of Teachers' Incentive affecting Working Effectiveness. The Multiple Indicators Multiple Causes (MIMIC) model of Teachers' Incentive factors affecting Working Effectiveness of Private Colleges and Universities in Shenyang, Liaoning Province. (3) To propose puts forward 3 guidelines for improving the Teachers' Working Effectiveness of Private Colleges and Universities in Shenyang, Liaoning Province. Through these guidelines, the vision of Private

Colleges and Universities is realized, retain valuable talents, promoting the quality of Private Colleges and Universities education and the sustainable development of the college.

Keywords: Teachers' Incentive, Teachers' Working Effectiveness, Private Colleges and Universities in Shenyang, Liaoning Province

1. Introduction

In recent years, as the population of newborns in China continues to decline, the intense competition among universities to attract students has become increasingly pronounced. This competition primarily stems from the universities' need to maintain student enrollments, ensuring the sustainable development and growth of the institutions. The ability to provide high-quality education and cultivate exceptional talent will become a crucial determining factor in the future viability of private higher education institutions.

The Working Effectiveness of teachers in higher education is a crucial factor that profoundly impacts the educational landscape. Good university teachers possess subject knowledge and excel in their teaching practices, directly influencing students' learning outcomes and overall development.

Effective university teachers demonstrate a strong command of their respective subjects, delivering accurate and comprehensive content to students. They utilize innovative and engaging teaching methodologies tailored to diverse learning styles, fostering active participation, critical thinking, and problem-solving abilities.

There is a very significant gap between private universities and public universities in China in terms of education quality and faculty. According to the 2022 QS World University Rankings, none of the private universities in Chinese Mainland has entered the top 200. The top 200 universities in Chinese Mainland are all public universities, including Tsinghua University, Peking University, Fudan University, Zhejiang University, Shanghai Jiaotong University, China Science and Technology, and Nanjing University. For private universities, how to attract and retain high-level and high-quality teaching staff has become a key factor in improving the level of education and achieving sustainable development. This has given researchers a profound understanding of the importance of incentive mechanisms for teachers in private universities, triggering their interest in studying the issue of incentive mechanisms for teachers in private universities.

Based on the actual management of teachers in private colleges and universities, combined with my own work experience, the facts and problems that I am accustomed to in work, and with a reflective and questioning attitude, the research starts from the problems

existing in teacher motivation in private colleges and universities, and tries to Attempting to construct a teacher incentive system to improve teacher effectiveness.

2. Research Questions

The research questions are as follows:

1: What are the components of Teachers' Incentive and Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province?

2: What are the Teachers' Incentive factors affecting Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province?

3: What are the guidelines for improving the Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province?

3. Research Objectives

The research objectives are as follows:

1: To study the components of Teachers' Incentive and Working Effectiveness.

2: To study the Teachers' Incentive factors affecting Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province.

3: To propose the guideline for improving of the Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province.

4. Research Methodology

4.1 Research Design

The research was mixed methodology design which were comprised of quantitative and qualitative research.

Researchers have found through data learning that Teachers' Incentive in Private Colleges and Universities has a direct impact on Working Effectiveness. The design of this study is divided into three stages as follows:

Phase 1: In this stage, qualitative research methods are used to collect data from all documents related to Teachers' Incentive factors and components of Teachers' Working Effectiveness.

Phase 2: A quantitative research methods will be used, Using MIMIC to study the Teachers' Incentive components affecting Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province. Using the key components of Teachers' Incentive and Working Effectiveness that resulted from phase 1 studied.

Phase 3: This phase design by using the qualitative research method using the data from phase 2 and the opinions of educational experts in order to filter it, so as to provide an appropriate process for propose the guideline of the Working Effectiveness in Private Colleges and Universities in Shenyang city, Liaoning Province.

4.2 Population and samples

Phase 1: There were 9 key informant's providers from China.

Phase 2: There were 4172 teachers of 10 private colleges and universities in Shenyang city, Liaoning Province. The sample size was determined by Taro Yamane's Formula (1967).

Phase 3: There are 9 experts or key informants in the field of educational administration, having more than 5 years of experience in private colleges, and universities education.

4.3 Instruments

Phase 1: The tool for data collection consisted of two parts. In the first part, data will be collected from the reviewed literature using a data recording form. In the second part, after the researcher's content analysis of the reviewed literature, nine experts will be asked to screen the Teachers' Incentive factors affecting Working Effectiveness, and this part of the instrument uses the Semi-Structured Interview Form (SSI).

Phase 2: The research instrument of this phase is Questionnaire.

4.4 Data collection

Phase 1: All data gathering by researcher own self under closely advise from the research committees.

Phase 2: The data collection steps are as follow:

Step 1: Request permission to collect data for research to the BTU Educational Faculty.

Step 2: Request a letter of recommendation for the researcher from the BTU Educational Faculty.

Step 3: Selection the coordinating teachers to help assist in coordinating data collection in each institution. Those will be oriented to understand the details of the questionnaire administration and data collection.

Step 4: Carry out data collection with the selected samples by sending questionnaires to the coordinator teacher who will help for collect data with the selected samples in each universities /college/department.

Phase 3: All data gathering by researcher own self under closely advise from the research committee.

4.5 Data analysis

Phase 1: All information obtained is make using content analysis which is a method for analyzing quality data.

Phase 2: Computer software will be used for data management and data analysis will be software in computer software packet will be employed for analyses the categorical variables. In terms of the qualitative method, the data analysis use content analysis by bring the experts' opinions to distinguish, to exploring the factors of Teachers' Incentive of Private Colleges and Universities in Shenyang city, Liaoning Province. Statistics for data analysis were Exploratory Factor Analysis and Multiple Indicators Multiple Causes model.

Phase 3: In terms of qualitative methods, the data analysis adopts the content analysis method, through the introduction of expert opinions to distinguish, classify and sort methods, improves the guidelines for the Teachers' Incentive of private colleges and universities in Shenyang city, Liaoning Province.

5. Research Results

5.1 Reliability analysis of initial measurement

Phase 1: The data consists of two parts, In the first part, a data recording form will be used from the 20 pieces of literature reviewed. In the second part, after the content analysis of the reviewed literature, nine experts will be asked to screen 3 components as well as 18 indicators of Teachers' Incentives affecting Working Effectiveness.

Phase 2: There are 51 questionnaires in this phase.

Phase 3: The experts collected data through focus group discussions and the Cronbach's alpha for the Teachers' Incentive affecting Working Effectiveness scale was 0.929, which indicated high internal consistency of the scales.

Exploratory factor analysis (EFA) used in the analysis include Pearson Correlation Coefficients and KMO and Bartlett's Test. The relationship between observed variables (indicators) and latent variables, as well as the measurement of latent variables were analyzed used the Multiple Indicators Multiple Causes (MIMIC) Analysis method, with a statistically ready-made program (SPSS) and AMOS program to analyze models. The value of Relative Chi-square ($\chi2/df$), Degree of Freedom (df), Statistical Significance (p), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Residual(RMR), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Factor loading, The Composite Reliability, Average Variance Extracted (AVE),Standard Error(S.E), Z-test for a population proportion(Z-test) and Root Mean Square Error of Approximation (RMSEA), all in line with specified criteria.

Table 1 Result of Data Analysis on Questionnaire: Descriptive statistics

(n=365)

pe	N	validation sample	Mean	Skewness statistic	Std.	Kurtosis Statistic	Std.
	WE1	365	3.58	-.617	.128	.034	0.26
orking Effectiveness	WE2	365	3.53	-.365	.128	-.307	0.26
	WE3	365	3.61	-.696	.128	.484	0.26
	WE4	365	3.67	-.530	.128	.383	0.26
	F1	365	3.60	-.947	.128	.562	0.26
achers' Incentive	F2	365	3.46	-.500	.128	.013	0.26
	F3	365	3.20	-.076	.128	-.433	0.26

The statistics in the table indicate moderate mean scores, varying levels of dispersion, relatively symmetrical distributions, and lighter tails compared to a normal distribution for most variables.

Table 2 KMO and Bartlett's Test of components of Teachers' Incentive affecting Working Effectiveness.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.937
Bartlett's Test of Sphericity	Approx. Chi-Square	26846.298
	df	4186
	Sig.	.000

This table provides the results of Kaiser Meyer Olkin (KMO) measurements for sampling adequacy and Bartlett's test for sphericity. KMO measurement is a statistical test used to evaluate whether data is suitable for component analysis. In this case, the KMO metric is 0.937, indicating high sampling adequacy. This indicates that the data is suitable for factor analysis. The Bartlett test is another statistical test used to evaluate whether data is suitable for factor analysis. This test evaluates whether there is sufficient correlation between variables for factor analysis. The approximate chi square value of Bartlett's test is 26846.298, and the corresponding degree of freedom (df) is 4186. The p-value (Sig.) related to the test is 0.000, below the typical significance level of 0.05. This indicates that there is sufficient correlation between variables for factor analysis.

Based on the above information, the questionnaire used in this study has good reliability and validity. To examine the relationship between teacher motivation factors and

teacher effectiveness, a structural equation model was constructed using AMOS software. The specific model is shown in the following figure.
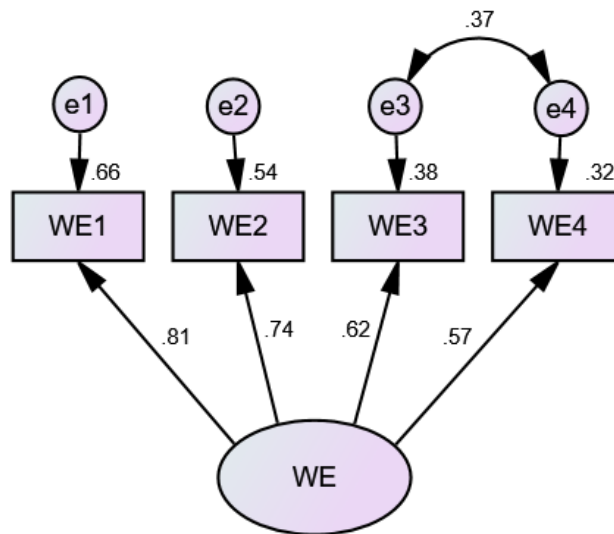
Chi-Square = .314, Df =1, P =.575, GFI =1.000, AGFI =.996, CFI =1.000, TLI =1.009, RMR =.002, RMSEA =.000

Figure 1 Show the first order of Working Effectiveness model that was consistent with the empirical data

      Based on the provided statistical indicators, it appears that the model fits the observed data very well, and the model can be accepted. These indicators indicate a good fit between the model and the data, meeting statistical criteria.

Table 3 Show The results of hypothesis testing in this study

Factor & Variable	Factor loading	R^2	CR	AVE	MSV
WE			.781	.477	.137
WE⟶WE1	.810	.656			
WE⟶WE2	.737	.543			
WE⟶WE3	.617	.381			
WE⟶WE4	.569	.324			

      5.2 Teachers' Incentive affecting Working Effectiveness Satisfaction by AMOS Path Analysis

Chi-Square = 65.26, Df = 22, p = .05, GFI = .81, AGFI = .80, TLI = .90, CFI = .82, RMSEA = .08
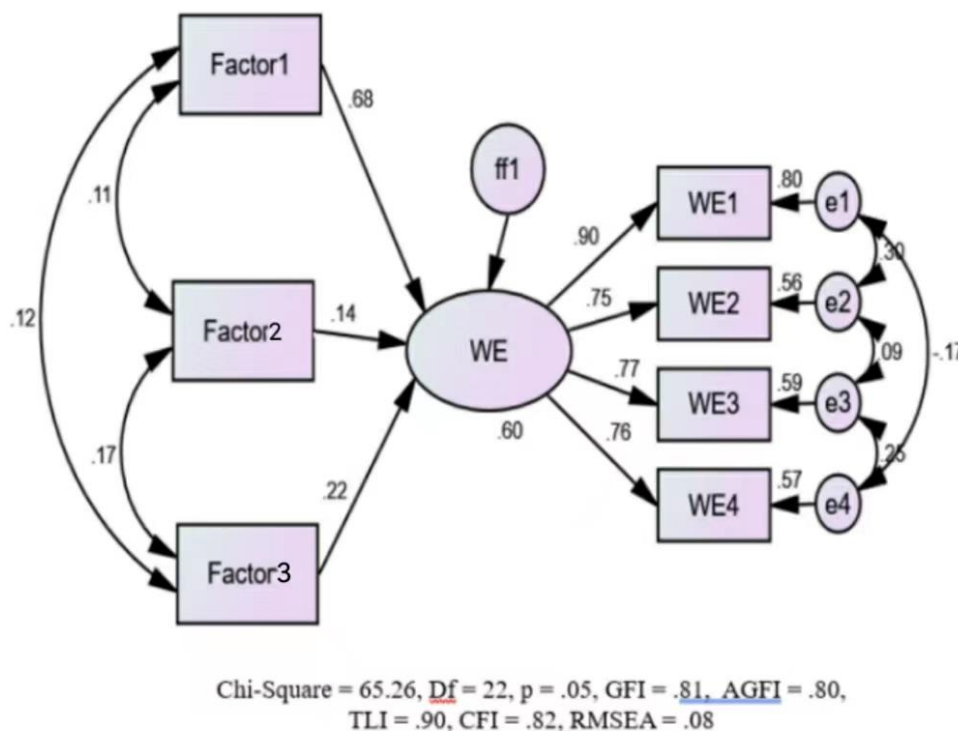
Figure 2 Show the second order of Teachers' Incentive affecting Working Effectiveness model that was consistent with the empirical data

As shown in Figure 2, Multiple Indicator Multiple Cause modeling (MIMIC) of this study has one potential variables: Working Effectiveness Among them, Teachers' Incentive factors include three observation variables, Working Effectiveness has four observation variables, by AMOS Path Analysis.

Table 4 Shows the value of fit index that consistent with the empirical data

Value	Standard	Value from analyzed	Result
x^2	p = > 0.05	65.26	accept
GFI	0.80 <GFI $\leq$ 1.00	0.81	accept
AGFI	0.80 $\leq$ AGFI $\leq$ 1.00	0.80	accept
TLI	0,80 $\leq$ TLI $\leq$ 1.00	0.90	accept
CFI	0.95 $\leq$ CFI $\leq$ 1.00	0.82	accept
RMSEA	0.00 $\leq$ RMSEA $\leq$ 0.08	0.08	accept

As shown in the table, where

p-value (p): A p-value greater than 0.05 (in this case, 65.26) is generally considered acceptable, indicating that the model fits the empirical data well. Therefore, the model's fit with the data is accepted.

Goodness of Fit Index (GFI): A GFI value greater than 0.80 (in this case, 0.81) is typically considered acceptable, indicating a good fit between the model and the data. Therefore, the model's fit is accepted.

Adjusted Goodness of Fit Index (AGFI): An AGFI value greater than 0.80 (in this case, 0.80) is generally considered acceptable, indicating an adequate fit between the model and the data. Therefore, the model's fit is accepted.

Tucker-Lewis Index (TLI): TLI should be between 0.80 and 1.00 for an acceptable fit. In this case, TLI is 0.90, which falls within the acceptable range. Therefore, the model's fit is accepted.

Comparative Fit Index (CFI): CFI should be between 0.95 and 1.00 for an acceptable fit. In this case, CFI is 0.82, which is slightly below the typical threshold. While it's on the lower side, it is still considered acceptable in some contexts.

Root Mean Square Error of Approximation (RMSEA): RMSEA should be less than 0.08 for an acceptable fit. In this case, RMSEA is 0.08, which meets the criterion for an acceptable fit.

Overall, based on the fit index values provided, the model appears to have an acceptable fit with the empirical data. However, the CFI value is slightly below the typical threshold, so you may want to consider the context and specific requirements of your analysis when interpreting these results.

Table 5 Show The results of hypothesis testing in this study

Factors & Observed variable	Estimate		S.E.	Z-test	p	R^2	Rank
	unstandard	standard					
WE					***	.60	
WE ← Factor 2	.203	.139	.057	3.55	***	.02	3
WE ← Factor 3	.352	.221	.063	5.61	***	.05	2
WE ← Factor 1	1.00	.680	-	-	***	.46	1

5.3   Based on the above study, 14 guidelines are proposed to improve the working effectiveness of Private Colleges and Universities in Shenyang city, Liaoning Province.

1. Teachers are required to complete various tasks, including lesson preparation, teaching, grading assignments, participating in assessments, and exams. To enhance work efficiency, appropriate support and resources should be provided, and excessive teaching hours should be limited when necessary.

2. To alleviate the pressure on teachers to complete tasks within limited time constraints, effective time management should be encouraged to improve work efficiency and enhance the quality of education.

3. To assist teachers in meeting various student needs, including learning difficulties, special requirements, behavioral issues, and emotional support, professional support and training should be provided to enhance their educational skills.

4. To reduce the burden on teachers related to administrative and managerial tasks such as document preparation, report writing, and meeting attendance, processes should be simplified, redundant tasks minimized, and necessary support provided to allow them to focus more on educational work.

5. To alleviate the pressure on teachers when it comes to assessing and evaluating student performance, including grade recording and providing quality feedback, effective assessment tools and relevant training should be made available.

6. To increase job satisfaction, teachers should be encouraged to find satisfaction in their work tasks and responsibilities, including teaching content, curriculum design, and textbook selection, and provided with opportunities for innovation and professional development.

7. To enhance teachers' quality of life, support in time management, reasonable holiday policies, and flexible work arrangements should be provided to maintain a balance between work and personal life.

8. Promoting positive interactions and relationship building, including interactions with students, colleagues, superiors, and parents, can improve job satisfaction and educational outcomes.

9. Encouraging a collaborative atmosphere, supportive leadership, and positive teacher-student interaction is essential to foster constructive cooperation and communication.

10. Individual performance and work quality should be fundamental considerations for career development and promotion decisions.

11. Participation in professional training, continuing education courses, and ongoing learning activities demonstrates a commitment to self-improvement and professional development, which can positively influence career advancement.

12. Obtaining professional certifications or credentials in a specific field is often considered advantageous for job title promotion and can validate an individual's professional competence and knowledge.

13. In certain promotion processes, leadership abilities and management skills are important considerations. Demonstrating effective team management, decision-making, and strategic thinking may be valued.

14. In certain cases, organizations may conduct comprehensive assessments, including interviews, evaluations by review committees, and colleague recommendation letters, to gain insights into an individual's performance and potential across multiple aspects and provide promotion opportunities.

6. Discussion

6.1 Discussion about major findings of objective 1

Based on the research objectives, the discussion will be presented as follows:

This research finding was consistent with Cheng Qiongwen (2010). They are results of the studies are consistent. Which was found that Propose the design and recommended measures of a comprehensive incentive model for research universities in China.This article analyzes the incentive methods for research university teachers' incentive under different influencing factors by combining the actual management of research universities in China, and proposes the implementation path to enhance the incentive effect of research university teachers' incentive in China. Also, the findings were in the same direction with Wang Qingru (2012). Analyzed the factors that constrain and affect the improvement of the educational level of private universities.

Also, the findings were in the same research content with Song Guangwei (2017). The results of this study indicate that measuring the turnover rate of private school teachers during the compulsory education stage and the achievement rate of school education goals can indirectly measure the work enthusiasm of school teachers and the effectiveness of incentive mechanisms. The incentive factors for private school teachers in the compulsory education stage include both material and non-material factors. This is same with the views put forward in the research content of Zhou Lijuan (2016). The research on the incentive mechanism for social organization growth has to some extent grasped the law between social organization growth and government Incentive, providing a systematic and sustainable path for social organizations and governments to clarify their relationship and promote each other's growth.

The research results of this paper have highly expanded the research contents and results of the above researchers, and better sorted out 3 Component of Teachers' Incentives of private colleges and universities.

However, the research of Researcher Qiu Kai (2011).it was found that Compared with ordinary personnel, members of the science and technology innovation team in local universities have higher cognitive abilities and rationality. There is an inverse ratio between the risk of delegation and the degree of control of the principal to the agent in the technology innovation team of local universities. Which was different.

6.2 Discussion about major findings of objective 2

After analyzing the exploratory factors, the model factors which are most suitable for the Teachers' Incentive components and Working Effectiveness components. Then used Multiple Indicators Multiple Causes (MIMIC) model for analysis, used to analyze the relationships between multiple observed variables and multiple latent factors.Through model analysis, the research obtains good model results based on data.

The results of this good model are obtained on the one hand because of the effectiveness of the research tool design based on theoretical analysis. On the other hand, it also reflects the important relationship between teacher motivation and work efficiency. However, whether the data model is real and effective, in addition to the data itself, also need the relevant field of experts, as well as practical practice. to better illustrate the effectiveness of the model.

6..3 Discussion about major findings of objective 3

The major findings were revealed as such because to propose the guidelines for improving the Working Effectiveness of Private Colleges and universities in Shenyang, Liaoning Province. By Working pressure, Job satisfaction and happiness and Promotion Incentive. In recent years, with the adjustment of national policies and economic transformation, the Northeast region of China has faced challenges such as economic restructuring and talent loss, which have also affected the development of private higher education in Shenyang city, Liaoning Province. While pursuing high-quality higher education, it is necessary to break free from the constraints of inefficient teacher efficacy, propose feasible specific measures and guidelines through feasible incentive strategies, inject vitality into regional higher education, and provide teachers with a diverse higher education environment and rich higher education content. Promote the quality of private higher education and the sustainable development of colleges. This guide is applicable to private colleges and universities in Shenyang city, Liaoning Province.

7. Recommendations

According to the research results of this paper, the following suggestions were

(1) In response to the serious problem of the turnover of highly educated young teachers, the leadership should take measures to improve their career development opportunities, provide promotion opportunities and development plans, and retain these promising teachers. The leadership should understand the ideological dynamics of teachers and the reasons for teacher turnover. Make every effort to meet talent needs, understand the relationship between departmental needs and teacher needs, protect the rights and interests of teachers, and increase their recognition to ensure that teachers are no longer lost.

(2) Improve the basic salary and welfare benefits of teachers, at least not lower than the level of public universities in the same region. Ensure that teachers maintain a balanced mindset in their work. On the basis of basic salary, use incentive mechanisms to reward teachers for their work and ensure their remuneration.

(3) In terms of welfare benefits, the leadership should take measures to provide more competitive benefits, including medical insurance, housing allowances, etc., to attract and retain outstanding teachers.

(4) Develop more diverse and widely recognized teacher performance standards to ensure fair evaluation of teachers' work and encourage them to continuously improve the quality of their work.

(5) Reduce the burden on teachers to allocate administrative tasks and ensure that they have sufficient time and energy for teaching and research work.

(6) Increase opportunities for teachers to participate in policy formulation to understand their needs and make policies more realistic. An anonymous suggestion platform can be established to allow teachers to express their personal wishes, so that they can truly understand their views on policy formulation. After the policy is formulated, anonymous voting is organized to understand teachers' recognition of the policy.

(7) In order to address the lack of happiness and satisfaction among teachers, the leadership should take measures to enhance their psychological well-being and professional satisfaction, including providing psychological counseling and support services, improving working conditions and educational resources, and enhancing interaction and support among teachers.

BIbliography

Elena Kokkinou, L. K. (2022). **Investigating differential teacher effectiveness: searching for the impact of classroom context factors.** SCHOOL EFFECTIVENESS AND SCHOOL improvingMENT, pp. VOL. 33, NO. 3, 403–430.

Guangwei, S. (2017). **Research on the Incentive Mechanism for Teachers in Private Schools during the Compulsory Education Stage.** China.

Hechuan, S., Wang , T., & Lu , L. (2010). **The Enlightenment of American Teacher Evaluation Indicators on the Structure of Teacher Evaluation Indicator System in Liaoning Province.** Education Science, pp. (06), 74-79.

Hua, J. (2007.6). **The Organizational Transition and Features of Chinese Private Higher Education-Perspective of the Sociology of Organizations.**

Jiao, W. (2013). **Research on the Construction of Administrative Management Teams in Private Art Higher Education Institutions.** China.

Kai, Q. (2011). **Research on the Incentive Mechanism of Science and Technology Innovation Teams in Local Universities in China.** China.

Lijuan, Z. (2016). **Research on Incentive Mechanism of Social Organization Growth in China.** China.

Lili, L. (2002). **Research on the Development Model of Private Higher Education in China.** China.

Ling, Z. (2018). **Empirical Study on Teacher Teaching Effectiveness from a Multicultural Perspective.** China.

Lisa Bardach, R. M. (2022). **Teachers' Psychological Characteristics: Do They Matter for Teacher Effectiveness, Teachers' Well-being, Retention, and Interpersonal Relations? An Integrative Review.** Educational Psychology Review, pp. 34:259-300.

Minghui, L. (2017). **Research on Teaching Efficacy and Related Factors of Teachers in Special Schools.** China.

Mohammad Rezaull Karim, N. A. (2021). **Self-efficacy: A Key Components of Teacher Effectiveness.** pp. 25(1):24-34.

Qingru, W. (2012). **Research on Strategies for Improving the Level of Private Higher Education Institutions.** China.

Qiongwen, C. (2010). **Research on the Motivation Effect of High School Teachers' Diligence.** China.

Rui, G. (2014). **Research on Strategies for Improving the Efficiency of Primary and Secondary School Teachers.** China.

Sofia Mastrokoukou, A. K. (2022, 3 28). **Rediscovering Teaching in University: A Scoping Review of Teacher Effectiveness in Higher Education.** Eduaction Received, p. Volume7|Article 86148.

Weicun, Q. (2021). **Moving towards positive organizational behavior: research on comprehensive performance incentive system for secondary vocational teachers.** China.

Xinquan, Z. (2012). **The impact of incentive factors on the teaching effectiveness of university teachers.** Journal of China Institute of Labor Relations, pp. (03),107-109.

Yonghong, C., & Huang, T. (2003). **The Origin, Problems, and Development Trends of Teacher Evaluation.** Journal of Beijing Normal University (Social Sciences Edition), pp. (01), 130-136.

Zhikun, Z. (2015, Nov 1). **A Study on the Motivation of University Teachers.** Nanjing, Jiangsu province, China.

The Environment Factors Affecting High School Students' Intention to Studying Abroad in Daqing City, Heilongjiang Province

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ABSTRACT

The objectives of this research were to: 1) To investigate the components of high school students' intention to study abroad in Daqing City, Heilongjiang Province. 2) To develop the model for the factors affecting high school students' intention to study abroad in Daqing City, Heilongjiang Province. 3) To analyze the direct and indirect effects on high school students' intention to study abroad in Daqing City, Heilongjiang Province.

The population for this research consists of high school students in Daqing City, Heilongjiang Province, totaling 6,373 for the academic year 2023. The sample size of 451 students was determined by G*Power software and, using a stratified random sampling method. The instrument's reliability coefficients for each component ranged from 0.841 to 0.957.

Research found that: 1) The component of high school students' intention to study abroad were 3 components namely; personal interests and career goals, quality and reputation of foreign university, and knowledge of application process, there were at moderate level; 2)The model of the factors affecting high school students' intention to study abroad in Daqing City, Heilongjiang Province fit well with empirical data (CMIN=2058.808 df=935 CMIN/df=2.202 CFI=0.914 TLI=0.909 RMR=0.042 RMSEA=0.052). 3) The Environmental Context had direct effect and indirect effect on the high school students' intention to study abroad via Attitudes and Beliefs, Educational Background and opportunities and Parental Involvement and Support.

Keywords: Daqing city, environment factor, students' intention, Factor effecting model

1. Introduction

Education plays a fundamental role in the development of human society, with each societal advancement accompanied by educational revolutions. Throughout history, education has evolved from personalized teaching to organized and large-scale systems, aiming to provide more comprehensive learning opportunities for students. The existing research on the motivation behind high school students' intention to study abroad in Daqing City, Heilongjiang Province, reveals certain gaps that need to be addressed. Firstly, previous studies have primarily approached this topic from a sociological perspective, attributing the motivation for studying abroad to macroeconomic and social factors such as economic policies, political climate, cultural differences, and variations in education quality. To address these research gaps, this study aims to investigate the motivations behind high school students' intention to study abroad in Daqing City, Heilongjiang Province, from the perspective of education consumption and consumer psychology. By exploring the impact of students' attitudes, motivations, and group consumer psychology, this research seeks to shed light on the extent to which motivations affect their choice of studying abroad and to examine whether students and their families make informed decisions or merely follow trends.

So this study will utilize a combination of theoretical analysis and empirical research to provide valuable insights into the motivations of high school students' study abroad behavior, ultimately contributing to the development of strategies and guidance for students, educators, and policymakers.

2. Research Questions

1. What is the component of high school students' intention studying abroad in Daqing City, Heilongjiang Province?

2. What is the model factors affecting high school students' intention to study aboard in Daqing City, Heilongjiang Province?

3. What are the direct and indirect factors that effect on high school students' intention to study abroad in Daqing City, Heilongjiang Province?

3. Research Objectives

1. To investigate the components of high school students' intention studying abroad in Daqing City, Heilongjiang Province.

2. To develop the model factors affecting high school students' intention to study aboard in Daqing City, Heilongjiang Province.

3. To analyze the direct and indirect effect on high school students' intention to study abroad in Daqing City, Heilongjiang Province.

4. Research Hypothesis

H1: The Environmental context had a positive direct effect on high school students' intention to study abroad in Daqing City.

H2: Attitudes and beliefs had a positive direct effect on high school students' intention to study abroad in Daqing City.

H3: Parental involvement and support had a positive direct effect on high school students' intention to study abroad in Daqing City.

H4: Educational background and opportunities had a positive direct effect on high school students' intention to study abroad in Daqing City.

H5: Environmental context had a positive direct effect on attitudes and beliefs on high school students in Daqing City.

H6: Educational background and opportunities and Study had a positive direct effect on Parental involvement and support on high school students in Daqing City.

H7: Attitudes and beliefs had a positive direct effect on educational background and opportunities on high school students in Daqing City.

H8: Environmental context had indirect effect on high school students' intention to study abroad via attitudes and beliefs.

H9: Environmental context had indirect effect on high school students' intention to study abroad via attitudes and beliefs, and educational background and opportunities.

H10: Environmental context had indirect effect on high school students' intention to study abroad via attitudes and beliefs, educational background and opportunities, and parental involvement and support.

5. Conceptual Framework
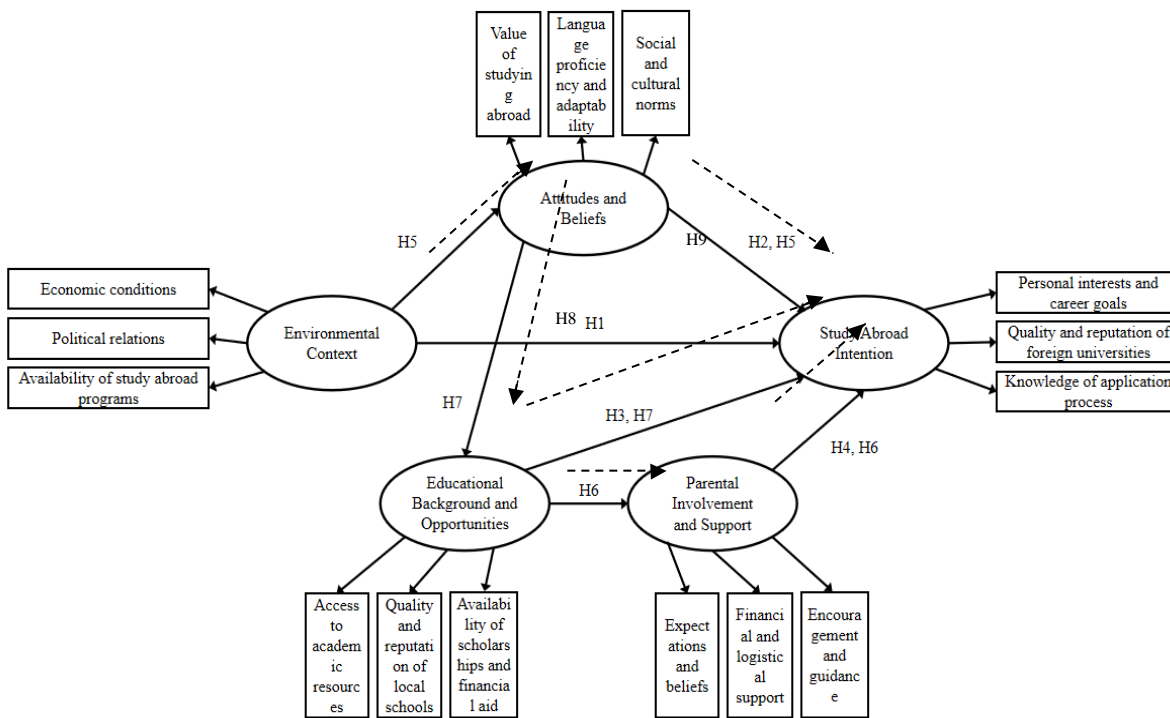
Figure 1 Conceptual framework of this research

6. Methodology

Research Design

This research divided into three main part follow up the research objectives, Firstly, study on literature review for find out the components of high school students' intention to study abroad, and some factors that influencing high school students' intention to study abroad. namely; Environmental context, attitudes and beliefs, educational background and opportunities, and parental involvement and support. The second, Development the model factors affecting high school students' intention to study aboard in Daqing City, Heilongjiang Province.   The data collected by the questionnaires from the samples. and third were data analyzed by confirmation factors analysis and structural equation model methods.

Population and Sample

This population was a high school students of Daqing city which 18 schools, on three distinct institutions, representing varied backgrounds and academic standings,   Selected for their rankings, international ties, and government support, they encapsulate both public and private educational. totaling 6,373. The sample determined by G*power and using stratified random sampling was 451 students.

Instruments

In the study focusing on high school students' study abroad intentions in Daqing City. Research instruments was a 5-point Likert scale questionnaire. There was 6 parts namely; demographics, high school students' study abroad intentions, Environmental context, attitudes and beliefs, educational background and opportunities, and parental involvement and support. There were experts verification ensures content validity by Index of Item-Objective Congruence (IOC), with each item has 0.60 - 1.00 and the questionnaire's reliability, by a Cronbach's alpha coefficient each component between 0.841-0.957.

Data Collection and Data Analysis

To collected data will be meticulously processed. Initial steps involve data cleaning, coding, and a preliminary descriptive analysis. The data analysis by SPSS for descriptive statistical. And inferential statistical by confirmation factor analysis (CFA) and the Structural Equation Model (SEM)

7. Results

1)Demographic statistics

Table 1: The basic information of respendents

Name	Level	Frequency	Percentage(%)	Cumulative Percent(%)
Gender	Male	235	52.11	52.11
	Female	216	47.89	100
Grade	First year	145	32.15	32.15
	Second year	148	32.82	64.97
	Third year	158	35.03	100
	Total	451	100	100

From Table 1, it was summarized, there were 235 male students, accounting for 52.11% of the sample size. There are 216 female students, accounting for 47.89% of the total. There were 145 second year students, accounting for 32.15% of the sample. 148 third year students, accounting for 32.82% and 158 fourth year students, accounting for 35.03%

2) Descriptive data analyzed

Table 2: Descriptive data for observed variables of factor

Name	$\bar{X}$	SD	%CV	Skwness	Kurtosis	level
EC1	3.25	1.10	34.10%	-0.03	-0.85	moderate

Name	$\bar{X}$	SD	%CV	Skwness	Kurtosis	level
EC2	3.27	1.06	32.70%	-0.12	-0.71	moderate
EC3	3.29	1.10	33.60%	-0.21	-0.74	moderate
PIS1	3.14	1.04	33.24%	0.07	-0.72	moderate
PIS2	3.28	1.06	32.36%	-0.11	-0.63	moderate
PIS3	3.28	1.07	32.46%	-0.11	-0.73	moderate
SAI1	3.04	0.98	32.19%	0.07	-0.43	moderate
SAI2	3.10	1.01	32.64%	0.01	-0.53	moderate
SAI3	3.22	1.04	32.47%	-0.16	-0.58	moderate
EBO1	3.34	0.94	28.29%	-0.29	-0.38	moderate
EBO2	3.17	1.04	32.85%	-0.10	-0.53	moderate
EBO3	3.17	1.02	32.22%	-0.12	-0.48	moderate
AB1	3.12	1.04	33.40%	0.14	-0.75	moderate
AB2	3.21	1.00	31.10%	0.01	-0.65	moderate
AB3	3.20	1.07	33.40%	-0.16	-0.57	moderate

Various factors (EC1, EC2, EC3, PIS1, PIS2, PIS3, SAI1, SAI2, SAI3, EBO1, EBO2, EBO3, AB1, AB2, AB3) have been assessed,There were mean between 3.04 to 3.44 at moderate level,the S.D between 0.94 to 1.10. standard deviations (SD) and moderate to high coefficient of variation (%CV) between 28.29 to 34.10 more over. Skewness were between -0.29 to 0.14 and kurtosis values were between -0.85 to -0.38, suggest that the data distribution was a normal distribution and analysis to the each factor at table 3.

Table 3: Intercorrelation of latent variables

Latent variables	EC	AB	PIS	SAI	EBO
EC	1				
AB	0.277**	1			
PIS	0.286**	0.332**	1		
SAI	0.250**	0.399**	0.409**	1	
EBO	0.384**	0.467**	0.522**	0.504**	1

From Table 3, it was summarized that the correlation values of EC AB PIS SAI and EBO were 0.277, 0.286, 0.250 and 0.384,(P<0.01). As a result, there was a significant relationship between EC,AB,PIS,SAI and EBO.

3) measurement model

The model factors affecting high school students' intention to study aboard in Daqing City, Heilongjiang Province. The research have 5 factors namely; 1)Attitudes and Beliefs, 2)Educational Background and Opportunities, 3)Parental Involvement and Support, and 4)Study Abroad Intention,and 5)Environmental Context
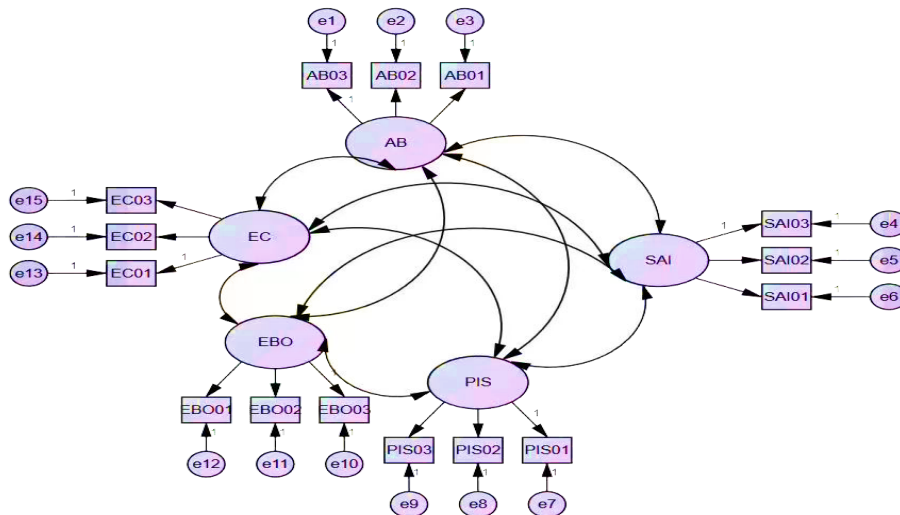
CMIN=2058.808,df=935,CMIN/df=2.202,CFI=0.914,
TLI=0.909,RMR=0.042,RMSEA=0.052

Figure 2 The Measurement Model in Standardized estimates.

The figure 2 the indicators show that the model fit well with empirical data. There were criterion indicator at Chi-square test, degrees of freedom, relative chi-square, Comparative Fit Index (CFI). As table 4.

Table 4: Measurement model fit valuation after modifying.

Measure	Estimate	Threshold	Interpretation
CMIN	2058.808		
df	935		
CMIN/df	2.202	1-3 Excellent, 3-5 Acceptable	Excellent
CFI	0.914	>0.95 Excellent,>0.9 Acceptable	Acceptable
TLI	0.909	>0.95 Excellent,>0.9 Acceptable	Acceptable
RMR	0.042	<0.05 Excellent, <0.08 Acceptable	Excellent
RMSEA	0.052	<0.05 Excellent, <0.08 Acceptable	Acceptable

On the measurement model the research was testing for the quality of the model by composite reliability (CR), average variance extracted (AVE), and this discriminant power of measurement model as the table 5.

Table 5: Composite reliability (CR), average variance extracted (AVE), and factor discriminant.

Latent variables	CR	AVE	EC	AB	PIS	SAI	EBO
EC	0.91	0.54	0.74				
AB	0.91	0.54	0.28**	0.73			
PIS	0.92	0.54	0.29**	0.33**	0.74		
SAI	0.94	0.63	0.25**	0.40**	0.41**	0.79	
EBO	0.93	0.58	0.38**	0.47**	0.52**	0.50**	0.76

In the provided data, the relationships between latent variables are presented, including the composite reliability (CR) and average variance extracted (AVE) values. The focus is on the relationships among the latent variables Environmental Context (EC), Attitudes and Beliefs (AB), Parental Involvement and Support (PIS), Study Abroad Intention (SAI), and Educational Background and Opportunities (EBO).There was a good measurement model.

4) structural equation mode
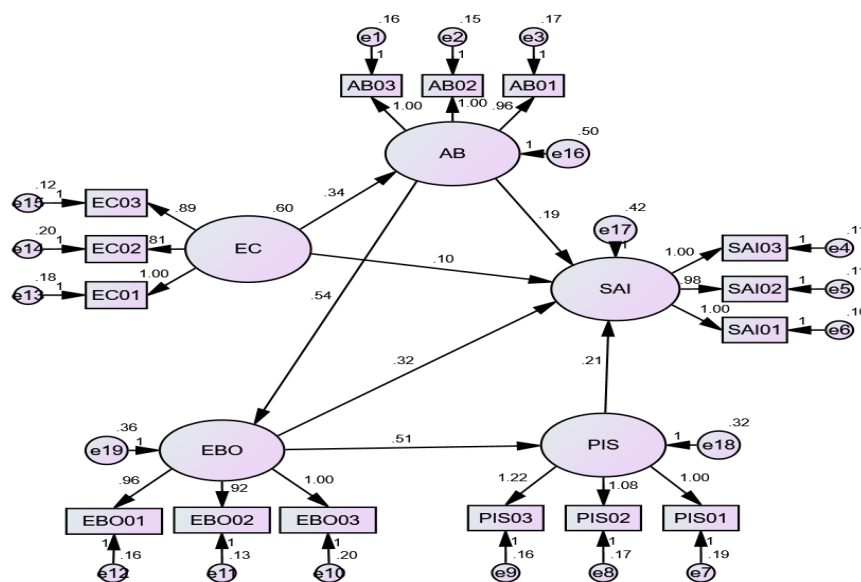
CMIN=2058.808,df=935,CMIN/df=2.202,CFI=0.914,
TLI=0.909,RMR=0.042,RMSEA=0.052

Figure 3. Structural equation models and their path coefficients in the evaluation of standardized models.

As can be seen from Figures 3, the structural equation model of factors affecting high school students' intention to study aboard in Daqing City, Heilongjiang Province. The environmental Context (EC), Educational Background and Opportunities(EBO), Attitudes and Beliefs (AB) and Parental Involvement and Support (PIS) had the direct affect of Study Abroad Intention (SAI), as the table 6

Table 6: The hypotheses testing of direct effect

Relationship	Standardized	Unstandardized	S.E.	C.R.	P	Label
SAI<---EC	0.10	0.11	0.05	2.20	*	H1
SAI<---AB	0.19	0.17	0.05	3.46	***	H2
SAI<---PIS	0.18	0.14	0.04	3.36	***	H3
SAI<---EBO	0.31	0.32	0.07	4.94	***	H4
AB<---EC	0.28	0.29	0.06	4.36	***	H5
PIS<--- EBO	0.21	0.14	0.03	2.85	*	H6
EBO<--- AB	0.19	0.31	0.05	2.11	*	H7

From the table 6, Environmental Context (EC), Educational Background and Opportunities(EBO), Attitudes and Beliefs (AB) and Parental Involvement and Support (PIS) had the direct affect of Study Abroad Intention (SAI) with statistical significant (p<.05).

The Attitudes and Beliefs (AB) was mediates on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI), Attitudes and Beliefs (AB) and Educational Background and Opportunities (EBO) act as mediating on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI). and Attitudes and Beliefs (AB) , Educational Background and Opportunities(EBO) and Parental Involvement and Support (PIS) act as mediating on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI) act as mediating on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI).As table 7

Table 7: The effect of indirect effects

Relationship	Estimate	Lower	Upper	p	Hypothesis
SAI<---AB<---EC	0.069	0.029	0.118	0.001	H8
SAI<---EBO<---AB<---EC	0.140	0.084	0.209	0.001	H9
SAI<---PIS<---EBO<---AB<---EC	0.103	0.037	0.177	0.002	H10

From Table 7, EC was summarized that the indirect effect on EC to SAI via AB was 0.069, and had direct effect on SAI via AB, EBO was 0.140, and had direct effect on SAI via AB,EBO and PIS was 0.103.The total indirect effect was 0.312.

8. Conclusion

1) The components of high school students' intention to study abroad were 5 components and there were at high level. 2)The model of to develop the model for the

factors affecting high school students' intention to study abroad in Daqing City, Heilongjiang Province fit well with empirical data (CMIN=2058.808 df=935 CMIN/df=2.202 CFI=0.914 TLI=0.909 RMR=0.042 RMSEA=0.052); and 3) Environmental Context, Educational Background and Opportunities, Attitudes and Beliefs, and Parental Involvement and Support had the direct effect of high school students' intention to study abroad with statistical significant (p<.05), For analyzed   indirect effect on relationship between Environment Context factor and high school students' intention to study abroad when Attitudes and Beliefs, Educational Background and Opportunities, and Parental Involvement and Support were   mediators, the result was found the Environment Context factor had indirect effect to high school students' intention to study abroad via Attitudes and Beliefs, Educational Background and Opportunities, and Parental Involvement and Support with statistical significant (p<.01). that show all the hypothesis were accepted. As follows;

For the direct effect:

H1: The Environmental Context had a positive direct effect on high school students' intention to study abroad in Daqing City, was accepted.

H2: Attitudes and Beliefs had a positive direct effect on high school students' intention to study abroad in Daqing City, was accepted .

H3: Parental Involvement and Support had a positive direct effect on high school students' intention to study abroad in Daqing City, was accepted

H4: Educational Background and Opportunities had a positive direct effect on high school students' intention to study abroad in Daqing City, was accepted.

H5: Environmental Context had a positive direct effect on Attitudes and Beliefs of high school students in Daqing City, was accepted.

H6: Educational Background and Opportunities and Study had a positive direct effect on Parental Involvement and Support of high school students in Daqing City, was accepted.

H7: Attitudes and beliefs had a positive direct effect on Educational Background and Opportunities of high school students in Daqing City, was accepted.

For indirect effect:

H8: Environmental Context had a positive indirect effect on high school students' intention to study abroad via Attitudes and beliefs, was accepted.

H9: Environmental Context had a positive indirect effect on high school students' intention to study abroad via Attitudes and beliefs and Educational Background and Opportunities was accepted.

H10: Environmental Context had a positive indirect effect on high school students' intention to study abroad via Attitudes and beliefs, Educational Background and Opportunities, Parental Involvement and Support was accepted.

9. Discussion

1) The component of high school students' intention to study abroad were 5 components and there were at high level. This is an encouraging discovery, indicating that high school students have a high interest in studying abroad. However, further research is needed to understand what these five components are and how they affect willingness to study abroad. Understanding the nature and impact of these components can help schools and governments develop more effective policies to encourage and support high school students' desire to study abroad. Zhang Weiguo; Feng Songke; Yi Xuemei; You Fang; &He Xiying. (2018) discovered that Chinese students' positive attitudes towards overseas studies were primarily fueled by the potential benefits of international education, mirroring the sentiments expressed by the high school students in Daqing City. Yingwen, S. (2016) also found that students with better educational backgrounds and more opportunities were more inclined to pursue overseas education. Such students are usually aware of the advantages that international education can offer and are, therefore, more eager to study abroad.

2) The model of to develop the model for the factors affecting high school students' intention to study abroad in Daqing City, Heilongjiang Province fit well with empirical data (CMIN=2058.808 df=935 CMIN/df=2.202 CFI=0.914 TLI=0.909 RMR=0.042 RMSEA=0.052); Fitting indicators such as CMIN/df, CFI, TLI, RMR, and RMSEA show a good fit between the model and empirical data. This indicates that the developed model is an effective tool for studying the factors that effect the willingness of high school students in Daqing to study abroad. This is crucial for formulating policies and taking action to support and encourage high school students' willingness to study abroad. Xinning, Pei., Xinyang, Liu., J. (2013) also emphasized the role of attitudes and beliefs as mediating factors between various external affects and the study abroad intention of students

3) Environmental Context, Educational Background and Opportunities, Attitudes and Beliefs and Parental Involvement and Support had the direct effect on high school students' intention to study abroad with statistical significant (p<.05), when Attitudes and Beliefs (AB) was mediates on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI), Attitudes and Beliefs (AB) and Educational Background and Opportunities(EBO) act as mediating on the relationship between Environmental Context (EC) and Study Abroad

Intention (SAI). and Attitudes and Beliefs (AB) , Educational Background and Opportunities(EBO) and Parental Involvement and Support (PIS) act as mediating on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI) act as mediating on the relationship between Environmental Context (EC) and Study Abroad Intention (SAI).This finding indicates that these factors directly affect the willingness of high school students to study abroad, including their environment, educational background and opportunities, attitudes and beliefs, and parental participation and support. The direct impact of these factors is worth noting as they can be used to guide policy formulation and intervention measures to increase the willingness of high school students to study abroad. Triffin, & Bernie (2011) emphasized the vital role of parents in shaping students' study abroad aspirations. Drawing parallels with Prasanth and Daniel Solomon. (2013) research, the critical role that parental support and involvement play in influencing students' aspirations for international education is reinforced. The synthesis of attitudes and beliefs with educational background and opportunities in influencing study abroad intention is a complex interplay, as highlighted by Morpurgo & Azevedo. (2021). In addition, the study also found that attitudes and beliefs play a mediating role between environmental background and willingness to study abroad, while educational background and opportunities also play a mediating role between environmental background and willingness to study abroad. This means improving the attitudes and beliefs of high school students, as well as providing more educational backgrounds and opportunities, which may further increase their willingness to study abroad. Therefore, educational institutions and governments can take measures to promote a positive attitude and provide more educational opportunities to support high school students' willingness to study abroad.

10. Recommendation

(1) Recommendation for Policy Formulation:

Policymakers should take steps to diversify curricula and democratize access to resources. Moreover, integrating cross-cultural insights into educational systems and emphasizing the role of parents as collaborators will foster an environment conducive for students to pursue international education.

(2) Recommendation for Practical Application:

Educational institutions should emphasize the importance of robust support systems and career counseling. For educators, it's vital to incorporate a global perspective in teaching and bridge the theoretical with real-world experiences. Parents should be engaged through

open dialogues about international education's benefits and equipped with necessary tools to support their children's ambitions.

(3) Recommendation for Further Research:

Future research could delve into how factors identified operate in various Chinese regions or even internationally. There's potential in longitudinal studies that monitor students' intentions over extended periods. The influence of digital platforms, like online learning, on study abroad intentions should be explored. Embracing qualitative methods could offer deeper insights, and assessing real-world policy impacts can help refine strategies further.

BIbliography

Morpurgo, M. T., & Azevedo, A. (2021). **Investigating the Role of Professional Accounting Education in Enhancing Meta-Competency Development: Aligning with Industry Perceptions.** In Integration and application of business graduate and business leader competency-models, (p. 1-26).

Prasanth. M. and Daniel Solomon. (2013). **Leadership Competency.** IOSR. Journal of Humanities and Social Science.

Triffin, & Bernie (2011). **21st Century Skills: Learning for the times of our survival.** Tianjin Academy of Social Sciences Press.

Xinning, Pei., Xinyang, Liu., J. (2013,12). **Establishment of the EU "core literacy" framework for rebuilding education in the 21st century.**Global Education Outlook.

Yingwen, S. (2016, May). **Research on the related Factors of Incentive System on Students' Learning Enthusiasm.** Intelligence, p. 71.

Zhang Weiguo; Feng Songke; Yi Xuemei; You Fang; &He Xiying. (2018, Aug 1). **Analysis of the Factors Influencing the Learning Motivation of College tudents.** Education and Teaching Forum, pp. 52-54.

The Improvement of Students' Leadership Training Model in Medical Colleges and Universities in Henan Province under The Background of The New Era

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ABSTRACT

The objectives of this research were: (1) to explore the components and indicators of college students' leadership training in medical vocational colleges in Henan Province; (2) To improve the model of college students' leadership training development in medical vocational colleges in Henan Province; and (3) to propose the guidelines of college students' leadership training in medical vocational colleges in Henan Province for improving the leadership of college students based on the new era.

The research was a mixed methodology design which were comprised of quantitative and qualitative research, divided to 3 phase: 1) Exploratory the students' leadership training on literature reviews and 9 experts interview; 2) Exploratory on the component and indicators by questionnaire on the teachers in medical colleges which the IOC of each item between .06-1.0 and questionnaires' reliability was .89. The sample was total of 300 teachers, used stratify random sampling technique. The data were analyzed by EFA. And 3) Proposing the guidelines of college students' leadership training by 17 expertise follow up Delphi technique applied (2 rounds).

The research found that; (1) There were five dimensions of the improvement of college students' leadership training in medical vocational colleges in Henan Province, namely; Leadership Magnets， Leadership Envision, Leadership Decision-Making Ability， Leadership Influence and Leadership Control. There was 80 indicators; (2) The model of college students' leadership training development in medical vocational colleges in Henan Province. There were

5 components and total 31 indicators construction namely; Students Leadership Magnetism(LM) on 4 indicators, College Students Leadership Envision(LE) on 9 indicators, College Students Leadership Decision-Making Ability (LD) on 3 indicators, College Students Leadership Influence (LI) on 9 indicators and College Students Leadership Control (LC)on 6 indicators; and (3) the guideline of college students' leadership training in medical vocational colleges in Henan Province for improvement students' leadership training in medical vocational colleges in Henan Province as "MEDIC Model".

Keywords: College Students' Leadership, Medical Colleges and universities, Henan Province, MEDIC Model

1. Introduction

Now, the colleges and universities see the importance and responsibility of deepening the comprehensive reform of higher education and promoting to the implementation of the national innovation-driven development strategy. The fundamental task is to cultivate talents and the leadership of college students is an important embodiment of the value of talent cultivation. Under the background of the new era, there are higher requirements for the overall leadership level of college students. In October 2018, the Ministry of Education issued documents such as the "Opinions of the Ministry of Education on Accelerating the Construction of High-Level Education and Comprehensively Improving the Ability to Cultivate Talents" of Higher Education in the New Era. It is proposed to unswerving follow the path of connotative development, Accelerate the formation of a high-level talent training system. Implement the "Six Excellence and One Top-notch" plan taking "deepening the reform of innovation and entrepreneurship education in colleges and universities as a breakthrough to promote the comprehensive reform of higher education"(Yao Yongzhi, & Wu Yang, 2005). Strengthen the practice of innovation and entrepreneurship and the construction of "double innovation" model universities, improve the level of innovation and entrepreneurship education. Build a world-class outstanding talent training system with Chinese characteristics.

With the updating of the concept on talents cultivation and the development on reformation of high-quality education, training high-quality talents with outstanding leadership ability becomes an important task for colleges and universities. Under the background of the new era, it has become an important task for the construction of colleges and universities in the new era to build a new framework for the cultivation of talents in higher vocational colleges and medical colleges, and to cultivate high-quality talents with excellent leadership skills and in line with the development needs of the new era (Dugan, 2011; Haber, 2011). The

in-depth development of leadership education for college students in higher vocational colleges and medical colleges meets the requirements of my country's higher education talent training framework system, and helps promote medical college students to achieve comprehensive personal development. It has far-reaching significance for improving the talent training framework in colleges and universities.

2. Research Questions

1. What are the components and indicators of college students' leadership training of college students in Medical Vocational Colleges in Henan Province under the background of the new era?

2. What is the leadership improvement model for students' leadership training in Medical Vocational Colleges in Henan Province under the background of the new era?

3. What is the guideline of college students' leadership training improvement in Medical Vocational Colleges in Henan Province under the background of the new era?

3. Research Objectives

1. To explore the components and indicators of college students leadership training in Medical Vocational Colleges in Henan Province under the background of the new era.

2. To development the model leadership training of college students improvement in Medical Vocational Colleges in Henan Province under the background of the new era.

3. To propose the guideline for improving the leadership of college students based on the research results in Henan Province under the background of the new era.

4. Research Framework
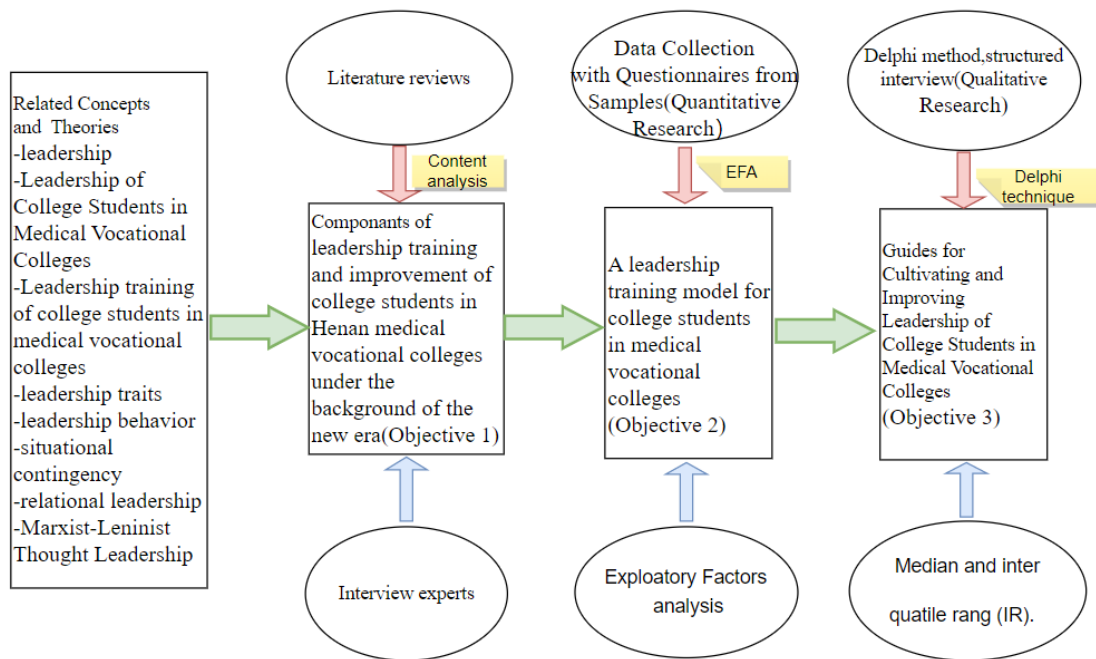
Figure 1 Research Framework

5. Research Methodology

This research adopted on the qualitative and quantitative research. There are three processes involved in research details were as follows:

Research Design

To achieve the aims of this research, the researcher was designed   main structural to three stages, as follows:

Stage One: Find out the components and indicators of college students' leadership training in Medical Vocational Colleges in Henan Province under the background of the new era.

In this stage was qualitative study, the researcher studied on literature and engaged with a panel of nine key informants, consisting of experienced leaders from student offices in university, the deputy secretary of the student affairs department, scholars specializing in human resources, and seasoned counselors. These informants were purposive selected based on specific criteria, including their extensive teaching and administrative backgrounds in medical education. Data were collected through the utilization of a semi-structured interview form, conducted through online, mail, and in-person interactions. The subsequent data analysis employed a content analysis approach. This comprehensive methodology aimed to provide valuable insights into the development of leadership training within the context of

medical education, encompassing relevant concepts, principles, and theories.

Stage Two: To development the model leadership training of college Students improvement in Medical Vocational Colleges in Henan Province under the background of the new era.

In this stage was quantitative study, the researcher developed a questionnaire based on the data of stage 1 were related to enhancing college students' leadership training. The data collection by 5 point scale questionnaire, totaling 80 item, there were validity of each item between 0.60 to 1.00, reliability was .98 , the data gathering from the sample size with determined by Krejcie and Morgan (1970) was totaling 300 instructors and leaders who work in five medical vocational colleges and universities under Henan Province and used stratify random sampling method. the data analyzed by exploratory factor analysis (EFA), and the researcher make a draft   format of model relationship of the new components and indicators for college students' leadership training on medical vocational colleges in Henan Province under the background of the new era.

Stage Three: Propose the guidelines of college students' leadership training in medical vocational colleges in Henan Province under the background of the new era.

In this stage was qualitative study, the researcher propose the training guidelines for college students' leadership in medical vocational colleges under Henan Province base on the result of stage 2, using the Delphi applied technique with 17 experts, included leaders from university student offices, deputy secretaries of student affairs departments, human resources scholars, and experienced counselors, all with professor must be academic position and over 15 years of administrative experience. The researcher was facilitated on data collection through contact, emails, and summarization of expert's discussions. The data analyzed by median, inter-quartile range (IR) and content analysis.

6. Results

The result of the research found that;

1) On the step 1; From the literature review and interview form (objective 1) found that;.

The components and indicators of college students leadership training in Medical Vocational Colleges in Henan Province under the background of the new era from literature review and experts interview, there were total 5 components and 80 indicators as table 1.

Table 1: Show the summary of components and indicators on the literature and experts

interview.

No	components and indicators
1	Decisiveness: The degree of promptness and firmness in making decisions.
2	Confidence: The perception and belief in one's own abilities and worth.
3	Honesty and integrity: The qualities of adhering to moral and ethical principles, being truthful, and trustworthy.
4	Perseverance: The ability to maintain determination and resolve in the face of difficulties and challenges.
5	Protectiveness: Taking initiative and assuming responsibility for actions
6	Creativity: The ability to generate new ideas, solve problems, and explore new domains.
7	Cooperativeness: The willingness to collaborate, share resources, and pursue common goals.
8	Positivism: Approaching things with a positive and optimistic attitude.
9	Desire for knowledge: A strong interest and pursuit of learning and knowledge acquisition.
10	Verbal expression ability: The ability to articulate thoughts and opinions clearly and accurately.
11	Conflict resolution: The ability to handle and resolve conflicts effectively, including listening to various perspectives, mediating, and seeking consensus.
12	Adaptive communication: The ability to adjust communication style and approach based on different individuals and situations.
13	Cross-cultural communication: The ability to communicate effectively in different cultural contexts, respecting and understanding cultural differences.
14	Clarity in expression: The ability to convey information using concise, clear language to avoid ambiguity and confusion.
15	Team communication: The ability to communicate and coordinate effectively with team members in collaborative settings, promoting cooperation and collaboration.
16	Social influence: The ability to influence others positively and persuasively, gaining acceptance and support for one's viewpoints.
17	Digital communication: The effective use of digital tools and technologies for

No	components and indicators
	communication, such as email, social media,
18	Communication and coordination ability: The ability to effectively communicate, exchange information, and coordinate work and tasks among team members.
19	Trust and collaboration: Establishing trust relationships among team members, actively participating in collaboration, and working together to achieve team goals.
20	Role awareness and responsibility: Understanding and accepting one's role in the team and taking on corresponding responsibilities and obligations.
21	Complementation and diversity: Making full use of the diverse skills, experiences, and backgrounds of team members to achieve complementary and diversity.
22	Problem-solving and decision-making skills: The ability to collectively face and solve problems encountered by the team, make decisions, and execute them.
23	Effective division of labor and collaboration: Appropriately assigning tasks based on members' abilities and strengths and collaborating to complete them.
24	Supervision and feedback: Monitoring the progress of team members' work and providing timely feedback and guidance.
25	Influence and motivation: Influencing and motivating team members in a positive manner to stimulate their motivation and cooperative spirit.
26	Conflict management: Identifying and managing internal conflicts within the team and promoting a harmonious working atmosphere.
27	Flexibility and adaptability: Adapting to changing work environments and requirements and flexibly adjusting team work methods and strategies.
28	Effective time management:
29	Team cohesion: Promoting cohesion among team members and fostering a sense of team identity to enhance team unity and spirit.
30	Sense of responsibility and self-management: Taking personal responsibility for work and behavior, and possessing self-management abilities to maintain

No	components and indicators
	a high level of work efficiency.
31	Emotional recognition: Recognizing and understanding one's own emotions and the emotions of others, including emotional expression and experience.
32	Emotional management: Effectively managing and regulating one's own emotions to adapt to different situations and challenges.
33	Self-awareness: Awareness and understanding of one's emotional state, including the sources and influences of emotions.
34	Guiding others' emotions: Helping others recognize and manage their emotions to facilitate positive interactions and cooperation.
35	Emotional expression: The ability to effectively express one's emotions to establish good communication and understanding.
36	Emotional adaptability: The ability to adapt to and cope with different emotions, including coping with stress and dealing with setbacks.
37	Self-motivation: The ability to motivate oneself and maintain a positive emotional state to achieve personal and team goals.
38	Empathy: The ability to understand and empathize with others' emotions, showing care and support.
39	Conflict resolution: Effectively dealing with and resolving emotional conflicts to achieve harmony and cooperation.
40	Flexibly adjusting emotions and coping strategies adapt to different situations and changes.
41	Emotional control: The ability to control emotions and not let emotions dominate behavior and decision-making.
42	Cultivating positive emotions: Cultivating and enhancing positive emotions such as joy, optimism.
43	Emotional regulation techniques: Mastering techniques to regulate emotions, such as relaxation training and breathing exercises.
44	Psychological resilience: Possessing psychological resilience to cope with challenges and adversity, and to recover and grow from them.
45	Analytical skills: The ability to analyze the causes of problems, key factors, and possible solutions.

No	components and indicators
46	Creative thinking: Possessing exploratory and innovative thinking to propose unique and effective solutions.
47	Logical thinking: Applying logical and reasoning abilities to establish clear problem-solving frameworks and approaches.
48	Team collaboration: Working with others to solve problems, effectively utilizing their respective skills and experiences.
49	Information gathering and analysis: The ability to search for, collect, and evaluate relevant information to support the problem-solving process.
50	Synthesis ability: Integrating knowledge, skills, concepts on different fields to solve problems.
51	Effective communication: Clearly expressing problems and solutions, and engaging in effective communication and coordination with others.
52	Adaptability: Being flexible in adapting to changes and uncertainties, and making timely adjustments to solutions.
53	Reflection and improvement: Reflecting on the problem-solving process and outcomes, learning from experiences, and continuously improving.
54	Resilience: Maintaining calmness and rationality in high-pressure environments, effectively dealing with challenges and difficulties.
55	Interdisciplinary thinking: Combining knowledge and approaches from different disciplines to gain a more comprehensive perspective on problem-solving.
56	Systems thinking: Thinking about problems from a holistic and comprehensive perspective, considering various factors and their interrelationships.
57	Goal setting: Being able to set clear, specific, measurable, and achievable goals.
58	Market and competitive analysis: Analyzing the market environment and competitors to develop adaptable strategies.
59	Opportunity identification: Being able to identify and seize opportunities, including discovering new markets, technologies, and partnerships.
60	Resource allocation: Effectively allocating and managing resources, including financial, human, and material resources.

No	components and indicators
61	Flexibility and adaptability: Being able to adjust strategies and plans flexibly according to changing environments and conditions.
62	Collaboration and partnerships: Establishing and maintaining good collaborative relationships, including collaboration with internal teams and external partners.
63	Data analysis and decision support: Being able to use data and analytical methods to support decision-making and strategic planning.
64	Time management: Effectively managing time and scheduling work and strategic execution.
65	Continuous learning and self-development: Continuously learning and growing, staying updated and adaptive to the industry and field.
66	Brand and reputation management: Recognizing the importance of brand and reputation for strategic success and actively managing and maintaining them.
67	Leadership and influence: Possessing leadership skills and influence, being able to motivate and guide teams in implementing strategies.
68	Goal setting and clarity: Setting and clarifying the goals of the team or organization, enabling team members to have a clear understanding of their pursuit.
69	Positive motivation: Motivating team members through rewards, recognition, and praise to encourage active participation and improved performance.
70	Inspiring individual motivation: Understanding team members' motivations and needs to inspire their intrinsic drive and commitment to their work.
71	Influence and persuasion: Using effective communication and personal charisma to influence others' viewpoints, beliefs, and behaviors.
72	Encouraging innovation: Inspiring team members to propose new ideas and innovative concepts to provide new solutions and improve work processes.
73	Providing challenges: Offering team members challenging tasks and projects to stimulate their learning and growth.
74	Personal demonstration: Motivating others through personal behavior and leading
75	Building trust: Creating an atmosphere of mutual trust, fostering willingness

No	components and indicators
	for mutual support and cooperation among team members.
76	Assisting problem-solving: Providing guidance and advice to help team members overcome obstacles and difficulties.
77	Establishing cooperative relationships: Promoting positive interactions with others and building harmonious working relationships.
78	Empowerment and delegation: Granting team members more autonomy and responsibility to enhance their sense of involvement and ownership.
79	Knowledge sharing: Encouraging team members to share knowledge and experiences, enhancing the overall team performance.
80	Positive feedback: Providing timely positive feedback and recognition to encourage team members to continue achieving excellent results

2) On step 2; Data analyzed by Exploratory Factor analysis

Base on the step 1; the researcher was created as a questionnaire, total 80 items, and sent to the 300 samples. The data were analyzed by EFA as follows;

2.1) Test of KMO and Bartlett's test as table 2

Table 2: Shows KMO and Bartlett's test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.863
Bartlett's Test	Approx. Chi-Square	19141.7
	df	465
	Sig.	.000

From table 2, it was evident that The KMO test results of the data collected from the research were .863.

2.2) Test for Exploratory factors analysis

On data from the questionnaire, result on exploratory analysis as table 3

Table 3: Components of college students' leadership training in medical vocational colleges in Henan Province

Order	Components	Number of Variables	Factor Loading

1	Component 1	6	0.741-0.949
2	Component 2	9	0.749-0.989
3	Component 3	9	0.829-0.915
4	Component 4	4	0.736-0.895
5	Component 5	3	0.79-0.862
	Total	31	0.736-0.989

From Table 3, it was summarized that these five components encompassed 31 variables, with factor loading spanning from 0.736 to 0.989. and each component there were indicators analyzed as follow table 5.

Table 4: Rotated Component Matrix

variable	Component					Reliability
	1	2	3	4	5	
LM5	0.915					
LM6	0.829					
LM7	0.836					0.953
LM8	0.888					
LM9	0.880					
LM10	0.915					
LC1		0.749				
LC2		0.771				
LC3		0.776				
LC4		0.765				0.966
LC5		0.789				
LC6		0.986				
LC9		0.984				
LC10		0.987				
LC11		0.989				
LD2			0.878			
LD3			0.896			
LD4			0.901			
LD6			0.741			
LD10			0.936			0.976
LD11			0.949			

variable	Component					Reliability
	1	2	3	4	5	
LD12			0.945			
LD13			0.945			
LD14			0.942			
LE5				0.82		
LE6				0.736		0.900
LE12				0.895		
LE13				0.87		
LI6					0.852	
LI7					0.862	0.874
LI8					0.790	

The rotated component matrix provides the standardized factor loading (after rotation). Composite Reliability (CR)>0.70 (Hair,1998)

Following the recommendations of Hair and Fornell, each construct demonstrates convergent validity.

Table 5 Discriminant and Convergent Validity Analysis Table:

Dimensional	Reliability	Inter-Item Correlation Matrix					Descriptive Statistics		
		LM	LC	LD	LE	LI	Mean	SD	n
LM	0.95	1					2.28	0.94	300
LC	0.96	0.45	1				3.17	1.01	300
LD	0.98	0.39	0.37	1			2.90	0.69	300
LE	0.87	0.34	0.41	0.30	1		1.50	0.26	300
LI	0.87	0.34	0.43	0.39	0.42	1	3.28	0.94	300

Explanation: lower triangle values represent the Pearson correlations between constructs.

On the Table 5, there are a total of 300 samples for descriptive statistics. The means and standard deviations are shown in the table. The Cronbach's alpha values are all greater than 0.70. This conforms to the recommended criteria of Cronbach's alpha greater than 0.70, as suggested by Heir in 2010. This indicates good reliability and convergent validity.

Based on the results of the analysis of components of the college students' leadership training using Exploratory Factor Analysis. There were 5 components and total 31 indicators construction namely; Students' Leadership Magnetism (LM) on 4 indicators, College Students'

Leadership Envision (LE) on 9 indicators, College Students' Leadership Decision-Making Ability (LD) on 3 indicators, College Students' Leadership Influence (LI0 on 9 indicators and College Students' Leadership Control

(LC) on 6 indicators. It can be summarized as shown in Figure 2.
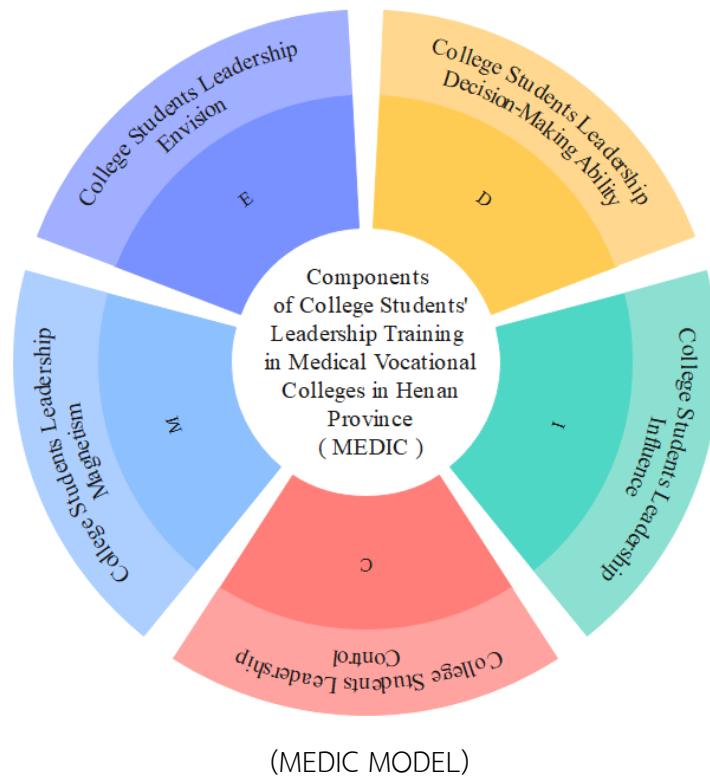
(MEDIC MODEL)

Figure 2 Components of College Students' Leadership Training in Medical

      3) On the step 3; From the MEDIC Model (Figure 2), it should be use for The Improvement of Students' Leadership Training guild line in Medical Colleges and Universities in Henan Province under the background of the new era. After use Delphi applied technique 2 rounds with consensuses on 17 experts opinion (medium > 3.5, and IR < 1.00). there were consisted of five components as follows.

      There were 5 components and total 31 indicators construction namely;

         1) Students Leadership Magnetism (LM) on 6 indicators,

            1.1) believe in their own potential and strive for excellence in their studies and future careers

            1.2) Responsible leaders should be mindful of the well-being and needs of their fellow students.

            1.3) Honesty and integrity are crucial qualities that leaders of college students in medical vocational colleges

1.4) Proactiveness is another essential quality that leaders of college students,

1.5) adaptive, resourceful, and forward-thinking professionals in the medical field.

1.6) positive and optimistic attitude, leaders can inspire, motivate, and create a supportive environment.

2) College Students Leadership Envision (LE) on 4 indicators,

2.1) Vision and future orientation enable leaders to navigate uncertainties and challenges

2.2) Systems thinking promotes a proactive and anticipatory approach to problem-solving, helping leaders navigate complexities and achieve

2.3) Goal setting promotes accountability, teamwork, and a shared commitment to the college's mission, leading to improved performance and overall success

2.4) Market and competitive analysis foster strategic decision-making, innovation, and responsiveness

3) College Students Leadership Decision-Making Ability (LD) on 9 indicators,

3.1) Time management enhances productivity, reduces stress, and creates a structured and efficient work environment

3.2) Creative thinking is essential for addressing complex issues, seizing opportunities, and driving positive change

3.3) Identifying assumptions, considering multiple viewpoints, and using logical reasoning, critical thinkers

3.4) Logical thinking enhances problem-solving capabilities, promotes rational decision-making

3.5) Quick decision-making complements other leadership skills, such as critical thinking and adaptability

3.6) Building trust, promoting effective communication, and recognizing individual strengths,

3.7) Information gathering and analysis empower leaders to address challenges and seize opportunities with confidence

3.8) Synthesis ability empowers leaders to navigate complexities, make well-informed decisions

3.9) Effective communication enhances problem-solving, decision-making, and coordination

4) College Students Leadership Influence (LI) on 3 indicators

4.1) Effective goal setting and clarity create a positive impact on the college's

performance, culture, and overall success

4.2) Positive motivation fosters a positive work culture, enhances job satisfaction

4.3) Inspiring individual motivation leads to a positive and energized team, driving enhanced performance

5) College Students Leadership Control (LC) on 9 indicators.

5.1) Effective communication and coordination ability

5.2) Trusting relationships and collaborative efforts.

5.3) Awareness and responsibility are vital for effective teamwork and leadership.

5.4) Goal consensus ensures that team members are aligned with the college's vision and work together

5.5) Problem-solving and decision-making skills are crucial for effective leadership and teamwork

5.6) Effective division of labor and collaboration are essential for successful teamwork and leadership

5.7) Supervision and feedback are essential for fostering growth, productivity, and a positive team dynamic

5.8) Effective conflict management fosters a positive team dynamic, enhances productivity,

5.9) Time management enhances productivity, reduces stress, and creates a structured and efficient work environment.

7. Conclusion

1. There were five components of the improvement of college students' leadership training in medical vocational colleges in Henan Province under the background of the new era which consisted of College Students Leadership Magnetism， College Students Leadership Envision， College Students Leadership Decision-Making Ability, College Students Leadership Influence and College Students Leadership Control.

2. There were total 31 indicators for managerial guidelines of the improvement of college students' leadership training in medical vocational colleges in Henan Province. As the MEDIC model

8. Discussion

In the context of developing college students' leadership training in medical vocational colleges in Henan Province during the new era, on study identified five essential components: College Students Leadership Magnetism, College Students Leadership Envision, College Students Leadership Decision-Making Ability, College Students Leadership Influence, and College Students Leadership Control. These components collectively form a comprehensive framework for leadership training, the organization in the new era, the leaders must act like a magnet, attracting talented people to work with them as multiplier leader that will always be open to ideas from subordinates and would never belittle them its' was influence and control leadership   (Pruettikul, 2017) and charismatic leaders capable of team management, informed visionary leadership with according learning organization should be shared vision (Senge,1990) and decision-making that very important of the leader in new era for skill on solve problems and decision making (Devies,2004). These findings align with the evolving needs of modern medical vocational colleges, driving progress in both the institutions and the broader healthcare field. As the MEDIC model. Moreover, All of 31 managerial guidelines for improving college students' leadership training in medical vocational colleges in Henan Province. These guidelines encompass various dimensions of leadership, including communication, problem-solving, ethics, innovation, and more. By addressing these aspects, the training seeks to cultivate well-rounded leaders who can guide their peers, make responsible decisions, foster positive environments, and drive progress in both the college community and the healthcare sector. These guidelines also emphasize attributes such as creativity, collaboration, trust-building, and effective information analysis, aiming to empower students to become influential leaders who can inspire their teams and positively impact the healthcare education and practice landscape. In summary, our findings highlight the comprehensive nature of these guidelines and their potential to produce skilled, influential, and visionary leaders capable of navigating the complexities of medical vocational colleges in Henan Province in the new era and advancing healthcare education and practice.

9. Recommendation

Recommendation for Policies Formulation

Developing college students' leadership training in medical vocational colleges is a crucial aspect of their overall education and future success in the healthcare field. In order to better develop the college students' leadership training in medical vocational colleges, policies should focus on creating a comprehensive curriculum covering communication,

teamwork, problem-solving, decision-making, emotional intelligence, and ethical leadership. Encourage real-world application through student organizations, community service, and internships. Mentorship by experienced professionals, workshops with industry leaders, and interdisciplinary collaboration will foster well-rounded leaders. Regular assessments, faculty training, and recognition programs are vital for students' growth. Emphasize ethics and inclusivity, collaborate with healthcare organizations, and continuously review and improve the training. Successful leadership development is a continuous journey that demands dedication from the institution, faculty, students, and healthcare partners. By adopting these policies and suggestions, medical vocational colleges can take a central role in fostering the future generation of healthcare leaders.

Recommendation for Practical Application

To develop college students' leadership training in medical vocational colleges, it is essential to implement practical strategies. This involves crafting a comprehensive leadership curriculum that blends theoretical knowledge with hands-on experiences through experiential learning projects. Additionally, establishing student leadership programs and clubs creates a supportive environment for students to explore and enhance their leadership abilities. Collaboration with healthcare institutions for leadership internships enables students to gain real-world insights and refine their leadership skills under professional guidance. Regularly organizing leadership conferences and team-building activities offers valuable exposure to successful healthcare leaders and fosters effective teamwork and communication. Personalized leadership coaching and ongoing feedback play a pivotal role in helping students identify their strengths and areas for improvement, thereby promoting continuous growth. Continuous evaluation of the training program ensures its relevance and effectiveness, enabling adjustments to meet the evolving needs of the healthcare sector. By embracing these practical application recommendations, medical vocational colleges can empower students to become exceptional healthcare leaders, well-equipped to drive positive change and innovation in the healthcare industry.

Recommendation for Further Research

The recommendations for further research on the improvement of college students' leadership training in medical vocational colleges include the following four aspects:

(1) Establish long-term impact assessment and cultural influence research on college students' leadership improvement in medical vocational colleges.

(2) Develop inclusive leadership practices and faculty improvement programs in medical vocational colleges.

(3) Enhance college students' leadership training in medical vocational colleges by integrating leadership technology.

(4) Implement peer-to-peer leadership mentoring programs and specialized leadership training for specific healthcare disciplines in medical vocational colleges.

BIbliography

Davies, B.J. and Davies, B. (2004). **Strategic Leadership, School Leadership & Management** 24(1).20.

Dugan, J. P. (2011). **Research on college student leadership development.** The handbook for student leadership development, 2, 59-84.

Haber, P. (2011). **Formal leadership program models.** The handbook for student leadership development, 2, 231-258.

Pruettikul, S. (2017). **Education administration and Changing in 21st Century.** Journal of Education faculty Burapha University. 28(2), 36-49.

Senge, P.M. (1990). **The Fifth Discipline; The Art and Practice of The Learning Organization.** New York; Double day.

Yao Yongzhi, & Wu Yang. (2005). **The important mission of higher education: training and bringing up a large number of leading talents.** Heilongjiang Higher Education Research, (12), 125-127.

The Development of Transformational Leadership Model
for the Administrators at University in Guangxi Province

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ABSTRACT

The objectives of this research were: (1) To study the components and indicators of transformational leadership for administrators at university in Guangxi Province. (2) To develop the transformational leadership model for administrators at university in Guangxi Province and (3) To propose the guidelines for improving transformational leadership of administrators at university in Guangxi Province.

The research was a mixed methodology, including qualitative and quantitative research. The population were 13,910 administrators and teachers from 11 major disciplines of colleges at university in Guangxi Province, China. Including: Philosophy, Economics, Law, Education, Literature, Administration, Engineering, Agriculture, Science, Medicine and Art. The sample were the 392 administrators and teachers and the sample size was obtained using statistical software. The key infomants in the first phase were 9 experts and in the third phase were 11 experts, obtained by purposive sampling method. The instruments used for data collection were Cite space, Doc. data record sheet, Semi-Structured Interview (SSI) forms and 5-points rating scale Questionnaire.The statistics used for data analysis were content analysis and Confirmatory Factor Analysis (CFA).

The research findings revealed that: (1) The transformational Leadership consisted of 4 components: Charm Leadership, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration. And 14 indicators. (2) The developed transformational leadership model fitted well with the empirical data. And (3) The proposed guidelines for improving

transformational leadership to administrators at university in Guangxi Province consisted of 8 guidelines.

Keywords*: Transformational Leadership, Transformational Leadership Model, Model Development

1. Introduction

Transformational leadership is innovative development leadership. First, it encourages followers to question the original rules and assumptions, and think about problems and solve from rational and different angles and ideas. Second, it emphasizes cooperation, organizational value, common vision goals and the role of authorization, which are very important conditions for organizational innovative development. Therefore, it is the starting point of this study to introduce the transformational leadership theory into the educational administration organization, focus on the transformational leadership problem of the university education administration innovative development. To study the components and indicators of transformational leadership for administrators at university and developed the transformational leadership model for administrators at university to propose the guidelines for improving transformational leadership of administrators at university, explore the application of the theory in the educational organization, effectively the leads and administrators at university education administration innovative development work for the principals, and seek the sustainable development of the university in the complex era environment.

Guangxi University established in 1928, is a regional comprehensive university with the longest history and largest scale. Is the National 211-Project Key Construction University and the co-administrative university by both the national Ministry of Education and Guangxi Zhuang Autonomous Region. At present, there are 27 Colleges at university in Guangxi Province. Each College has 1 president, 4 vice-presidents, 1 secretary, 2 department heads,and 6 department administrators. So there are about 27 presidents, 108 vice-presidents, 27 secretaries, 54 department heads and 162 department administrators. Including 11 post-doctoral research programs, 17 Ph.D. programs, 62 graduate programs, and 67 undergraduate programs. There are 27,704 four-year undergraduates, 11,049 master and doctoral students, and 56,165 students on the job trainees. There are 11 major disciplines of Colleges at university in Guangxi Province, China. Totall of Administrators and Full-time Teachers 13,910 persons. The disciplines cover 11 major disciplines, including: Philosophy, Economics, Law, Education,

Literature, Administration, Engineering, Agriculture, Science, Medicine and Art. Guangxi University has been ranked among the 300-400 universities in Asia by the Thames. In recent years, the ranking of Guangxi University has increased significantly, which is closely related to the transformation of administrators of Guangxi University. Therefore, the administration of the university education organizations is now on the development road of popularization. The proposal will study the components and indicators of transformational leadership required for administrators of university, and develop the model of transformational leadership for administrators of the effective educational administration of the universities. Proposing the guidelines for improving transformational leadership of administrators at university.

With the rapid development of social science and technology, the concept of modern education has been gradually integrated into the educational administration system. Economic globalization and information diversification not only impact the traditional educational administration model but also bring new development opportunities and more new possibilities to the leadership model of modern educational administration. The four main tasks that higher education universities must undertake are teaching, research, academic service to society, and the protection of art and culture. With the rapid transformation of the global society, the implementation of these four missions is very important for the university's short-term and long-term development. Under the background of the accelerated development of science and technology, facing the new development situation and the development and progress of the times, the traditional teaching educational administration development model has failed to keep up with the current development trend of universities. How to verify the more systematic and effective educational administration leadership development model of the universities, scientific syllabus, and teaching system in line with the current modern education, and cultivate administrators' international vision and transformational ability, It will be an inevitable trend to promote the good development of educational administration for example, great transformations have taken place in the teaching administration of Guangxi University in modern education. This transformation is the reality that administrators have to face under the background of modern education, especially how to improve the effectiveness of educational administration, which is also the main problem that current education administrators must think about. At the same time, whether the traditional teaching educational administration model can still adapt to the development trend of universities under the new situation, the reality faced by education administrators are whether the leadership style they have been using can still bring required and development

expectations for universities and education administrators. Based on the thinking of the above problems, the researcher chooses Guangxi University as the research object. Firstly, the researcher makes a systematic analysis of its traditional education types. Through the research and interpretation of the university's historical records, the researcher makes a comparative analysis of the data from the traditional educational administration model to the current educational administration model and compares the transformations after the reform of the two, such as the situation of education administrators, the transformation of professional titles, high-level talents and the advanced version of the research project, etc. Analyzed and discussed these data and made an objective analysis and evaluation.

The essence of the university is an organization with common values based on teaching and learning activities. The organizational atmosphere of the university should be harmonious, cooperative, and innovative development. In the unique leadership system and academic environment of universities, and the administrators are the practitioners and promoters of university development. Verified to the components and indicators and transformational leadership model at university in Guangxi Province. This proposal hopes to study and find out the components and indicators of transformational leadership required for administrators at university in Guangxi Province. And establish the scientific and effective development model of transformational leadership for administrators at university in Guangxi Province. The proposed guidelines for improving transformational leadership to administrators at university in Guangxi Province and improvement the guiding ideology of leadership effectiveness of administrators. Enrich transformational leadership in educational administration academic research, select and cultivate a group of excellent educational administration talents, make important contributions to the long-term development of the university, and also provide some new ideas to propose the guidelines for improving transformational leadership of administrators at university of higher educational administration system.

2. Research Questions

(1) What are the components and indicators of transformational leadership required for administrators at university in Guangxi Province?

(2) What is transformational leadership model for administrators at university in Guangxi Province should be?

(3) What are the guidelines for improving transformational leadership of administrators at university in Guangxi Province?

3. Research Objectives

(1) To study the components and indicators of transformational leadership required for administrators at university in Guangxi Province.

(2) To develop the model of transformational leadership for administrators at university in Guangxi Province.

(3) To propose the guidelines for improving transformational leadership of administrators at university in Guangxi Province.

4. Research Methodology

4.1 Research Design

This study adopts a mixed-methods research design, combining both quantitative and qualitative research methods. The quantitative data was collected through a survey questionnaire distributed to administrators and teachers at university in Guangxi Province. Statistical analysis techniques, such as descriptive statistics and regression analysis, will be used to analyze the quantitative data. The qualitative data will be collected through semi-structured interviews with a purposive sampling of administrators from different departments of the university. Content analysis techniques will be employed to analyze the qualitative data. The findings from both data analyses will be integrated to develop the transformational leadership model for administrators at university in Guangxi Province.

4.2 Population and Sample

The population were administrators and teachers of 11 major disciplines of Colleges at university in Guangxi Province, China. Including: Philosophy, Economics, Law, Education, Literature, Administration, Engineering, Agriculture, Science, Medicine and Art. The totall are the 13,910 persons. The sample size was obtained to select respondents by proportional stratified random sampling by using G*Power program. (Set as Chi-square test at: Df = 72, α err prob = 0.05, Effect size w = 0.3, power = 0.8), totall are the 392 persons.

4.3 Research Instruments

Use the Chinese website "WJX.cn" to create a five-point rating scale questionnaire and manage it on a professional platform for online data collection. It consists of the following three parts.

Part I: Demographic variables, general information of the respondents, totaling 8 items, such as gender, age, education level, position, working years, etc.

Part II: Rating scale questionnaire (Five-point rating scale), which asks about the development of resilient leadership model for administrators at university in Guangxi Province

Part III: Suggestions and additional comments (Open Ended). All type of questionnaires will be Likert's rating scale with 5 choices. All of these develop are to use the IOC and Cronbach's alpha coefficient to find the validity and reliability.

4.4 Data Collection

The steps for data collection will be as follow:

Step 1: Request permission to collect data for research to the Faculty of Education, Bangkokthonburi Univerity (BTU).

Step 2: Request a letter of recommendation for the researcher from the BTU Educational Faculty.

Step 3: Selection the coordinating teachers to help assist in coordinating data collection in each institution. Those will be oriented to understand the details of the questionnaire administration and data collection.

Step 4: Carry out data collection with the selected samples by sending questionnaires to the coordinator teacher who will help for collect data with the selected samples of each college at university.

4.5 Data Analysis

The data collected for this study undergo from both content analysis and statistical analysis. Content analysis was utilized to identify patterns, themes, and categories within the qualitative data obtained from interviews the experts of universities in Guangxi Province. Statistical analysis was employed to manipulate and assess various statistical values. The statistics used analysis to determine the sample group's characteristics, such as gender, age, educational background, and management experience. Means and standard deviations were calculated to evaluate indicator suitability for inclusion in the model, considering mean values equal to or greater than 3.00 as appropriate. Item reliability, composite reliability (CR), and Average Variance Extracted (AVE) were assessed. Confirmatory Factor Analysis (CFA) was performed to test the structural correlation model's conformity.

5. Research Results

The research procedures involved three phases. In phase (1) the components and indicators of transformational leadership required by administrators at university in Guangxi Province were verified of the qualitative research approach. The researcher reviewed 21 relevant documents and conducted in-depth interviews with 9 key informants who held positions in administration at university in Guangxi Province. The data collected were analyzed using content analysis. In Phase (2) aimed to develop the model of transformational leadership for administrators at university in Guangxi Province. A quantitative research approach was utilized, and a questionnaire was administered to a sample of participants from 11 major disciplines of Colleges at university in Guangxi Province. Including: Philosophy, Economics, Law, Education, Literature, Administration, Engineering, Agriculture, Science, Medicine and Art. The sample size was 392 participants using proportional stratified random sampling. The questionnaire consisted of three parts: general information, a rating scale questionnaire in the transformational leadership development model, and the open-ended section for suggestions. The content validity and reliability of the questionnaire were assessed.

Data collection involved online platforms, email communication, and physical delivery of questionnaires. The data of demographic variables were analyzed by descriptive statistics; frequency, and percentage. The components and indicators of transformational leadership required for administrators at university in Guangxi Province were analyzed by descriptive statistics; Arithmetic Mean ($\bar{x}$), Standard Deviation (S.D.), Skewness (Sk.), Kurtosis (Ku.) and Coefficient of Variation (C.V.). The inferential statistics used in the analysis include Pearson Correlation Coefficients and KMO and Bartlett's Test. The components and indicators of administrators' resilient leadership were analyzed by Confirmatory Factor Analysis (CFA) to reduce irrelevant variables, with a statistically ready-made program (SPSS) and AMOS program to analyze development model. The value of Relative Chi-square (χ^2/df), Degree of Freedom (df), Statistical Significance (p), Goodness of Fit Index (GFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA), all in line with specified criteria.

From the research objectives, major findings were revealed as follows:

Chi-square =85.313; df = 43; p = .000; GFI = .968;
AGFI =.922; TLI = .988; RMSEA = .052
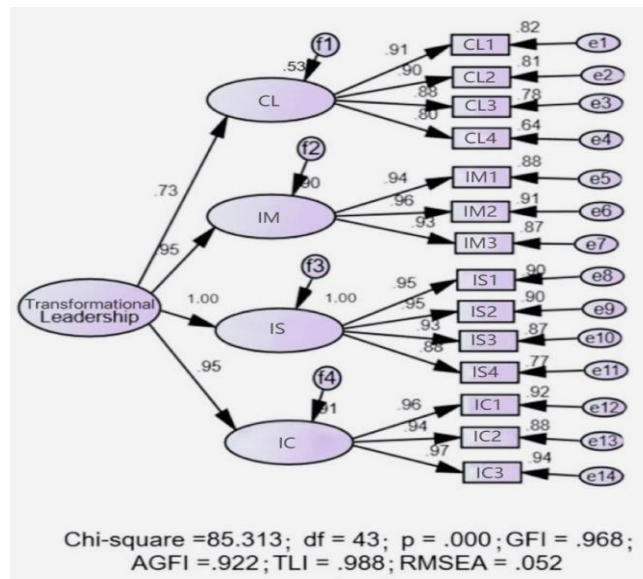
Figure 1 Show the secondary data order to the Latent Variables and Observable Variables of transformational leadership development model that fited well with the empirical.

Table 1: Show the statistical value of transformational leadership for administrators development model in Guangxi Province.

	Latent and observable	Standardized Factor loading	Error	S.E.	C.R.	A.V.E.	p	R²
	Component 1	.726	.474	.029	.928	.764	0.00	0.527
	CL 1	.908	.175	.039			0.00	0.824
	CL 2	.901	.188	.040			0.00	0.812
	CL 3	.882	.223	-			0.00	0.778
	CL 4	.801	.359	.038			0.00	0.642
	Component 2	.947	.103	.027	.959	.887	0.00	0.897
	IM 1	.939	.118	.024			0.00	0.882
	IM 2	.956	.087	-			0.00	0.914
Transformational Leadership for Administrators	IM 3	.931	.129	.024			0.00	0.867
	Component 3	1.000	-	-	.961	.861	0.00	1.000
	IS 1	.950	.097	.023			0.00	0.903
	IS 2	.949	.099				0.00	0.901
	IS 3	.931	.133	.024			0.00	0.867
	IS 4	.879	.227	.027			0.00	0.773
	Component 4	.955	.089	.022	.969	.912	0.00	0.912

Latent and observable	Standardized Factor loading	Error	S.E.	C.R.	A.V.E.	p	R²
IC 1	.957	.084	.024			0.00	0.916
IC 2	.937	.122	.022			0.00	0.878
IC 3	.970	.059	-			0.00	0.941

From Figure 1 and Table 1 above the results of the secondary data order by Confirmatory Factor Analysis (CFA) with the AMOS program, the following confirmative index values were obtained: Relative Chi-square ($\chi2/df$) = 1.98, Degree of Freedom (df) = 43, p-value = 0.000, Goodness of Fit Index (GFI) = 0.968, Tucker-Lewis Index (TLI) = 0.988, Root Mean Square Error of Approximation (RMSEA) = 0.05. By this evaluate index fited well the specified criteria, Relative Chi-square ($\chi2/df$) < 2 (Diamantopoulos, A. et al., 2000; Schumacker, R. E. and Lomax, R. G., 2010), p > 0.05, GFI, TLI, CFI ≥ 0.95 and RMSEA ≤ 0.05 (Jöreskog and Sörbom,1996; Diamantopoulos, A. et al., 2000; Fan and Sivo, 2009; Hair et al, 2010, Poonpong Suksawang, 2020).

The major findings of the research include the verify of the transformational leadership model for administrators have four components, consisted of : (1) Charm Leadership, (2) Inspirational Motivation, (3) Intellectual Stimulation , (4) Individualized Consideration.

The research also presented a visual representation of the transformational leadership for administrators development model in Figure 2 and Figure 3: Transformational Leadership Model Mind Map and Conceptual Chart. These figures provide a comprehensive overview and detailed representation of the key components, interrelationships, and conceptual framework of the development model.

Overall, the research contributes to the understanding and application of transformational leadership among administrators at university in Guangxi Province. The findings provide insights into the components and indicators of transformational leadership and offer the development model that can guide administrators in developing effective strategies for implementing transformational leadership in their system.
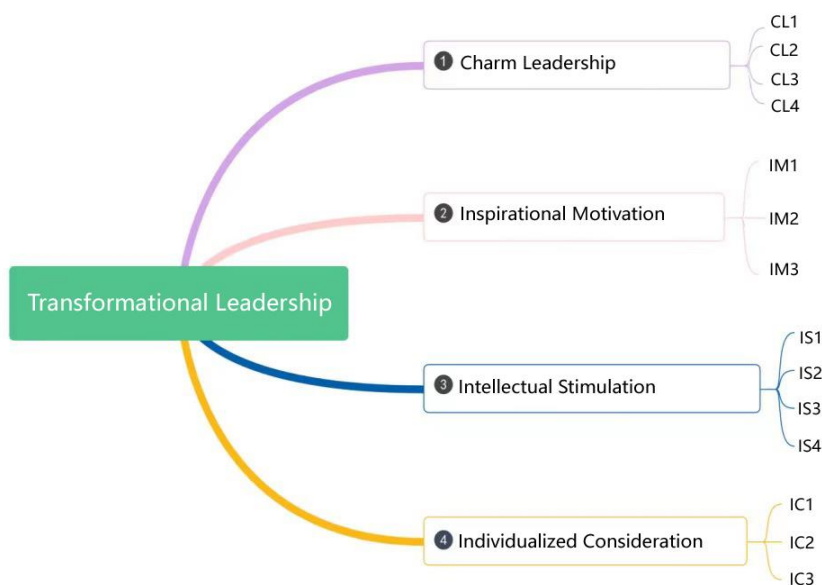
Figure 2 Transformational Leadership Model Mind Map for Administrators at university.

6. Discussion

Discussion about major findings of verifying the components and indicators of Transformational Leadership required of Administrators:

There were 4 components and 14 indicators of Transformational Leadership required of Administrators which consisted of : (1) Charm Leadership, (2) Inspirational Motivation, (3) Intellectual Stimulation ,   (4) Individualized Consideration. Based on the research objectives, the discussion will be presented as follows:

Objective 1 :   To study the components and indicators of transformational leadership required for administrators at university in Guangxi Province.

Objective 2 : To develop the model of transformational leadership for administrators at university in Guangxi Province.

Objective 3 : To propose the guidelines for improving transformational leadership of administrators at university in Guangxi Province.

The research main finding are revealed of great practical significance to the components and indicators of transformational leadership for education administration teaching behavior innovation and development advanced in academic and profession in education administration development of university organizations. Peters and Nancy Austin noted, Senior leadership is a very important components for the survival and development of excellent enterprises. The transformational leadership for education administration of innovative and development also plays a direct and key role in university organizational groups. The

transformational leadership for administrators in higher education institutions is essential for guiding the strategic use of informations to enhance educational quality, innovation, and overall institutional effectiveness. The research conclusions of the proposal verify the positive correlation of transformational leadership model in education administration development for administrators, which can promote and facilitate the innovative and development of university organizations.

The research results can provide suggestions for the transformation and development of   university as follows :

Transformational leadership has been a topic of education administration development. It is of great practical significance to take the transformation leadership   to education administration teaching behavior innovation and development. And advanced in academic and profession in education administration. The research affecting the education administration development and   innovation of university organizations. Peters and Nancy Austin noted that senior leadership is an extremely important component of the survival and development of excellent enterprises. The development atmosphere also plays a direct and critical role in organizational groups. The conclusion of this the proposal verify the positive influence of transformation leadership model practices can be used to education administration teaching behavior innovation and development. And advanced in academic and profession in education administration, which can promote and promote the development of university organization. No matter which university organization needs innovation and development in a different sense. Transformations in administration, technology updates have created value in different universities.For the organizational transformation of colleges and universities, due to its special organizational characteristics, has been few researchers to in-depth research, in recent years,globalization to accelerate the impact of various industries forced us to accelerate the pace of knowledge economy, colleges and universities organization adhering to the historical responsibility more need our attention to its research, speed up the process of university organization transformation. In view of the conditions and other limitations of this research have the following limitations :

(1) Sample collection is not large enough to spread the samples to more provinces according to different regions. The development goals and modes of universities are different in different provinces and different regions, and the source of administrators   is different. Therefore, although we choose as many universities   as possible with certain representative regions as possible, in general, there are still some limitations to the results of empirical research.

(2) From the perspective of research methods, this study is mainly a research method for the development of transformational leadership model. Try to empirical research on the development of university organizations in the university field still needs to be more in-depth.

(3) In terms of selection variable, this proposal only covers one variables: transformation leadership model. Research on the influence of university development. There are still many other variables affecting university organizational transformation. In addition, the transformation leadership and have been   verified to have a positive impact on organizational transformation in the education administration development of university organizations field, and there are few research in universities. This study is a transforming attempt to demonstrate the research of   transformation leadership style in the new field of university development. The leadership style is not only the transforming   leadership style that has improved the university organizational transformation, and the influence of other leadership styles and variables also need to be developed and studied. This research objective is mainly an attempt to do an empirical research on university organization transformation, both the scope of research It is the first time, in theory or in practice. It is hoped that through this research, the research content and scope of university organization development can be richer, and the effective information reference of university administrators can be provided through the demonstration, so as to make a meager contribution to the development of university in China. Due to the rare references, this paper is based on the research of organizational transformation leadership theory and extended to the field of university organizational transformation and development, which verifies the impact of transformation leadership model on the development of university organizational development. This is just an confirmatory study, which needs to be further discussed in the future.

7. Recommendations

1. Recommendation for Policies Formulation

Build a scientific and reasonable administration system, and form a good atmosphere for organizational innovation and development.

A scientific and reasonable administration system helps universities to create a positive atmosphere, encouraging administrators to give full play to their talents and creativity, and allowing administrators to arrange the best position to play their talents according to their different characteristics and talents. Information communication in universities should also be open, and administrators are willing to exchange their innovative and developmental ideas. The university or the department college can set up a discussion group according to different

topic directions, each discussion time is flexible, the discussion problem is open, and the brainstorming method can be used to make a good record. Universities should publicize and praise the faculty and administrators with the ideas of innovation and development, and support all aspects of the effective innovation and development ideas, so as to improve the enthusiasm of the organization administrators for the development. Universities can set up special innovation and development funds to support and encourage creative innovative development programs. And as far as possible to provide them with as research equipment or information access as possible. For talents with special talents in innovation and development, we should give them more personalized administration, solve them from the reality of their life, and give them appropriate and flexible arrangements, so that they can concentrate on the play of innovation and development talents. The university can also organize some rich collective activities after work, so that they can also have life communication outside of work, and improve the cohesion of the organization. Establish a positive university campus culture and organizational culture, and give the organization administrators an optimistic and positive career pursuit and working attitude.

Strengthen the administration of the university scientific research team and improve the scientific research conditions. Various talent initiatives implemented by universities in recent years are already playing a positive role. However, while actively introducing talents, colleges and universities should give full play to the role of talents and truly make the advantage of talents. The system construction and the improvement of the mechanism are the key to give full play to the advantages of talents. Through the establishment of a more reasonable system. Not only in the material and life treatment to meet the needs of talents. More to in the research environment, academic atmosphere, so that they can continue to make progress, positive enterprising, bold innovation and development. In addition, the improvement of basic conditions, especially the necessary research facilities and equipment, is also an important prerequisite for basic innovation and development. Scientific research is the foundation of university innovation and development, and the requirements for basic scientific research facilities and equipment are getting higher and higher, universities must meet the requirements of these facilities and equipment, and create corresponding conditions for playing the role of innovation and development of talents, and for improving the whole level of development ability. From the above research results, we can see that the resource supply has a significant positive correlation effect. In this regard, universities can set up special development funds to support and encourage creative

innovative development programs or programs. And as far as possible to provide them with as research equipment or information access as possible. Universities should provide optimized support to members of scientific research projects engaged in universities, such as information access channels, information access, scientific experimental equipment, and application for funds. Innovation development ability to encourage and reward, to arouse the enthusiasm of everyone, teachers and scientific research personnel in the research work university should give a more personalized care, such as to a full vacation, to the administrator appropriate subtract their other work daily affairs.

2. Recommendation for Practical Application

Taking the transformational leadership style as an indicator to select university administrators can also become an evaluation standard to evaluate the effective administration of university administrators.

Most confirmatory studies on transformational leadership in the research on organizational innovation and development of universities have proved that leadership with transformational leadership style has a major impact on education administration of university. When selecting administrators or promoting cadres, universities can make evaluation and rating scales on the performance of administrators in the transformational leadership style from the four components of Charm Leadership, Inspirational Motivation, Intellectual Stimulation and Individualized Consideration, and combined with the relevant actual situation of universities. The confirmatory results of the transformational leadership model give university administrators a bellwether of their leadership style. University administrators can self-examine those shortcomings based on their own conditions and combine them with transformational leadership model the five level rating scales, and use this as the direction of their future efforts. For example, many of the administrators of university organizations are rigorous scholars and intellectuals, scholars and intellectuals are generally more cautious in the administration style, they generally learn from senior administrators, the better realization in leadership behavior. However, in the leadership charm is general, although the thought is also more enlightened, but in the consciousness of innovation and development is generally more cautious and more conservative. conversely, In some young administrators, although the leaders are open, have a strong sense of innovation and development, and have many administration ideas, and can be timely put into the practice of administration. Be able to clearly express the future development goals and university organizational philosophy to the subordinate members, but because they are young, the more senior administrators are

exemplary in virtue, such as dedication, the young administrators tend to be less considerate than the senior administrators. It is inevitable that sometimes the youth shows an aggressive administration style. The indicator of transformational leadership style can be used as a style reference or become a direction of effort.

3. Recommendation for Further Research

Improve the administrators understanding of the development of university organization, and promote the model of transformational leadership for administrators at university.

In the process of researching the proposal, through questionnaires with university administrators, what we feel the most is that all university administrators agree that the current universities need organizational development. And organizational development can seek a bright future for the future development of the university. Only a real recognition of the problem will promote the future development of the university organization, although our interview and survey sample is limited for practical reasons. However, through the investigation of different administration levels in different colleges, we have learned that the vast majority believe that development is the foundation of administration. The study of this proposal can provide the theoretical connotation of the university administrators, whether about the innovative development of education administration in university organizations, either in theory or in practice. To deepen the understanding of the concept of education administration in university organization development, promote every administrator understand the importance of education administration in university development, and promote the model of transformational leadership for administrators at university.

By addressing these research recommendations, we can advance our understanding of transformational leadership for administrators at university in higher education and contribute to the effective implementation. And the considering these recommendations, policymakers, ducational institutions, and the administrators can work together to promote effective transformation and enhance leadership practices in educational administration. Adopting these practical strategies and guidelines, the university of higher education institutions can cultivate effective transformational leadership, and facilitate educational administration transformate, and ultimately enhance the quality of educational administration in the age. And there will support the innovative and development environments that prepare of administrators for the challenges to the future and make the dream come true.

BIbliography

Bellibas¸ et al. (2021). **Developing transformational leaders: the full range leadership model in action, Industrial and commercial training.** 36(8), 23-33.

B.J.Avolio. (1998). **Full leadership Development:Building the Vital Forces in Organizations. Transformational Leadership:Industy,Military, and Educational Impact.** Mahwah, Nj., Lawrence Erlbaum. P43—49.

Barling, J., Christie, A., & Hoption, A. (2010). **Leadership. In S. Zedeck.** (Ed.), Handbook of industrial and organizational psychology (pp. 183 - 240). Washington, DC: American Psychological Association.

Berkovich & Eyal, (2017). **The role of person-job fifit in the relationship between Transformational Leadership and Leadership in Educational Administration.** J. Manag. Psychol.32.

Bellibas¸ et al. (2021). **Transformational University Leadership for Large-Scale Reform: Effects on Students, Teachers, and their Classroom Practices, University Effectiveness and University Improvement.** 17(2).

Bass, B. M., & Avolio, B. J. (1994). **Improving organizational effectiveness through Transformational Leadership.** Thousand Oaks, CA: Sage Publications.

Berkovich & Eyal, (2017). **Transformational Leadership Effects on administrators Commitment and Effort Toward University Reform**. Journal of Educational Administration. 41 (3)

Barling & Christie & Hoption. (2010). **Version: How transformational leadership facilitates innovation capability: The mediating role of administrators psychological capital.** Leadersh. Organ. Dev. J. 33, 281.

Charoensukmongkol & Villegas Puyod. (2021). **Version: R. Knowledge: Transformations leadership of the Sciences and Humanities.** MIT Press: Cambridge, MA, USA.

Cheng Guanjun & Yang Hongjiang & Lu Bin & Zhou Yuehui. (2019). **A Revolution of corporate leadership Life -- Analysis of Haier's "Three major Transformational" of "leaderless" Administration.** China Leadership Section Science, (02): 71-74

Charoensukmongkol, P. & Villegas Puyod, J. (2021). **Influence of Transformational Leadership on role ambiguity and work–life balance of Filipino university employees during COVID - 19: Does employee involvement matter.** International Journal of Leadership in Education.1–20.

Chang Jian. (2007). **Modern Leadership Science.** Tianjin: Tianjin University Press. P 283.

Cai Yi. (2007). **New Progress in Educational Leadership Theory.** In Comparative Education Studies. (1).

Daft, R. L. (2014). **The leadership experience.** (4th ed.). Mason, OH: South Western.

Dastbaz. (2019). **The development of indicators for quality assessment of administration.** Education. Bangkok: Than Aksorn.

Daniel, S. J. (2020). **Education and the COVID-19 Pandemic.** PROSPECTS, 49(1–2), 91–96.

Day et al., (2016). **Leadership in Organizations**. Englewood Cliffs, NJ: Prentice Hall.

Feng Daming. (2004). **American, British and Australian education administration frontier vision.** Beijing Education Science Press. 52.

Guo Guimei, Duan Xingmin. (2008). **the transformational leadership behavior and creative inner motivation and creative working atmosphere Intermediary role.** Science and Science Technology Administration. (3).

Hou Tangzhu. (2006). **Research on the Relationship between Conversion and Trading Leadership Behavior and Leadership Efficiency.** doctoral thesis. Hefei: University of Science and Technology of China. 22 -34.

Kim, B.Y. (2010). **Application of Transformational Leadership: The Case of Hiddink Leadership.** The Korean Association of Sport Law, 13(1), 11-37.

Li Xinjiu. (2019). **Transformational Leadership" Series (8) Value Loss**. Enterprise management Science, (03): 26-28.

Liu Yuou. (2023). **Effects of Administrators Transformational Leadership on Organizational Commitment of Art School Teachers in Shenyang, Liaoning Province.** Journal of Dhammasuksa Research, Vol 6 No 1.

Li Yun, Guan Yuan Yuan. (2007). **Transformational leadership and Transformational leadership theory and Enlightenment.** Chongqing University of Science and Technology News. (5): 14 - 15.

Li Weining & Zhan Jingyu & Lv Yuan, (2019). **Version:Do transformational leaders enhance their followers daily work of administration.** Q. 23, 121.

Minhyun Kim, Glenn Hushman, Lauren Holz and Hosung So California. (2017). **The Effect of Transformational Leadership on University Administrators' Intrinsic Motivation and Expectancy-Value in Physical Education.** European Journal of Educational Sciences.

Pierce, Newstrom. (2003). **The Leaders & Leadership Process.** Edition 2. Beijing: China People's Press. p 426 - 427.

Peng Hongbin. (2006). **New progress of university leaders: from teaching leadership to Transformation Leadership**. In Foreign Education Studies. (2).

Pounder, J. S. (2003). **Employing transformational leadership to enhance the quality of management development instruction.** Journal of Management Development, 22, 6 -13.

Sun Hong & Li Li. (2019). **Transformational Leadership: Western Theory and Chinese Practice**. Leadership science, (8) : 60-63 [2019-04-15].

Shi Kan, et al. (2008). **Leadership behavior and its mechanism of administrators in China.** Journal of Pudong Cadre College, China. 2 (2) : 43.

Sayadi, Y. (2016). **The effect of dimensions of transformational, transactional, andnon-leadership on the job satisfaction and organizational commitment of teachers in Iran.** Administration in Education. 30(2)

Tian et al. (2022). **A Review of Transformational Leadership Research: A Meta-Analytic Approach.** Unpublished Doctoral thesis, University Of Toronto.

Wang Nan. (2007). **Transformational leader : the founder of the enterprise   "innovation gene**. Modern business. (8).

Wang Zihao. (2023). **Mediating Effects of Organizational Commitment on the Relationship between Leadership Behavior and Job Satisfaction of Art Teachers in Shenyang, Liaoning Province.** Nimitmai Review Journal, Vol 6 No 1.

Wu Wei. (2019). **The influence mechanism of transformational leadership on employee-organization value matching Research**. Zhejiang University of Finance and Economics.

Wang Zihao. (2023). **Mediating Effects of Organizational Commitment on the Relationship between Transformational Leadership Behavior and Job Satisfaction of Art.** Nimitmai Review Journal, Vol 6 No 1.

Wen Hengfu et al. (2006). **Research on the Basic Theory and Frontier Issues of Educational Leadership Theory**. Harbin: Heilongjiang People's Publishing House. 44.

Yang Xiaowei. (2008). **University Leaders in Tranformational Leadership**. Educational Research and Experiment. (12).

Zhao Tao et al. (2008). **The driving utility analysis of the internal power of independent innovation**. Scientific Administration Research. (1).

Zhao Fusheng. (2019). **Reform and Opening Up Leadership and Change Leadership**. Chinese Leadership Department Journal of Science, (02): 35-38.

Zeng Hao & Zhao Lijing. (2019). **The relationship between service-oriented leadership and employees' proactive Transformational Leadership Behavior. A mediated model.** Journal of Enterprise Economics, (03): 105-111.

Zhang Xinping. (2008). **The study on Principal Role Transformation is based on Burns' Transformational Leadership Theory.** Research on Educational Development. (5 - 6).

The Improvement Process of Jilin Folk Art Education Management in Universities Under Jilin Province

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ABSTRACT

The objectives of this research were: (1) to explore the components of Jilin folk art education management in universities under Jilin Province; (2) to propose the guidelines to improving Jilin folk art education management in universities under Jilin Province.

The research method were mixed methods, including qualitative research and quantitative research. The researcher used Krejcie and Morgan's table (1970) to determine the sample size, which was obtained using stratified random sampling technique. The population was 728, The sample size was 254 faculty members from five universities, the interviewed with 9 key informants. The instruments used for data collection were semi-structured interview form, five-point rating scale questionnaires and Connoisseurship discussion form. The response rate of questionnaires was 100%. Statistics used for data analysis included frequency, percentage, mean, Standard Deviation, Exploratory Factor Analysis (EFA), and content analysis was employed.

Research findings were based on objective: (1) 6 components and 60 key variables of the improving Jilin folk art education management in universities under Jilin Province. consisted of 1) Policy and Environment Mechanism 2) Student Innovation management 3) Course management in Jilin folk art 4) Teaching management，5) Teacher knowledge Management Optimize, 6) Establish supervision service and evaluation mechanism; (2) There were total 50 guidelines to improving Jilin folk art education management in universities under Jilin Province.

Keywords: Jilin folk art education, educaion management, improvement process

1. Introduction

Folk art education is increasingly valued by the educational and academic circles. However, in recent years, many developed countries have taken many measures to rescue, support and develop their own folk art, so that folk culture and modern civilization can coexist. (Lei Jun.2023). President Xi Jinping pointed out: "We must pay attention to the protection and inheritance of history and culture, and protect the endless roots of the spirit of the Chinese nation." as educators, we must pay more attention to the protection and inheritance of Chinese excellent traditional culture, strive to promote the innovative development and creative transformation of Chinese excellent traditional culture, activate cultural vitality, and let the Chinese nation and people all over the world share Chinese civilization and create together. Create a more colorful world civilization. (Chi, Xusheng. 2012)

The main problems in the folk art education in Jilin universities were as follows:

1) The format of the folk art education system in Jilin colleges and universities was almost the same as the training mode and curriculum of art majors in different regions or in different natures in my country

2) The growth methods and approaches of students majoring in folk art in Jilin colleges and universities were too single.

3) Students' innovation awareness and spirit were low for the modernization.

2. Research objectives

1. To explore the components of Jilin folk art education management in universities under Jilin province.

2. To propose the guidelines to improving Jilin folk art education management in universities under Jilin province.

3. Research Methodology

1. Population and Samples

Population consisted of 728 who were administrators and teachers. They came to 5 universities of art design major in Jilin province, The sample size was approximate 254 administrators and teachers with a stratified sampling technique. The key informants of semi-structured consisted of 9 persons, including 3 administrators of universities in Jilin Province, 6 teachers of the university of Art and Design.The key informants of Connoisseurship are composed of 13 experts, including 4 administrators of universities in Jilin Province, 5 from the

dean of the university of Art and Design,4 faculty of art and design teachers The sampling universities were 5 public universities.

2. Research instruments

Used three research tools to examine the objectives of this paper. 1) Semi-structured interview form. 2) A five-point rating scale questionnaires 3) Connoisseurship Discussion form.

3. Data collection

3.1 Semi-structured interview: Data collection was done by face to face, mail, Line, Wechat.

3.2 questionnaire: Questionnaires were sent through the Internet, mails and by hand.

3.3 Connoisseurship Discussion: Will be give open questionnaires to the 13 key informants by mail, online and by researcher. (the researcher constructed the meeting as the moderator.

4. Data analysis

4.1 Semi-structured interview: The content analysis method was used to analyze the semi-structured interview data of 9 key informants.

4.2 questionnaire: Through the questionnaire survey of art design teachers in 5 public universities in Jilin Province, the collected data were analyzed by Exploratory Factor Analysis.

4.3 Connoisseurship Discussion: Connoisseurship group data is based on content analysis. After data collection is complete, descriptive and content analysis were employed.

4. Research Framework

		Objective 1		Objective 2

- Folk art
- Folk art education
- Art education management
- Education improvement
- Education system improvement
- Educational Technology improvement
- Educational Management Strategies
- Educational quality management
- ISO9000 series standard quality management system theory
- Total Quality Management Theory
- Service Quality Management Theory

Semi-structured interviews with 9 key informants

Data Collection with Questionnaires from 254 Samples

Connoisseurship Discussion with 13 key informants

1. Variables of Jilin folk art education management in universities under Jilin province.
form theories and researches
2.Study form semi-structure interview.

The components of Jilin folk art education management in universities under Jilin province.

The guidelines to improving Jilin folk art education management in universities under Jilin province.

Content Analysis

Data Analysis with EFA

Content Analysis

5. Research Results

Phase 1: Result of the Content Analysis on Variables of of Jilin folk art education management in universities under Jilin province.

The researcher reviewed literature from theories and researches, found 65 variables and there were 35 variables from the interview of key informants. Second,The researcher was combined the content analysis of the literature review and the analysis of semi-structured interview with experts, a total of 68 variables are obtained and screened. A total of 65 sub-variables with a frequency greater than 50% were identified. After the expert IOC certification, variables with a score of less than 0.6 were removed. Thirdly, combined with the formed questionnaire after consistency of the questionnaire (IOC), the questionnaire was revised, and the 65 questions in the original questionnaire were adjusted to form the first draft. Fourthly, 30 questionnaires were distributed by non-random sampling method to pre-test in a small-scale. On the basis of filling in the questionnaire and analyzing the data, the statement method and wording details of some questions were further improved to form the final questionnaire. Fifthly, the items were verified by Cronbach Alpha for reliability. Finally, 68 variables will be

used for questionnaire distribution, A total of 254 questionnaires were distributed in this step, and 254 questionnaires have been received at the response rate of 100%.

Phase 2: Result of Data Analysis for Research Objective 1. To explore the components of Jilin folk art education management in universities under Jilin province;

Part I: Result of Data Analysis on Questionnaire: Demographic Information

It was summarized that in Gender, the frequency of Female was 118, accounting for 46.5%, and the frequency of Male was 136, accounting for 53.5%.

In Age, the frequency of 22-34 years was 62, accounting for 24.4%; the frequency of 35-44 years was 135, accounting for 53.1%; the frequency of 45-54 years was 44, accounting for 17.3%; and the frequency of More than 55 years was 13, accounting for 5.1%.

Among Professors, the frequency of Teaching Assistant was 20, with a percentage of 7.9%; the frequency of Lecturer was 55, with a percentage of 21.7%; the frequency of Associate Professor was 140, with a percentage of 55.1%; and the frequency of Professor was 39, with a percentage of 15.4%.

In Education, the frequency of Bachelor was 20, accounting for 7.9%; the frequency of Postgraduate was 199, accounting for 78.3%; and the frequency of Doctor was 35, accounting for 13.8%.

In experience, Less than 5 years was 25, accounting for 9.8%; 5-10 years was 196, accounting for 77.2%; 10-15 years was 33, accounting for 13%.

Among the positions, the frequency of Administrator was 41, accounting for 16.1%, and the frequency of Teacher was 213, accounting for 83.9%.

Part II Result of Data Analysis on Questionnaire: variable analysis

The researcher analyzed the arithmetic mean (Mean) and standard deviation (S.D) and compared the derived arithmetic mean with the guidelines based on the best guidelines.

The results showed that the arithmetic mean, standard deviation and level of each methodological variable were components of the factors influencing the management of education in higher education.

Notice**:**

1. PAE mean Policy and Environment
2. SM mean Student Management
3. CM mean Course Management in Jilin folk art
4. TIM mean Teaching Management
5. TRE mean Teacher Management

6. SSEM mean Supervision Service and Evaluation Mechanism

Table 1:   Descriptive statistics

Item	Average value	Standard deviation	Skewness	Kurtosis	Level
PAE1	3.50	1.309	-0.432	-0.912	High
PAE2	3.51	1.294	-0.382	-0.976	High
PAE3	3.39	1.355	-0.295	-1.110	Moderate
PAE4	3.46	1.302	-0.276	-1.124	Moderate
PAE5	3.33	1.325	-0.207	-1.103	Moderate
PAE6	3.52	1.359	-0.337	-1.203	High
PAE7	3.35	1.270	-0.236	-0.982	Moderate
PAE8	3.28	1.291	-0.164	-1.040	Moderate
SM1	3.47	1.130	-0.401	-0.543	Moderate
SM2	3.48	1.127	-0.350	-0.507	Moderate
SM3	3.46	1.130	-0.309	-0.537	Moderate
SM4	3.53	1.137	-0.247	-0.742	High
SM5	3.54	1.198	-0.390	-0.783	High
SM6	3.43	1.100	-0.195	-0.588	Moderate
SM7	3.48	1.117	-0.372	-0.439	Moderate
SM8	3.44	1.115	-0.230	-0.595	Moderate
SM9	3.45	1.116	-0.276	-0.530	Moderate
SM10	3.43	1.183	-0.401	-0.619	Moderate
CM1	3.37	1.127	-0.325	-0.556	Moderate
CM2	3.31	1.094	-0.177	-0.520	Moderate
CM3	3.33	1.213	-0.215	-0.784	Moderate
CM4	3.39	1.170	-0.252	-0.733	Moderate
CM5	3.32	1.185	-0.189	-0.784	Moderate
CM6	3.39	1.157	-0.210	-0.692	Moderate
CM7	3.35	1.196	-0.313	-0.711	Moderate
CM8	3.31	1.201	-0.255	-0.821	Moderate
CM9	3.34	1.168	-0.341	-0.592	Moderate
CM10	3.50	1.266	-0.398	-0.913	High

Item	Average value	Standard deviation	Skewness	Kurtosis	Level
CM11	3.40	1.171	-0.378	-0.552	Moderate
CM12	3.51	1.199	-0.472	-0.574	High
TIM1	3.56	1.201	-0.345	-0.829	High
TIM2	3.45	1.227	-0.276	-0.916	Moderate
TIM3	3.39	1.136	-0.264	-0.604	Moderate
TIM4	3.43	1.150	-0.228	-0.831	Moderate
TIM5	3.34	1.151	-0.260	-0.605	Moderate
TIM6	3.37	1.179	-0.279	-0.707	Moderate
TIM7	3.36	1.136	-0.183	-0.565	Moderate
TIM8	3.37	1.198	-0.251	-0.710	Moderate
TIM9	3.39	1.177	-0.263	-0.660	Moderate
TIM10	3.52	1.221	-0.315	-0.862	High
TIM11	3.53	1.250	-0.415	-0.799	High
TRM1	3.37	1.095	-0.302	-0.558	Moderate
TRM2	3.48	1.117	-0.149	-0.864	Moderate
TRM3	3.43	1.111	-0.307	-0.485	Moderate
TRM4	3.46	1.205	-0.290	-0.805	Moderate
TRM5	3.38	1.096	-0.212	-0.574	Moderate
TRM6	3.41	1.117	-0.270	-0.591	Moderate
TRM7	3.42	1.128	-0.269	-0.638	Moderate
TRM8	3.67	1.136	-0.596	-0.429	High
TRM9	3.41	1.070	-0.251	-0.389	Moderate
TRM10	3.35	1.128	-0.239	-0.562	Moderate
TRM11	3.40	1.191	-0.478	-0.552	Moderate
SSEM1	3.41	1.182	-0.303	-0.624	Moderate
SSEM2	3.37	1.032	-0.094	-0.390	Moderate
SSEM3	3.33	1.216	-0.249	-0.735	Moderate
SSEM4	3.41	1.185	-0.268	-0.734	Moderate
SSEM5	3.43	1.180	-0.278	-0.681	Moderate
SSEM6	3.35	1.189	-0.280	-0.658	Moderate
SSEM7	3.51	1.234	-0.330	-0.843	High

Item	Average value	Standard deviation	Skewness	Kurtosis	Level
SSEM8	3.34	1.123	-0.183	-0.579	Moderate
SSEM9	3.39	1.133	-0.260	-0.584	Moderate
SSEM10	3.38	1.169	-0.363	-0.523	Moderate
SSEM11	3.37	1.088	-0.230	-0.477	Moderate
SSEM12	3.40	1.151	-0.377	-0.542	Moderate
SSEM13	3.31	1.216	-0.288	-0.666	Moderate

From Table 1, it was summarized that descriptive analysis describes the overall picture of the data through mean or median. From Table 1: There are no outliers in the current data.The mean values of the 65 questions ranged from 3.28-3.670 indicating that the respondents had an opinion on the values of the variables at this level. The mean of the arithmetic ranges from Moderate to High with standard deviation ranging from 1.032-1.359, which indicates that the acceptance of the item is relatively the same for all the study participants.

Part Ⅲ: Reliability and validity analysis (EFA)

Table 2: Factor loads (rotation)

	ingredient						
	1	2	3	4	5	6	7
PAE1					0.774		
PAE2					0.796		
PAE3					0.812		
PAE4					0.785		
PAE5					0.782		
PAE6					0.810		
PAE7					0.789		
PAE8					0.817		
SM1				0.710			
SM2				0.687			
SM3				0.665			
SM4				0.679			
SM5				0.702			
SM6				0.687			

	ingredient						
	1	2	3	4	5	6	7
SM7				0.711			
SM8				0.719			
SM9				0.660			
SM10				0.674			
CM1		0.734					
CM2		0.699					
CM3		0.746					
CM4		0.698					
CM5		0.714					
CM6		0.693					
CM7		0.718					
CM8		0.741					
CM9		0.724					
CM10		0.758					
CM11		0.456					
CM12		0.745					
TIM1			0.766				
TIM2			0.356				
TIM3			0.758				
TIM4			0.725				
TIM5			0.732				
TIM6			0.731				
TIM7			0.689				
TIM8			0.688				
TIM9			0.720				
TIM10			0.760				
TIM11			0.765				
TRM1						0.717	
TRM2						0.672	
TRM3						0.679	
TRM4						0.478	
TRM5						0.666	

	ingredient						
	1	2	3	4	5	6	7
TRM6						0.709	
TRM7						0.728	
TRM8						0.730	
TRM9						0,376	
TRM10						0.693	
TRM11						0.701	
SSEM1	0.709						
SSEM2	0.660						
SSEM3	0.703						
SSEM4	0.720						
SSEM5	0.697						
SSEM6	0.722						
SSEM7	0.726						
SSEM8	0.388						
SSEM9	0.701						
SSEM10	0.764						
SSEM11	0.714						
SSEM12	0.677						
SSEM13	0.719						

The data in this study were rotated using the maximum variance rotation method (varimax) to find out the correspondence between the factors and the research items. Table8 shows the information extraction of the factors of the research project and the relationship between the factors and the research project. From the above table, it can be seen that the factor loadings of CM11, TIM2, TRM4, TRM9, and SSEM8 are less than 0.5, so CM11, TIM2, TRM4, TRM9, and SSEM8 questions were deleted, and after deletion of the questions, the validity analysis of the remaining questions was redone and the results were as follows:

Table 3 KMO and Bartlett's test

KMO Number of Sampling Suitability Measure		0.919
Bartlett's test of sphericity	Approximate cardinality	9320.433
	Degrees of freedom	1770
	Significance	0.000

As can be seen in Table 3, the KMO is 0.919, which is greater than 0.6 and meets the prerequisite requirements for factor analysis, indicating that the data can be used for factor analysis studies. The data passed the Bartlett's test of sphericity (p<0.05), indicating that the data in this study is suitable for factor analysis

Table 4 Factor loads (rotation)

	ingredient					
	1	2	3	4	5	6
PAE1				0.776		
PAE2				0.795		
PAE3				0.813		
PAE4				0.782		
PAE5				0.781		
PAE6				0.808		
PAE7				0.787		
PAE8				0.818		
SM1					0.707	
SM2					0.688	
SM3					0.670	
SM4					0.678	
SM5					0.703	
SM6					0.684	
SM7					0.711	
SM8					0.717	
SM9					0.663	
SM10					0.674	
CM1		0.734				
CM2		0.704				
CM3		0.748				
CM4		0.701				
CM5		0.712				
CM6		0.697				
CM7		0.721				

	ingredient					
	1	2	3	4	5	6
CM8		0.743				
CM9		0.721				
CM10		0.762				
CM12		0.747				
TIM1			0.764			
TIM3			0.758			
TIM4			0.728			
TIM5			0.734			
TIM6			0.733			
TIM7			0.694			
TIM8			0.689			
TIM9			0.718			
TIM10			0.757			
TIM11			0.762			
TRM1						0.720
TRM2						0.672
TRM3						0.678
TRM5						0.664
TRM6						0.708
TRM7						0.723
TRM8						0.739
TRM10						0.695
TRM11						0.711
SSEM1	0.705					
SSEM2	0.655					
SSEM3	0.710					
SSEM4	0.717					
SSEM5	0.692					
SSEM6	0.724					
SSEM7	0.730					
SSEM9	0.715					
SSEM10	0.762					

	ingredient					
	1	2	3	4	5	6
SSEM11	0.721					
SSEM12	0.678					
SSEM13	0.719					

The data in this study were rotated using the maximum variance rotation method (varimax) to find out the correspondence between the factors and the research items. Table 4 shows the information extraction of the factors of the research items and the relationship between the factors and the research items. From the above table, it can be seen that the commonality value of the corresponding values all of the research items is greater than 0.4, which indicates that there was a strong correlation between the research items and the factors, and that the factors could be effective in extracting information. After ensuring that the factor could extract most of the information of the research item, the corresponding relationship between the factor and the research item was analyzed (when the absolute value of the factor loading coefficient was greater than 0.4, it indicates that the item had a corresponding relationship with the factor).

The questionnaire scale data were selected for reliability analysis, and the Cronbach Alpha was first used to analyze the reliability of the data. In the reliability analysis, Cronbach Alpha coefficient generally reaches more than 0.7, which can reflect the high reliability of the questionnaire, and the questionnaire can be further analyzed in depth, as can be seen from the following table, the dimensions of the questionnaire in this study and the total Cronbach Alpha coefficient are all greater than 0.7, which indicates that the questionnaire has a high degree of reliability as a whole.

Table 5: Confidence analysis table

Items	Cronbach's α
PAE	0.944
SM	0.908
CM	0.926
TIM	0.922
TRM	0.898
SSEM	0.924
Total	0.952

Part IV Correlation analysis

Table 6 Pearson correlation

	Average value	Standard deviation	PAE	SM	CM	TIM	TRM	SSEM
PAE	3.417	1.112	1					
SM	3.471	0.840	0.413**	1				
CM	3.376	0.896	0.310**	0.355**	1			
TIM	3.427	0.905	0.356**	0.404**	0.306**	1		
TRM	3.435	0.834	0.310**	0.409**	0.352**	0.275**	1	
SSEM	3.388	0.860	0.338**	0.306**	0.313**	0.249**	0.339**	1

From Table 6, correlation analysis was used to study the correlation between PAE, SM, CM, TIM, TRM, and SSEM, and Pearson correlation coefficient was used to indicate the strength of the correlation. The specific analysis shows that the significance of the 6 components of PAE, SM, CM, TIM, TRM, and SSEM is less than 0.05, i.e., there is a positive correlation between both PAE, SM, CM, TIM, TRM, and SSEM.

Part V Component analysis

Table 7 Components of education management

No.	Components	Name	Number of variables	Factor loading
1	Component 1	PAE	8	0.776-0.818
2	Component 2	SM	10	0.663-0.717
3	Component 3	CM	11	0.697-0.762
4	Component 4	TIM	10	0.689-0.764
5	Component 5	TRM	9	0.664-0.739
6	Component 6	SSEM	12	0.655-0.762
	Total		60	

Notice: (Researcher gave new name after EFA)

1. PAE mean Policy and Environment Mechanism
2. SM mean Student Innovation Management
3. CM mean Course Management in Jilin folk art
4. TIM mean Teaching Management

5. TRE mean Teacher knowledge Management Optimize

6. SSEM mean Establish Supervision Service and Evaluation Mechanism

From Table 7, it could be seen that there were the following 6 components: component 1 contains 8 variables with factor loadings between 0.776 and 0.818; component 2 contains 10 variables with factor loadings between 0.663 and 0.717; component 3 contains 11 variables with factor loadings between 0.697 and 0.762; component 4 contains 10 variables with factor loadings between 0.689 and 0.764; component 5 contains 9 variables with factor loadings between 0.664 and 0.739; and component 6 contains 12 variables with factor loadings between 0.655 and 0.762. The total number of variables describing these 6 variables was 60 variables with factor loadings ranging from 0.655 to 0.818.

Based on the Exploratory Factor Analysis to extract variables to key component variables by analyzing the most likely conditions (maximum likelihood) to obtain important variables, which appeared to have acquired 6 components of improvement process of Jilin folk art education management in universities under Jilin Province.

Phase 3: Result of Data Analysis for Research Objective 2. To propose the guidelines to improving Jilin folk art education management in universities under Jilin Province.

A content analysis of the data from Connoisseurship discussion was performed. Based on the principle of freedom and voluntariness, the experts spoke freely in the discussion and proposed the managerial guideline of improvement process of Jilin folk art education management in universities under Jilin Province. The researcher sorted out and analyzed the discussions of 13 experts, choosing percentage guidelines that were greater than or equal to 50%, a total of 50 guidelines.

6. Discussion

Discussion about major findings of objective 1

The paper was formed through a literature review, a semi-structured interview and EFA to study the status of Jilin folk art education management in universities under Jilin Province. There were 6 important components of the status of Jilin folk art education management in universities under Jilin Province which consists: (1) Policy and Environment Mechanism (PAE), (2) Student Innovation Management(SM), (3) Course Management in Jilin folk art (CM), (4)

Teaching Management (TIM), (5) Teacher knowledge Management Optimize (TRM), (6) Establish supervision service and evaluation mechanism (SSEM).

Component 1: Policy and Environment Mechanism

The major findings "Constructing the theoretical system of educational management with Chinese characteristics" were revealed a lot of tales because folk art education is not just an educational pursuit, but a cultural heritage that transcends generations. In Jilin Province, the preservation and promotion of folk art education is very important. Jilin Province is known for its rich cultural heritage and has a long tradition of folk art. Folk art education in the region plays a key role in preserving and perpetuating these valuable traditions. Strengthening the management of folk art education must be strictly controlled at all stages. This research finding was in accordance with the theories or research of Zhang, Jingming & Wang, Qi. (2012, 62-67) which found that a number of policies and directives explicitly advocate for the protection and promotion of folk arts education. These policies help to recognize the cultural importance of folk arts and allocate resources to support their education.

Component 2:Student Innovation Management

The major findings"Strengthen students' innovative ideology, morality and professional cultural quality"were revealed as the commitment to improving course evaluation and course management in Jilin folk art education is a strategic imperative. It underscores the dedication to producing well-rounded, skilled, and culturally aware graduates who can contribute to the preservation and evolution of Jilin's unique folk art traditions. These efforts not only benefit students but also uphold the cultural heritage and creative industries of Jilin Province, ensuring their continued vitality and relevance. The findings were in the same direction with Yang, Lei. (2012,124-125) which found that Jilin Province policy encourages universities to offer a wide range of folk art programs, covering both traditional and contemporary forms. This diversity caters to students with different interests in the field of folk art. Jilin Province's policies promote the integration of folk art into the broader cultural landscape.

Component 3: Course Management in Jilin folk art

The major finding "Improve course evaluation and Course Management in Jilin folk art" were revealed because emphasizing the improvement of course evaluation and course management in Jilin folk art education, is grounded in the fundamental principles of educational quality, relevance, and effectiveness. These components are the building blocks

of a strong educational program, and by addressing them, Jilin Province can ensure that its folk art education not only meets goal of the education, but exceeds the expectations of students, the industry, and the broader community. The ultimate beneficiaries of these efforts are the students who will carry forward Jilin's rich folk art traditions and contribute to the cultural heritage and creative industries of the province. This research finding was in accordance with the theories or research of Zhu, Xiaojie. (2019,75-77) which found that while many universities offer diverse programs, keeping course materials current as a major challenge. At some institutions, course materials remain the same over the years, resulting in outdated content that is out of step with contemporary folk art.

Component 4: Teaching Management

The major finding "Teaching concept, teaching method and teaching goal of innovative art education" were revealed as regarding the need to reevaluate teaching concepts, methods, and goals in innovative art education is essential for preparing students for the challenges and opportunities of the 21st century. It acknowledges the evolving nature of art and creativity and advocates for a dynamic, adaptable, and student-centered approach to art education. By embracing these principles, art educators can nurture the next generation of artists, designers, and creative thinkers who will shape the future of art and culture.This research finding was in accordance with the theories or research of Wang, Wenjing. & Dai, Yongsheng. (2017,50-51) which found that strong teacher-student interaction was another key finding. Teachers actively interact with students, providing individualized instruction, guidance, and constructive feedback.

Component 5: Teacher knowledge Management Optimize

The major finding "Optimizing Teachers' Knowledge Structure and Improving Comprehensive Teaching Ability" were revealed as regarding the optimization of teachers' knowledge structure and the improvement of their comprehensive teaching ability recognized the pivotal role of educators in shaping the future. It highlights the need for teachers to continuously expand their knowledge, adapt to changing educational paradigms, and employ effective teaching methods. By doing so, teachers can create enriching learning experiences that empower students to thrive academically, socially, and ethically, preparing them to tackle the challenges and opportunities of the modern world.This research finding was in accordance with the theories or research of Tang, Jialu. (2020,75-77) which found that The faculty of the Jilin Folk Arts Education Program is of a high caliber. Many of the teachers hold advanced degrees and had extensive experience in their respective fields of folk art.

This expertise contributes to the quality of education provided. Faculty in the Jilin Folk Arts Education Program are often faced with a challenging balance of teaching, research, and administrative responsibilities.

Component 6: Establish Supervision Service and Evaluation Mechanism

The major finding "Comprehensive evaluation of teaching quality that combines teacher self-evaluation, student evaluation, peer evaluation, supervisory evaluation." were revealed because the importance of comprehensive evaluation of teaching quality, which combines various assessment methods, reflects a commitment to enhance the educational experience and outcomes for students. It recognized that effective teaching is multifaceted and involves ongoing self-reflection, collaboration, and accountability. Through this approach, universities could ensure that teaching quality remains a top priority and that educators are equipped with the tools and support needed to excel in their roles, ultimately benefiting students and society as a whole. This research finding was in accordance with the theories or research of Huang, Zhongzhao & Bai Yang. (2016, 74-76) which found that Oversight services assessment mechanisms are needed to improve transparency and clarity. Students, faculty, and administrators have expressed concerns about the lack of transparency in assessment standards and processes. Clearer guidelines and communication were essential to address these concerns. The existence and effectiveness of feedback mechanisms within the mechanism varies from university to university.

Discussion about major findings of objective 2

The guidelines for improving process of Jilin folk art education management in universities under Jilin Province. There were 50 guidelines of "The improvement process of Jilin folk art education management in universities under Jilin Province." and the guideline were prioritized on strengthen students' innovative ideas and moral and professional cultural qualities , integrated characteristic resources to create a teaching system, open courses with national folk art characteristics, build a dual-track of employability and establish a quality assurance system for improvement process of Jilin folk art education management in universities under Jilin province.

7. Recommendations

Recommendation for policy formulation

Enhancing Jilin folk art education management in universities is not just about preserving cultural heritage but is also a means to promote creativity, critical thinking, and a

deeper understanding of regional identity among students. Universities in Jilin Province can become pivotal centers of folk art education, research, and preservation.

Recommendation for practical application

The practical application of the dissertation's findings is crucial for tangible outcomes. By integrating folk art into the university environment and beyond, we ensure the continuous evolution and appreciation of Jilin's rich cultural heritage.   universities can be pivotal in not only preserving but also innovating and promoting Jilin folk art on a wider scale.

Recommendation for Further Research

(1) The study of the broader socio-economic implications of robust folk art education as solf power to tourism, greater community cohesion, or even the potential for economic upliftment of artisan communities.

(2) The examine of modern technologies, as virtual reality, augmented reality, or online learning platforms, can be seamlessly integrated to enhance folk art education.

(3)   The study of folk art education fit into international students and global cultural exchange.

In summary, while the dissertation on Jilin folk art education management in universities has provided a foundation, the multifaceted nature of folk art education demands continuous research. By exploring the aforementioned avenues, we can ensure that the rich tapestry of Jilin's folk art not only remains preserved but thrives and evolves in a rapidly changing educational and cultural landscape.

BIbliography

AlMalki Hameeda A. & Durugbo Christopher M.. (2023). **Evaluating critical institutional factors of Industry 4.0 for education reform. Technological Forecasting & Social Change.** doi:10.1016/J.TECHFORE.2023.122327.

Bao Xue. (2021). **Construction of a comprehensive quality management system for postgraduate students in college H based on the ISO9000 family of standards**. Master's thesis, Hebei University of Science and Technology. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202201&filename=1021759319.nh

Bao, Yajun. (2021). **The Importance of Folk Art Elements in College Art Education.** Research on Ethnic Higher Education (05), 89-92. doi:10.14045/j.cnki.rhen.2021.05.017.

Boonyasurat Woralun,Piriyatachagul Grit,Thammawong Panupong & Niratsayaputi Nichapa.(2022). **Crafts and Folk Art Tourism Development in Chiang Mai Towards UNESCO Creative Cities Network Membership.** Journal of Sustainable Development(4). doi:10.5539/JSD.V15N4P84.

Changjiang Jin. (2023). **On the Effective Integration of Folk Art and Art Design Education.** Frontiers in Art Research(3). doi:10.25236/FAR.2023.050304.

Cheng Gang. (2020). **Research on the Development Countermeasures of Art Education Management in Students' Comprehensive Quality Education.** China Nationalities Expo(04), 56-57.

Chi, Xusheng. (2012). **Introduction to the tradition and development of folk art.** modern communication (07), 92+91.

Circumference. (2023). **Art Education Management Mechanism and Construction.** Teaching the New Curriculum (electronic version) (04),102-103.

Dong Xiao-jun. (2021). **Research on the Integration of Folk Art and Art Program Teaching in Colleges and Universities.** Light Textile Industry and Technology (09),150-151.

Dimmock Clive,Tan Cheng Yong, Nguyen Dong,Tran Tu Anh & Dinh Thang Truong. (2021). **Implementing education system reform: Local adaptation in school reform of teaching and learning.** International Journal of Educational Development. doi:10.1016/j.ijedudev.2020.102302.

Dybach Inna. (2019). **Institutional aspects of educational quality management in higher educational establishments.** Economics of Development (1). doi:10.21511/ed.18(1).2019.04.

Fang, Shu & He, Jia. (2018). **Research on the status quo and countermeasures of traditional culture education for art students in colleges and universities.** academy(27), 108-109.

Fu, Chunmin. (2022). **The Educational Implications of Folk Art(Doctoral dissertation, Sichuan Normal University.** https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2023&filename=1023004215.nh

Hu Yan. (2017). **Research on Folk Artistic Orientation Based on the Reform of Art Education in Colleges and Universities.** China University Science and Technology(S1),127-128. doi:10.16209/j.cnki.cust.2017.s1.072.

Huang, Zhongzhao & Bai Yang. (2016). **Art Talent Cultivation and Entrepreneurship Education in Colleges and Universities.Education and careers.** (07),74-76. doi:10.13615/j.cnki.1004-3985.2016.07.024.

Jie Xin. (2021). **Research on the Integration of College Art Teaching and Folk Art Resources. Advances in Higher Education.** (2). doi:10.18686/AHE.V5I2.3358.

Khrystyna Mykyteychuk. (2018). **The School Education System Reforms in Modern Poland. Comparative Professional Pedagogy.** (2). doi:10.2478/rpp-2018-0030.

Lei Jun. (2023). **Inheritance and development of folk art, design innovation to help rural cultural revitalization--Another review of Folk Art and Design. Contemporary media.** (03), 113-115.

Lei Rongjia. (2022). **On the Aesthetic Characteristics of Traditional Folk Art. Frontiers in Art Research.** (11.0). doi:10.25236/FAR.2022.041112.

Li Yang. (2020). **Internal Management System Reform of Colleges and Universities Based on the Perspective of Autonomous Synergy--A Review of New Theory of Internal Management System Reform of Colleges and Universities: a Research Perspective of Autonomous Synergy.China University Science and Technology.** (Z1),130. doi:10.16209/j.cnki.cust.2020.z1.033.

Li, Mingyu. (2019). **Analysis of the Impact of Folk Art on the Reform of Art Education in Colleges and Universities.** Journal of Hubei Open Vocational College(08),47-48.

Liu, Qiang. (2010). **Aesthetic and social values of Chinese folk art.** The Grand View of Fine Arts(07),75.

Liu, Wenwen. (2012). **Strengthening Chinese traditional art education and promoting folk art culture.** Examinations (Teaching and Research Edition)(12),219.

Lv, Hong. & Qiu, Junping. (2015). **Discussion on Research Progress and Innovative Development Path in the Field of Quality Standards in Higher Education.** Journal of Chongqing University (Social Science Edition) (03),181-188.

Ma, Wanmin. (2006). **Discussion on Quality Management of Higher Education Services.** Research on Education Development(01),77-80.

Nataliya Panasiuk. (2016). **ANALYSIS OF EDUCATIONAL QUALITY MANAGEMENT SYSTEM TRAINING FUTURE ENGINEERS AND TEACHERS.** Naukovì Zapiski Ternopìl's'kogo Nacìonal' nogo Pedagogìčnogo Unìversitetu Imenì Volodimira Gnatûka. Serìâ:Pedagogìka(2).

Qin Xuan. (2016). **From Art Resource to Industrial Brand: The Inheritance and Innovation of Folk Art (Doctoral Dissertation.** Central China Normal University. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2018&filename=1016 269533.nh

Tang, Suisheng. (2003). **A brief account of the development of traditional folk art "New Year's Paintings".** Beauty and the Times(08),33-34.

Tang Jialu . (2020). **The value and significance of folk art education integrated into higher art and design education**. Journal of Shandong Academy of Arts and Crafts (02),75-79.

Wang Wenjing. & Dai Yongsheng. (2017). **The Construction of Folk Art Education Inheritance System - A Study from the Perspective of Intangible Cultural Heritage Protection and Inheritance.** China Nationalities Expo(04),50-51.

Wen Yang. (2021). **The Value and Significance of Mixing Folk-art Education into Higher-art Design Education.** (eds.). 2021Proceedings of the Fifth International Conference on Science, Technology, Innovation and Educational Development (English)(pp.15-17).

Xiang Liya. (2023). **Research on the status quo and strategy of education management in China's colleges and universities.** Shanxi Youth (07),178-180.

Xu, Yi. (2008). **Application of ISO9000 quality management system in elementary school management**. Master's thesis, Soochow University. https://kns.cnki.net/KCMS/detail/ detail.aspx?dbname=CMFD2009&filename=2009030163.nh.

Yang, Lei. (2012). **Analyzing the Development and Inheritance of Folk Traditional Art in College Art Education.Beauty and the Times**(above). (09),124-125. doi:10.16129/j.cnki.mysds.2012.09.040.

Zhang, Bowen (2020). **An Initial Exploration of Reform and Innovation in Arts Education Management--A Review of Introduction to Arts Management.** forest industry (08),115.

Zhang, Jingming & Wang, Qi. (2012). **Current Situation Analysis of Intangible Cultural Heritage of Folk Art in Northeast China.** Journal of Dalian University (04),62-67.

Zhu, Xiaojie. (2019). **Innovative Development of Folk Paper Cutting Art in College Art Education.** Journal of Changchun College of Education (10),75-77.

Information Leadership in the Digital Era of Administrators
in Comprehensive Universities under Liaoning Province

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ABSTRACT

The research objectives were: (1) To explore the components of information leadership in the digital era of administrators in Comprehensive University under Liaoning Province; and (2) To develop the managerial guidelines for enhancement of information leadership in the digital era of administrators in comprehensive university under Liaoning Province.

This research was a mixed method research, including quantitative research and qualitative research. The population consisted of 438 comprehensive university leaders and information management personnel from 30 comprehensive universities under Liaoning province. The sample size was determined by Krejci and Morgan's Table (1970) obtained through stratified random sampling technique. There were 205 university leaders and information management personnel in total. 7 experts key informants were gained through purposive sampling methods. The instruments used for data collection are semi-structured interview form and five-point rating scale questionnaire. Statistics used for data analysis included frequency, percentage, mean, Standard Deviation, Exploratory Factor Analysis and Focus group Discussion.

The research findings revealed that: (1) there were 8 components of information leadership in the digital era of administrators in comprehensive universities under Liaoning Province.and (2) there were 24 managerial guidelines for enhancement of information leadership in the digital era of administrators in comprehensive university under Liaoning Province.

Keywords: administrator, Information Leadership, comprehensive university, Liaoning Province

1. Introduction

As the human society has entered the information age.Digital information technology has a profound impact on all fields of the world. It not only impacts people's production and life style, but also profoundly affects the organization and management mode of social organizations and managers.the leadership paradigm is quietly changing in qualitative way, will inevitably give birth to new leadership theory and new demands of leadership practice application under the new theory. In the field of education, digital information technology has produced unprecedented impact and influence on educational ideas, teaching mode, and inevitably leads to the systematic reform and reconstruction of educational management system and organizational structure.

In 2002, the International Educational Technology Association (International Society for Technology in Education, ISTE) issued the programmatic document " Educational Technology Standard for Education Leaders to improve the efficient use of information technology and enhance the national education information (NETS.L). The document emphasizes the leading and transformative role of education leaders in the age of information innovation. (U.S, 2010)

In March 2012, the Chinese Ministry of Education issued the education information ten years development plan (2011-2020), based on the information education the scientific development, clearly put forward the significance of information leadership,   fully ensure the management efficiency and quality level. It is emphasized to vigorously promote the education management information in the whole scope, and promote the realization of scientific education decision-making and standardized school management. (ministry of education, 2012, p.92).

The development of educational information in China has gone through three stages:

The first stage, from 1978-1999 to the computer teaching experiment and computer-aided teaching practice exploration of the pre-education information stage;

In the second stage, education information 1.0 stage (2000-2017), strengthened the deployment of information infrastructure and supporting equipment, practiced the application-driven goal, and promoted the integrated development of information and education.

The third stage of education information 2.0 stage, in April 2018, the Ministry of Education issued the "Notice on education Information 30Era", marking the upgrading of education information.stimulate the reform of education system, realize the integration,

innovation and development of education information, and produce the integration effect of technology and education.

The 2017 education information priorities in Liaoning province put forward the current education information construction in Liaoning province area for the whole, rely on the provincial, city and county governments at all levels, play to the education management decisions and leadership to promote education information development.adjust the organization structure, establish match the information development of management system, operation mechanism and management mode, is the managers information leadership development problems to be solved.

Researchers think that the concept of information leadership, structure research analysis,can further enrich the local education information theory, promote the education concept and education mode innovation, but also for the subsequent subject research provides a certain theoretical basis. In a practical sense, conducive to better integrating information technology into the leadership structure of educational managers,clarifying the key elements of information leadership.

2. Research Questions

1. What are the components of information leadership in the digital era of administrators in comprehensive universities under Liaoning Province?

2. What are the managerial guidelines for element of information leadership in the digital era of administrators in comprehensive university under Liaoning Province ?

3. Research Objectives

1. To explore the components of information leadership in the digital era of administrators in Compre   hensive University under Liaoning Province .

2. To develop the managerial guidelines for enhancement of information leadership in the digital era of administrators in comprehensive university under Liaoning Province.

4. Research Method

4.1 Research Design

This dissertation mainly adopts the mixed research methods of quantitative research and qualitative research. The phase 1 is Qualitative research:The researchers studied the concept, principle, theory and theory of the literature, and conducted in-depth interviews with 7 key informant .The phase 2 is Quantitative research: Researcher use step (1) Variables

of information leadership of the administrators of Liaoning Comprehensive University to compile a questionnaire to collect data from samples to test the components of information leadership of the managers of Liaoning Comprehensive University.The phase 3 is qualitative research:selected various components of management information leadership from step (2) and adopted the method of focus group discussion by 7 key informants to formulate the information leadership management guide of comprehensive university administrators in Liaoning Province;

4.2 Population and Sample

The phase1Qualitative research: In-depth interviews with 7 key informants, the phase 2 Population was the relevant personnel of Liaoning Provincial Comprehensive University involved in the management and organization of educational information. using proportional stratified random sampling Choose 205 peoples from totally 438 members. They came from 30 comprehensive universities in Liaoning province. The investigators determined the sample size using Krejci and Morgan's Table (1970).

4.3 Research Instruments

Phase1: Collect the relevant literature on the components of information leadership of administrators in Comprehensive University under Liaoning Province. by semi-structured interview format. Phase 2: The instrument for this phase is questionnaire. Phase 3: Note taking,diagram"The components of Information Leadership of administrators in Comprehensive University under Liaoning Province".for focus group discussion.

4.4 Data Collection

Phase 1:Data collection was performed by the researcher, through 21 documents and the interview of 7 experts. Phase 2: The questionnaires were sent by online and mail. Information was collected by filling in the questionnaire of 205 peoples. Phase 3: Checklist will be sent to the panel of experts by mail and online. The data collected in this stage mainly consisted of discussion and surveys conducted by 7 experts.

4.5 Data Analysis

Phase 1:The collected data was analyzed by Content Analysis statistics using frequency and percentage. Phase 2: Data for demographic variables were analyzed by frequency and percentage. Descriptive statistics were used to analyze the variables of information leadership in the digital era of administrators in Comprehensive University under Liaoning Province; mean, standard deviation (S.D.). For interpretation criteria about classifying mean score. information leadership of administrators in Comprehensive University under

Liaoning Province was analyzed by Exploratory Factor Analysis (EFA), reduce unrelated variables. Phase 3: Mode, Median, Inter Quartile Range are used for data analysis.

5. Research Results

5.1 Demographic Information

Data analysis resulted reveal that the summary questionnaire a total of 205 respondents, including 105 women, 51.6%, male 100 people accounted for 48.4%, most respondents from the age in 36 and above, a total of 88 people, 42.7%, university education informational development in Liaoning province in the primary stage, management team members in education qualification was mostly master, followed by PhD degree 63 people, accounting for 30.7%, in terms of work experience,The maximum number of informants was more than 6 years, accounting for 44.9%, and 14.9% were less than 4-6 years. In terms of position level, the largest number of informants was the main person in charge of information construction, with 89 people, accounting for 43.7%. In terms of the size of the college, the largest (400-800), with a total of 101, followed by 61 small (less than 400), accounting for 30.1%, and the smallest was 43 large (more than 800), accounting for 20.6%.Among the types of colleges / universities, the largest number of comprehensive universities was 107 (52.2%), and the least number of public Education Department of Liaoning Province was 39 (19%).

5.2 Reliability analysis of initial measurement

For reliability of questionnaire was a way of assessing the quality of the measurement procedure used to collect data. The researcher had sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's alpha coefficient on or above 0.80 means adequate reliability to determines the internal consistency or average correlation of items in a survey instrument to gauge reliability of the questionnaire. As a result, Cronbach's alpha coefficient was at 0.965 which can be used to describe the reliability of questionnaire.

5.3 Exploratory factor analysis

The relationship between variables was tested by statistical values, the Bartlett sphericity test (Bartlett's Sphericity Test). The coefficient matrix of the variables. the obtained information is suitable for further factor analysis.

Table 1 : shows the components of educational IT leadership for administrators

Order	Components	Number of variables	Factor loading
1	Component 1	13	0.646-0.836
2	Component 2	12	0.691-0.855

Order	Components	Number of variables	Factor loading
3	Component 3	10	0.605-0.801
4	Component 4	9	0.565-0.797
5	Component 5	8	0.717-0.815
6	Component 6	8	0.708-0.783
7	Component 7	7	0.657-0.773
8	Component 8	6	0.600-0.756
	total	73	0.600-0.855

According to table 1, there were 8 qualified components as follows;

Component 1 was described by the 13 key variables. After rotating the axis, the variable factor loading in this component is between 0.646 and 0.836, and the maximum variance variable was 45.602, which could explain 36.798% of the total variance. The 13 variables were the best combined with this component which the researcher named "Information literacy".

Component 2 was described by the 12 key variables. After rotating the axis, the variable factor loading in this component was between 0.691 and 0.855, and the maximum variance variable was 45.602, which explained 36.798% of the total variance. All 12 variables was the best combined with this component which the investigator named as "Information knowledge and technical ability".

Component 3 was described by the 10 key variables. After rotating the axis, the variable factor loading in this component was between 0.605 and 0.801, and the maximum variance variable was 45.602, which could explain 36.798% of the total variance, All 10 variables were the best combined with this component which the investigator named as "Information management and evaluation ability".

Component 4 was described by 9 key variables. After rotating the axis, the variable factor loading in this component was between 0.565 and 0.797, and the maximum variance variable was 45.602, which could explain 36.798% of the total variance. All nine variables were the best combined with this component which the investigator named "Information communication and coordination ability".

Component 5 was described by 8 key variables. After rotating the axis, the variable factor loading in this component was between 0.717 and 0.815. The maximum variance variable was 45.602, which explained 36.798% of the total variance. All 8 variables were the best combined with this component which the investigator named "Information planning and design ability".

Component 6 was described by 8 key variables. After rotating the axis, the variable factor loading in this component was between 0.708 and 0.801, and the maximum variance variable was 45.602, which explains 36.798% of the total variance compared with the variance of the other components, meaning that all eight variables are the best combined with this component which the researcher named" Information organization and implementation ability".

Component 7 was described by 7 key variables. After rotating the axis, the variable factor load in this component was between 0.657 and 0.773, and the maximum variance variable was 45.602, which could explain 36.798% of the total variance, Meaning that all seven variables were the best combined with this component. which the researchers named "Information environment and resource construction ability".

Component 8 was described by 6 key variables. After rotating the axis, the variable factor load in this component was between 0.600 and 0.756, and the maximum variance variable was 45.602, which could explain 36.798% of the total variance. All the six variables are the best combined with this component.which the investigator named" Information ethics literacy and professional ethics literacy ".
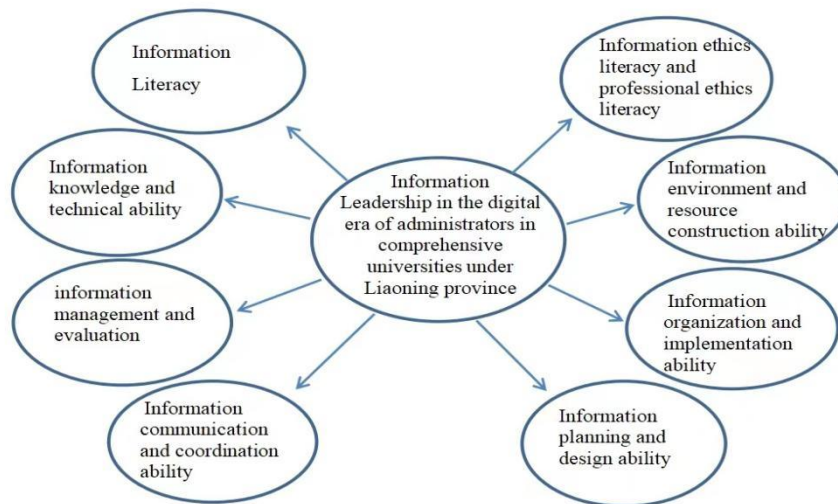

Figure 2 : The component of information leadership consisted of 8 components

5.4 Result of data analysis to develop the managerial guidelines for enhancement of information leadership in the digital era of administrators in comprehensive university under Liaoning Province

According to the results of the study objective Through focus group discussion of 7 experts.1. Investigation he managerial guidelines for enhancement of information leadership in the digital era of administrators in comprehensive university under Liaoning Province. Taking

the comprehensive universities in Liaoning Province as the research object, for the objective 2 .The investigators collated and analyzed the discussions of the 7 experts and reached the following conclusions.

Composition Part1: Information literacy had2 managerial guidelines;Strengthen the value orientation of information technology and organize the policy study;Set up the clear information awareness.Composition Part 2: Information knowledge and technical ability had 2 managerial guidelines;Organize theoretical study;Strengthen the application of educational information technology.Composition Part 3:Information management and evaluation ability had 4 managerial guidelines;Focus on technology, evaluation, analysis, and interpretation;Formulate professional development plans for teachers;Human resource management;Evaluate the teaching effect of teachers.Composition Part 4:Information communication and coordination ability had 2 managerial guidelines;Build an online communication platform;Focus on the internal and external communication and coordination of the administrative organization.Composition Part5:Information planning and design ability had 4 managerial guidelines; Develop your goals and visions;Strengthen the information leadership and organization;Strengthen the information technology integration; Implementation of information planning. Composition Part 6:Information organization and implementation ability had 3 managerial guidelines;Formulate the Team informational training plan;Strengthen the informational guidance;Build an information team of teachers.Composition Part 7:Information environment and resource construction had 4 managerial guidelines ; Information resources; Information technology facilities; Strengthen the information platform construction; Strengthen the information management and maintenance.Composition Part8:Information ethics literacy and professional ethics literacy had 2 managerial guidelines; Strengthen the information management and maintenance; Create a healthy, civilized and harmonious environment for communication;Promotion of information legal ethics.

6. Discussion

The discussion will be presented as follows:

6.1 Discussion about major findings of objective1

The first objective of the research was To explore the components of information leadership in the digital era of administrators in Comprehensive University under Liaoning Province. The major findings revealed 8 components of information leadership of administrators in Comprehensive University: Information literacy; Information knowledge and

technical ability; Information management and evaluation ability; Information communication and coordination ability; Information planning and design ability; Information organization and implementation ability; Information environment and resource construction; Information ethics literacy and professional ethics literacy.

The Information literacy and Information knowledge and technical ability of information leadership are important guarantees for the development of school informational; Information management and evaluation ability, Communication and coordination ability, Information planning and design ability, Organization and implementation ability, Information environment and resource construction ability,was an important support for the orderly implementation of education informational; Information ethics literacy and professional ethics literacy help to improve the social, moral, and ethical competence, Create a healthy, civilized and harmonious communication environment.

Therefore, the eight components of the research results was the important elements to build the information leadership of the comprehensive university managers, and also an important means to improve the information management. The common development of these 8 components can bring more opportunities for the development of university informational.

These research findings were in accordance with the theories or research of   Li xin(2022:18-31) found that The information management team of the university should, according to the requirements of the information development of the university, formulate the corresponding development plans and teacher training programs, and establish a new mode of information technology application ability that meets the needs of the school development of the university.

In addition,The establishment and training of school information management team can be better education information construction and development.managers' deep understanding of goals, tasks, ideas, content and assessment of policy understanding, Liu Meifeng   (2009:5-7), Gibson I W. (2002:315-334), Schmeltzer T. (2001:16-20)studied highlights the information knowledge and technical ability and indicates that   managers need to successfully integrate technology into the school teaching process. Zhong Xuelian (2020:36-37), Zhang Yanqiu,Kaslin (2016:23) pointed out that the measurement and evaluation of the status quo of information leadership level affects the information leadership level of leaders.Yang Kun (2014:51-54), Hu Quanyu (2013:30-32)found that information communication and coordination ability ,that was, internal promotion, external promotion of the school, and mutual assistance between schools.Sun Zhenxiang (2010:3-7),Wang Lu (2010:10-11) pointed

out that Information planning and design ability refers to the ability of managers to plan and construct the vision in the process of promoting the construction of school informational.Chen Qianhua (2015:43),Yang Rong(2007:47-48) pointed out that the management to formulate the information management system and planning suitable for the development of schools. As a leader,can influence the people to used information means to form an information work community.Wang Lu (2010:10-11),Dawson C,(2003:29-49) believed that the information environment and resource construction can influence the teaching and learning of teachers and students and promote the sustainable development of the school,administrators have a responsibility to ensure that schools invest in and install technology infrastructure, hardware and software to meet the needs of teachers and students. Liu Xiaojie (2018:14), Zhang Xian (2009:58-59) proposed that managers should have good information moral literacy and professional ethics,At the same time, managers implement laws and ethics related to the application of information technology and promote the responsible used of technology by teachers and students.

6.2 Discussion about major findings of objective2

There were 24 managerial guidelines for enhancement of information leadership of administrators in comprehensive university under Liaoning Province.This verification result was slightly different from the components of goal 1, and the guidance puts forward a more comprehensive and practical way to realize the information leadership of managers.On the basis of improving policy understanding, the leadership Information literacy emphasizes the correct value orientation; on the basis of organizational goal planning, the information leadership management policy should gradually promote the education planning, improve the green and healthy information environment, and strengthen the integrated application of information technology; On the basis of improving the information leadership, promote the teaching technology, evaluation, analysis and interpretation ability of teachers' information education, and carry out human resource management; formulate the teacher professional development plan, and evaluate the teaching effect of teachers.On the basis of communication and coordination, it is suggested to build an online communication platform and improve internal and external communication and coordination of administrative organizations. On the basis of the rules and regulations, strengthen the composition of the management team, formulate the information system, ensure that the planning can be implemented; On the basis of improving the construction and management of environmental resources, allocate information resources, carry out teacher training, build the first-class teachers and shape the shared school situation.On the basis of guaranteeing technical facilities, ensure the construction of school information software equipment, hardware equipment;

improve the construction of school information platform and set up professional information technology management and maintenance team. The construction of management policy can serve the development of management personnel informational leadership in an all-round and multi-dimensional way, provide certain theoretical and practical basis for the development of informational in colleges and universities, and also provide corresponding reference for relevant departments to formulate corresponding policies.

These findings were in accordance with the theories or research of Huang Ronghuai, (2012:11-17),Sun Zhenxiang (2010:3-7),Guo Xuling   (2010:21-27)which was found that the views proposed are consistent. Zhang Yanqiu, (2015:4-30), found that the Starting from the practical work needs and ability development, we should actively learn all kinds of new technologies and new knowledge, and incorporate them into the knowledge system.Zhao Hongjuan (2018:61-64),Wang Zhong (2019:65), Schoeny, Z. G. (2002:245-251) believed that the new leadership formed by the application of information technology in the expanding field of education and teaching.Yang Xiaohong (2010:7-10) and Zhong Xuelian (2020:36-37),Zhao Leilei (2018:67-71),Wang Jinjun (2014:45-46).found that the management evaluation ability reflected by school administrators directly affects the development of school education.Hao Ning,(2001:24-27) and Wang Huiqing (1998:19-21), Yang Kun (2014:51-54) found that information communication and coordination ability was communicate with administrators through the network platform; communicate with parents; communicate with brother schools, communicate with superior leaders and community leaders.Chen Qianhua (2015:28),Wang Haiying (2009:32-38), Zhang Xian (2009:58-59) emphasizing the formulation of information development goals, development content and safeguard measures,establishment of the information vision and the planning and implementation ability after the establishment of the information vision.Anderson,R.E,&Dexter,S. (2005,p.49-82), Guo Xuling(2010:21-27)found that management Should strengthen the establishment of management mechanism, the construction of school hardware and software environment, information application level, lifelong learning, teacher professional development and teacher level training construction.GuoXuling(2013:63),WangAne(2014:70),Anderson,R.E, & Dexter, S. (2005:49-82) believed that management should be strengthened hardware environment construction and software environment construction; potential environment construction. Zhang Yanqiu (2015:04-20),Zhou Lingyi (2016:11-10)found that management should have good information moral literacy and professional ethics,the ability to handle school affairs, identify information, improve problem processing efficiency, and achieve organizational goals through information technology.

7. Recommendations

7.1 Recommendations for Policy Formulation

The investigators believe that the suggestions for policy making can be discussed based on the following dimensions:

(1) Clearly define the main objectives of the policy, such as strengthening the value positioning of information technology, improving the ability of information management and evaluation, promoting information ethics literacy, etc. Education and training programs to help university administrators and relevant officials acquire the required information leadership.

(2) Adjust the policy in time and ensure that it has the desired effect Monitoring and evaluation mechanism: Establish a monitoring and evaluation mechanism to track the progress and effectiveness of policy implementation. To ensure that all relevant parties understand the objectives, measures and importance of the policy and encourage their participation and support.

(3) Develop or revise regulations to support the recommendations in the study results. Ensure that policies can be supported by adequate resources. Including budget allocation, training resources, technical facilities, and human resources allocation publicity and training activities are carried out to help information managers better understand various aspects of moral laws and regulations, so as to ensure the legality and morality of information management in colleges and universities.

7.2 Recommendations for practical application

Based on the study of Liaoning Province, the results can be applied to the following fields or institutions:

(1) University information management: The research results can provide the consult for Information leadership of the managers, help information management team to improve information literacy, information knowledge and technical ability, information management and evaluation ability, information communication and coordination ability, information planning and design ability, information organization and implementation ability, information environment and resource construction ability, information ethics accomplishment and professional ethics accomplishment, and provide them with targeted management policy.

(2) To provide a theoretical basis for promoting the development of local higher education informatization, The school information management team can develop a more scientific information development strategy according to the research results, To improve the level of school information development, At the same time, it can enrich and improve the

relevant research of school management team information leadership in Liaoning Province, To improve the influence and sustainable development ability of scientific research achievements.

In conclusion, the research on Information leadership in the digital era of administrators in comprehensive university under Liaoning Province is not only of far-reaching significance at the theoretical level, but also has a positive impact on the development of information managers in higher education institutions and practical applications.

7.3 Recommendation for Further Research

After Focus group discussions, through data analysis, from 8 dimensions to determine the 24 managerial guidelines, It provides the following thoughts for the future development of university information managers.

(1) Long-term impact study: Understand the long-term   impact of information leadership enhancement policies. Analyze current college policies, especially regarding information technology and information leadership, to identify potential bottlenecks and opportunities for improvement. Focus on the continuous development of managers' information leadership skills, as well as the potential impact of informatization on university performance and innovation. Track the trends in the field of information technology, especially those related to higher education. Timely adjustment of information leadership training and policies to adapt to the development of emerging technologies.

(2) Comparative study: Compare the differences in information leadership level and influencing factors between different universities to identify best practices and replicable strategies. Conduct comparative studies with universities in other countries or regions to understand the information leadership improvement policies and practices of different international university managers, and obtain cross-cultural experience and lessons.

(3) More quantitative studies:Quantifying the different dimensions of information leadership and the effect of policy implementation. Provide more specific data to support policy decisions. Consider the sustainability of information leadership enhancement policies,to provide a more comprehensive understanding of the complexity of information leadership. Better introduce stakeholders such as students, parents, alumni and industry partners to participate in information leadership development and decision making to achieve broader consensus and support.

In short, the future research direction should explore the development of information leadership of administrators in comprehensive universities under Liaoning Province from a deeper and broader perspective.Perform interdisciplinary and interdisciplinary collaborative research that integrates knowledge in the fields of educational management, are also worthy of further research direction.

BIbliography

Bovatzis, Richard E. (1982). **The competent manager: a model for effective performance.** New York,John Wiley & Sons,Inc.

Bi Xinhua & Wang Lei & Cao Yue & Gu Meiling. (2014). **An Empirical Study on the Relationship between Information Leadership and Competitive Advantage.** Information theory and practice,30(10), 88-93.

Chen Qianhua. (2015). **Research on the Current situation of School Management Team Information Leadership and Promotion Strategy.** Zhejiang Normal University, doctoral thesis, (05),63-78.

Du Ping. (2004). **Principals'high-performance leadership: An important guarantee of curriculum reform.** Research on educational development, (11),28-31.

David,Preston. (2007). **Karahanna Antecedents of Is strategic alignment a nom-ological network.** information Systems Research, (2),159-179.

Kotter,John P.Xu Zhong translated. (2014). **Leading the Change. Beijing: China Machinery Press.** (07),93-97.

Jiang Xin. (2021). **Research on the Development and Reform of Basic Education informational in the United States,1958-2018.** Fujian Normal University, doctoral thesis, (06),361-366.

Huo Guoqing & Meng Jianping & Liu Shifeng. (2008). **An Overview of Information Leadership Research.** Management Review, (04) ,31-38 24 64.

Huang, Ronghuai & Hu Yongbin. (2012). **informational Leadership and School informational Construction.** Open education research, 10(5), 11-17.

Liu Jinjun & He Yuanfeng & Wang Wei. (2017). **The Development Research of First-Class Characteristic Administration College.** Gansu People's Publishing House, (07), 180-183.

Li Zongzong. (2018). **Research on the Development Level of Basic Education informational.** Central China Normal University, doctoral dissertation,154-158.

Burke, Robert. (2006). **Leadership and spirituality.** Emerald group publishing limited, (08),14-25.

Sun Zhenxiang & Weng Jialong. (2014). **The Development Course and Enlightenment of the Information Leadership Connotation of Overseas Principals.** Audio-visual education in China,10(02), 8.

Yi Lingyun. (2017). **Internet Education and Education Change.** Huazhong Normal University, doctoral thesis, (05), 171-174.

Zhao Xiaowei. (2020). **The Construction of Information Leadership of School Managers under the Background of Intelligent Education.** NJNU (Nanjing Normal University, master thesis, 5(03), 87-89.

Zhong Xuelian. (2020). **Research on the Promotion Path of Information Leadership of Primary School Management Team.** Xinjiang Normal University, master thesis, (05),11-13.

Zhang Xian, Zhang Ting. (2009). **Cultivating School Leadership for informational.** Information technology education in primary and secondary schools, (02), 58-59.

Intelligent Service Affecting Smart Library Effectiveness
in Colleges and Universities in Anyang under Henan Province

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ABSTRACT

The purpose of this study is to (1) understand the factors that affect the effectiveness of intelligent services in intelligent libraries of universities in Henan Province, and (2) explore the mediating role of intelligent perception services in the relationship between knowledge services and the efficiency of intelligent library services. The research method is quantitative research.

This study included 6 universities in Anyang City, Henan Province, and selected 300 students as samples through stratified random sampling method. A survey questionnaire was used for data collection, and a total of 247 valid questionnaires were collected. Among them, there are 44 from Henan Nursing Vocational College, 44 from Anyang Vocational and Technical College, 39 from Anyang Preschool Vocational College, 43 from Anyang Normal College, 40 from Anyang Institute of Technology, and 37 from Anyang College. Descriptive statistics and structural equation modeling (SEM) were used for data analysis using data analysis software.

The results indicate that the key factors affecting the effectiveness of intelligent services in university smart libraries include knowledge services, intelligent perception, and research service needs. The demand for knowledge services, intelligent perception, and scientific research services has a positive impact on the intelligent services of university smart libraries. Intelligent service perception plays a mediating role between the demand for scientific research services and their effectiveness.

Keywords: knowledge services, intelligent service perception, research service demand, intelligent services

1. Introduction

The smart age is an advanced stage of the development of the information age. The changes in the big data environment, the development of information technology, the changes in people's information needs, and the development of the global economy are the main factors driving the inevitable trend of the information age towards the smart age. The continuous development of information technology has become a powerful driving force in the era of intelligence. Smart cities represent the direction of future urban construction and development. Smart libraries are one of the important components of the public cultural system in smart cities, so the research on smart libraries has increasingly become the focus of modern library research.

At the beginning of the 21st century, developed countries in Europe and America first proposed the concept of smart libraries and conducted extensive and effective practices. Compared to foreign countries, China started relatively late, and the library service model has been discussed by a large number of experts and scholars in recent years. Among them, the library service models in Shanghai and Taipei started the earliest. In the era of rapid development of network and digital technology, libraries, as organic growth entities, have undergone repeated transformations. Throughout their long history, libraries have also kept up with the times. The service functions of libraries are constantly developing, playing an irreplaceable role in collecting, classifying, storing, and utilizing human wisdom, culture, and knowledge achievements, making them the most valuable knowledge and information organization.

As a part of social public services, university libraries need to keep up with the pace of the times and continuously explore smart models, upgrade their services intelligently, continuously optimize and innovate, in order to better meet the needs of social development and readers. At present, the construction of smart libraries in the province is in a stage of transitioning from theoretical research to a combination of theory and practice, thus there is an urgent need to carry out research on the intelligent services of university libraries in the province. Intelligent services are the latest form of library services to date, and their implementation requires the cooperation of the library environment, which is the construction of smart libraries.

Smart library is a new type of library supported by a series of modern communication and high-tech intelligent technologies such as big data, cloud computing, and the Internet of Things. Its service purpose is to provide users with intelligent services based on human text, consider and solve practical problems from the perspective of users, and meet their various

personalized needs. Due to the difference between the knowledge services of smart libraries and traditional library literature and information services, as an important component of smart library research, it has increasingly attracted widespread attention. The inheritance and service of knowledge is the eternal theme of libraries. Under different historical backgrounds, researchers have conducted innovative research on knowledge services from different perspectives, resulting in different academic contributions. This study is based on the actual work of library services and conducts theoretical and empirical research on library intelligent services.

Through analyzing the literature content, it was found that the current theory of library intelligent services has not formed a corresponding system, and most of the literature focuses on the application of new technologies in intelligent services. The theory of intelligent services in domestic libraries is relatively comprehensive, focusing on the construction, development strategies, and technical practices of intelligent services. However, the research on the problems encountered in the construction of humanistic, intelligent, and ubiquitous library intelligent services and the actual implementation of services is not in-depth enough. In order to continuously adapt to the rapid development of external information and network environment, as well as the growing demand of readers, the research on library intelligent services needs to absorb interdisciplinary research results. Analyze the satisfaction of intelligent services in university libraries and propose relevant countermeasures and suggestions. University libraries take serving university teachers and students as the norm and shoulder the important function of the "heart" of universities. In order to better provide services, they are required to comprehensively utilize current information technologies such as cloud computing, the Internet, and big data in combination with actual situations, and complete the transformation of intelligent and digital organic integration through these technologies, in order to promote the construction of smart libraries and the effectiveness of intelligent services, It is necessary to conduct in-depth research on the needs, habits, and preferences of readers in order to provide them with intelligent services that are more in line with their actual needs.

2. Research Question

1. What are the factors that affecting the effectiveness of intelligent services in smart libraries of universities in Anyang City?

2. Do Smart perception services have a mediating effect on the relationship between knowledge service and Smart Library Smart Service Effectiveness.

3. Research Objectives

1. To find factors Influencing the Effectiveness of intelligent Services in Smart Libraries of Universities in Henan Province

2. To find the mediating effect of Smart perception services on the relationship between knowledge service and Smart Library intelligent service Effectiveness.

4. Research Hypothesis

H1 Knowledge services have a direct positive impact on the effectiveness of intelligent services in smart libraries.

H2 The perception of intelligent services has a direct positive impact on the effectiveness of intelligent services in smart libraries.

H3 The demand for scientific research services has a direct positive impact on the effectiveness of intelligent services in smart libraries.

H4 Knowledge services have a direct positive impact on the perception of intelligent services.

H5 The demand for scientific research services has a direct positive impact on the perception of intelligent services.

H6 The intermediary of intelligent perception services affects the effectiveness of knowledge services and intelligent services.

H7 Mediation of demand for scientific research services affects the perception and effectiveness of intelligent services
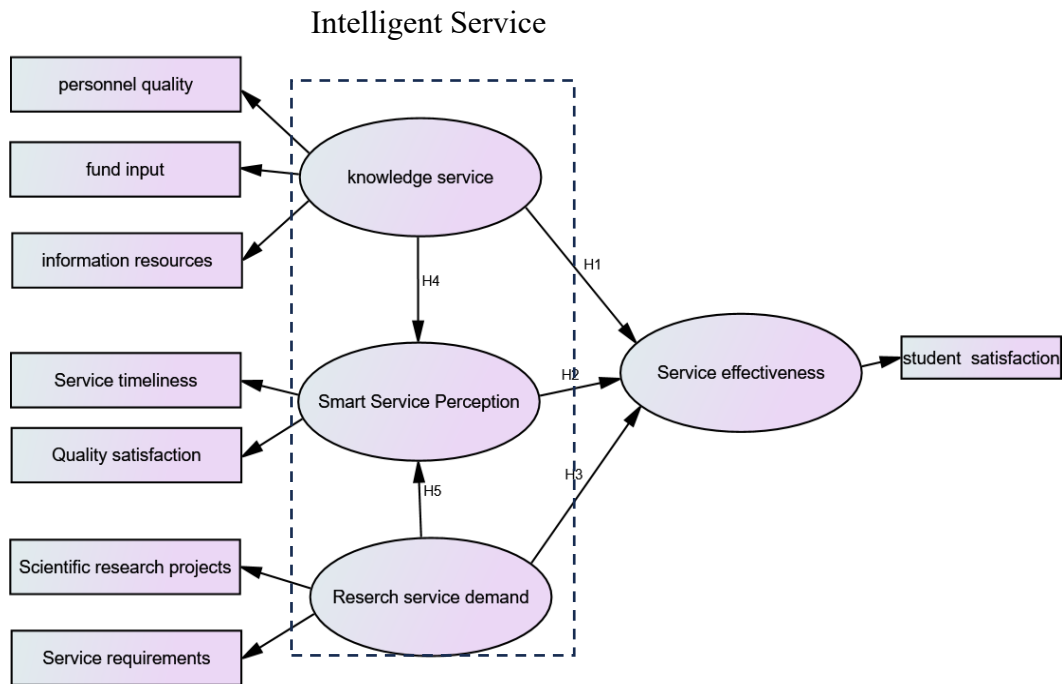
5. Conceptual Framework

Figure 1-1 Conceptual Framework

6. Methodology

Research methodology refers to the systematic process and techniques employed to conduct research, gather information, analyze data, and draw conclusions. It provides a structured framework for researchers to plan, execute, and validate their studies, ensuring that the research objectives are met effectively. The methodology chosen depends on the nature of the research question, the type of data needed, and the overall goals of the study. This research adopted quantitative research. There are three processes involved in research: research design, data analysis, and results. Details were as follows:

Research Design

To achieve the aims of this study, the research design was structured into three distinct stages, as outlined below:

Phase 1: Determine the factors that affect the effectiveness of intelligent services in the intelligent library of universities in Anyang City, Henan Province.

In the initial stage, researchers conducted in-depth research on a literature review focused on decision theory, emphasizing the factors that influence the effectiveness of intelligent services on the intelligent library of universities in Anyang City, Henan Province.

These determining factors include knowledge services, intelligent perception, and demand for scientific research services, which come from students' perspectives, school funding, and management.

Phase 2: Establish factors that affect the effectiveness of intelligent services in intelligent libraries of universities in Anyang City, Henan Province. Using intelligent perception as a mediator variable, analyze the impact of intelligent services on the efficiency of intelligent libraries in universities in Anyang City, Henan Province.

Based on the research results of the first step, researchers have identified the key factors that affect the effectiveness of intelligent services in the intelligent library of universities in Anyang City, Henan Province. The information extracted from the initial stage results helps identify these influencing factors and guides the writing of questionnaires designed for data collection purposes.

Phase 3: Establish a logistic regression equation for predicting the effectiveness of intelligent services in academic libraries in Anyang City, Henan Province.

In the final stage, researchers created a predictive model using logistic regression equations to understand the decision-making behavior of intelligent services on the effectiveness of intelligent libraries in universities in Anyang City, Henan Province.

This research design is characterized by these three different steps, aiming to comprehensively investigate the factors that affect the effectiveness of intelligent services on the intelligent library of universities in Anyang City, Henan Province.

Population and sample

The subjects of this study are students from 6 universities in Anyang, Henan Province. They are Henan Nursing Vocational College; Anyang Vocational and Technical College; Anyang Preschool College; Anyang Normal University; Anyang Institute of Technology; Anyang College has a total of 119830 students.

The sample selection method adopts stratified random sampling method. Researchers will divide students into two groups based on different schools, and then sample proportionally based on the total number of data in each group. The sample is 229 people, and the test power is 0.80 calculated using the G * power program.

The creation of research instruments

The researchers utilized a questionnaire comprising two parts; Part I: Basic Information of Students. Part II: Factors Affecting Questionnaire Survey. The quality of the questionnaire was evaluated by content validity and reliability. For content validity, it was checked by 5

experts and analyzed using item-objective consistency (IOC). The value of the item value is ≥ 0.50. For reliability, it was analyzed by Cronbach's alpha at 0.80.

Data Collection

The researcher sent Likert(5-point) rating scale questionnaires to the respondents. Questionnaires were sent online.

Data analysis

In order to analyze the sample characteristics, descriptive analysis of demographic characteristics was conducted on the collected effective questionnaires, mainly from the current school; Gender; Have you ever used a smart library; Would you like to choose a smart library or a traditional library; Level; Analyze it in terms of age.

To describe the characteristics of observed variables, descriptive statistical data such as mean and standard deviation were analyzed, and skewness, kurtosis, and Maria coefficients were used to test the normality hypothesis.

To ensure that the measurement of data is suitable for confirmatory factor analysis (CFA) and structural equation modeling (SEM) analysis, cross correlation matrices and tolerance and variance inflation factors (VIF) are used to test multicollinearity. And analyzed the reliability, effectiveness, and other measurement quality of the measurement.

The statistical tests for each hypothesis are 5 direct effects hypotheses and 2 intermediate effects hypotheses.

7. Results

Quantitative data analysis

Table 1 Demographic Information

Level	Frequency	Percentaged	Effective percentage	cumulative percentage
School				
Henan Nursing Vocational College	44	17.8	17.8	17.8
Anyang Vocational and Technical College	44	17.8	17.8	35.6
Anyang Preschool College	39	15.8	15.8	51.4
Anyang Normal University	43	17.4	17.4	68.8
Anyang Institute of	40	16.2	16.2	85.0

Level	Frequency	Percentaged	Effective percentage	cumulative percentage
Technology				
Anyang College	37	15.0	15.0	100.0
Gender				
Male	129	52.2	52.2	52.2
Female	118	47.8	47.8	100
used a smart library				
Yes	247	100	100	100.0
NO	0	0	0	0
Library				
Smart Library	149	60.3	60.3	60.3
Traditional Library	98	39.7	39.7	100.0
Grade				
Freshman	54	21.9	21.9	21.9
sophomore	92	37.2	37.2	59.1
junior	72	29.1	29.1	88.3
senior	29	11.7	11.7	100.0
Age range				
Below 17	48	19.4	19.4	19.4
17	45	18.2	18.2	37.7
18	51	20.6	20.6	58.3
19	65	26.3	26.3	84.6
More than 19	38	15.4	15.4	100.0
Total	247	100	100	

From Table 1, it can be seen that among the 247 valid samples, there are 129 male respondents, accounting for 52.2%, and 118 female respondents, accounting for 47.8%. etc.

Table 2 Results of descriptive statistical analysis

Table Descriptives

	$\bar{x}$	SD	Skewness		Kurtosis		
			Skewness	SE	Kurtosis	SE	P.
SR	3.51	1.167	-0.834	0.155	-0.45638	0.309	.000
SP	3.62	1.040	-0.823	0.155	-0.27198	0.309	.000
QS	3.75	0.985	-0.853	0.155	-0.00690	0.309	.000
ST	3.71	0.970	-0.753	0.155	-0.05135	0.309	.000
IR	3.86	0.946	-1.235	0.155	1.24180	0.309	.000
FI	3.84	0.978	-1.168	0.155	0.79328	0.309	.000
PQ	3.77	1.064	-1.122	0.155	0.56655	0.309	.000
SS	3.67	0.932	-0.781	0.155	0.25625	0.309	.000
Mardia's coefficient			34.8		150.5		.000

From Table 2, All of validates distribute normally while met the requirement of CFA assumption.

Table 3 Intercorrelation matrix

Correlation Matrix

	SS	PQ	FI	IR	ST	QS	SP	SR
SS	1.000***	1.000						
PQ	0.555***	0.619***						
FI	0.663***	0.596***	1.000					
IR	0.646***	0.460***	0.600***	1.000***				
ST	0.734***	0.452***	0.497***	0.556***	1.000***			
QS	0.762***	0.323*	0.491*	0.468*	0.772*	1.000*		

	SS	PQ	FI	IR	ST	QS	SP	SR
		**	**	**	**	**		
SP	0.721***	0.323* **	0.407* **	0.402* **	0.650* **	0.707* **	1.000	
SR	0.699***	0.329* **	0.376* **	0.367* **	0.552* **	0.586* **	0.775* **	1.000

Note: ***represent P≤.001

According to the data analysis, all pairs of correlations show a positive link with a moderate scale and can be utilized as indicators in a model of CFA.

Measurement model

In the measurement model specification of this study, researchers identified four factors: 1. Service Efficiency (SS), 2. Knowledge Services (KS), 3. Intelligent Service Perception (SSP), and 4. Research Service Demand (RSD). And 8 observation variables: 1. Service effectiveness (SS); 2. Personnel Quality (PQ), 3. Capital Investment (FI), 4. Information Resources (IR), 5. Service Timeliness (ST), 6. Quality Satisfaction (QS), 7. Scientific Research Projects (SP), 8. Service Needs (SR).
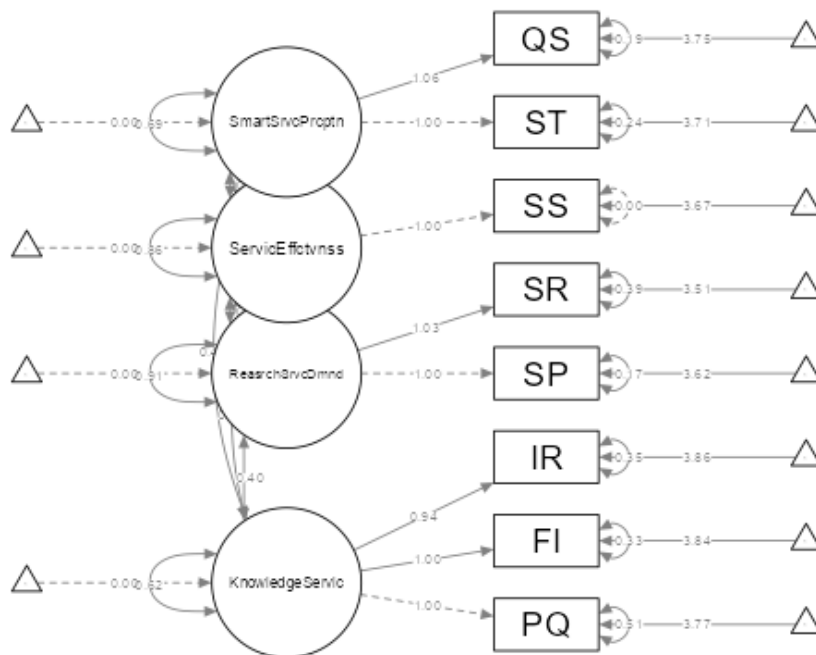
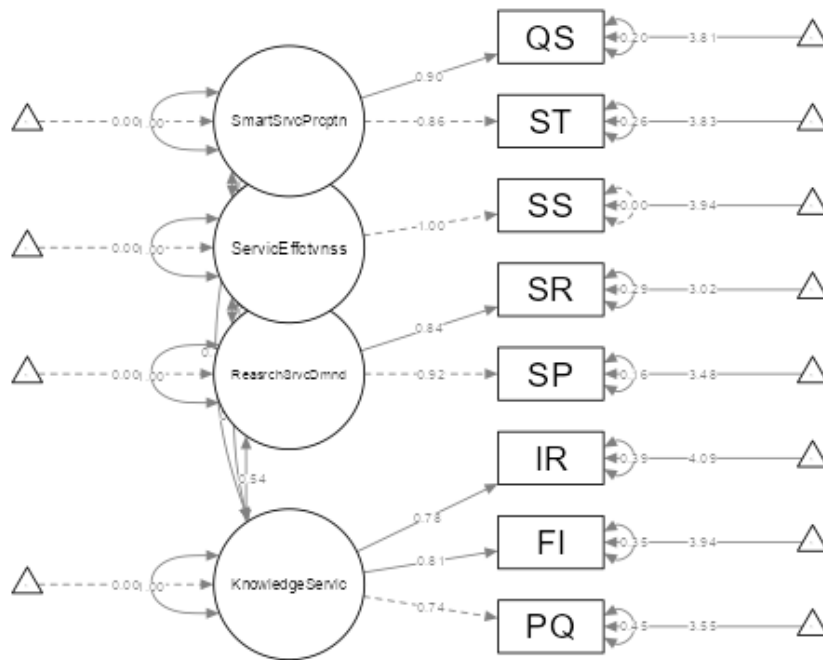**Structural Equation Model**

Figure 1Unstandardized CFA model

Figure 2 Standardized CFA Model

Table 4.1 Measurement model tests

Table 4.1.1 Model tests

Label	X²	df	p
User Model	36.7	15	0.001
Baseline Model	1428.4	28	< .001
X²/DF	2.45		

Table 4.1.2 Fit indices

		95% Confidence Intervals		
SRMR	RMSEA	Lower	Upper	RMSEA p
0.021	0.076	0.045	0.108	0.077

Table 4.1.3

User model versus baseline model

	Model
Comparative Fit Index (CFI)	0.985
Tucker-Lewis Index (TLI)	0.971
Bentler-Bonett Non-normed Fit Index (NNFI)	0.971
Relative Noncentrality Index (RNI)	0.985
Bentler-Bonett Normed Fit Index (NFI)	0.974
Bollen's Relative Fit Index (RFI)	0.952
Bollen's Incremental Fit Index (IFI)	0.985
Parsimony Normed Fit Index (PNFI)	0.522

Firstly, the model fitting indicators of the confirmatory factors were obtained, and the results showed that in the model validation, X^2 = 36.7, df=15, therefore, X is obtained X^2/Df=2.447, meeting the academic standard of below 3. SRMR=0.021 < 0.05; RMSEA=0.076 < 0.08; Comparative Fit Index (CFI)=0.985; Tucker Lewis Index (TLI)=0.971; Bentler Bonett Non normalized Fit Index (NNFI)=0.971; Relative Noncentrality Index (RNI)=0.985; Bentler Bonett Normalized Fit Index (NFI)=0.974; Bollen's Relative Fit Index (RFI)=0.952; Bollen's Incremental Fit Index (IFI)=0.985 is greater than 0.9, and the Parsimony Normed Fit Index (PNFI)=0.522 is greater than the minimum standard of 0.5. Overall, the fitting index values of the questionnaire model meet the requirements of the academic community. indicating that the structural model of this study was reasonable and can analyzed.

The researcher tested the fit of the structural model and found that the fit of the model was as follows: (X^2 = 36.7, TLI=0.971, GFI=0.971, CFI=0.985, RMSEA=0.058). indicating that the structural model of this study was reasonable and can analyzed.

Hypothesis testing

Based on the theoretical model constructed in this article, the Service effectiveness is improved; Personal quality; Fund input; Information resources; Service timeline; Quality satisfaction; Scientific Research Projects; Service recommendations are included in the same structural model to empirically test the research hypotheses of this article.

Firstly, the structural equation model verification results under standardized and unstandardized states are shown in Figure 3 and Figure 4, respectively.
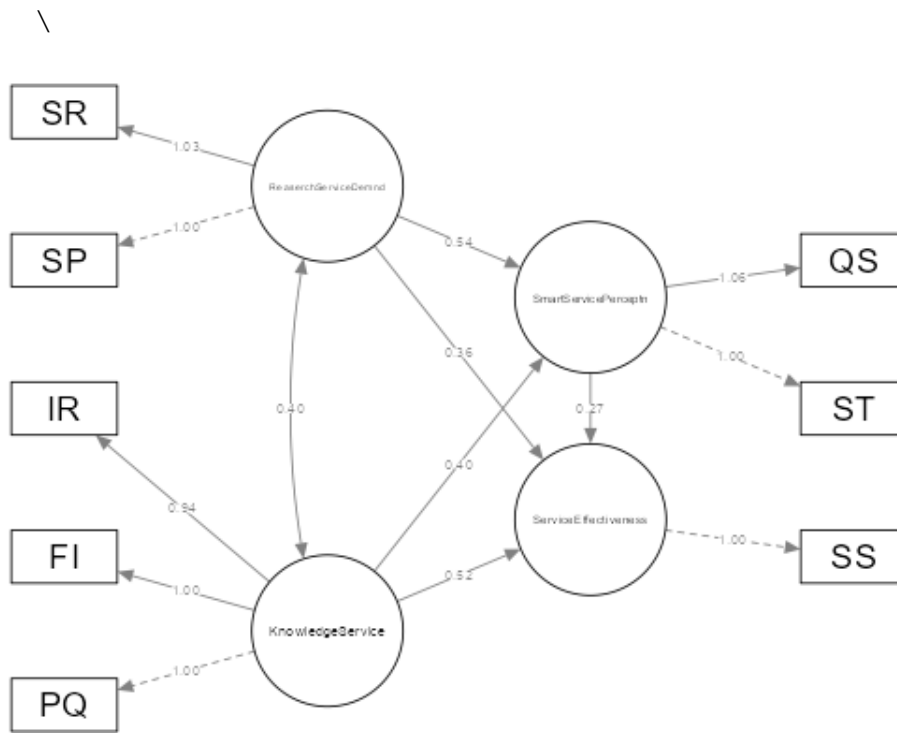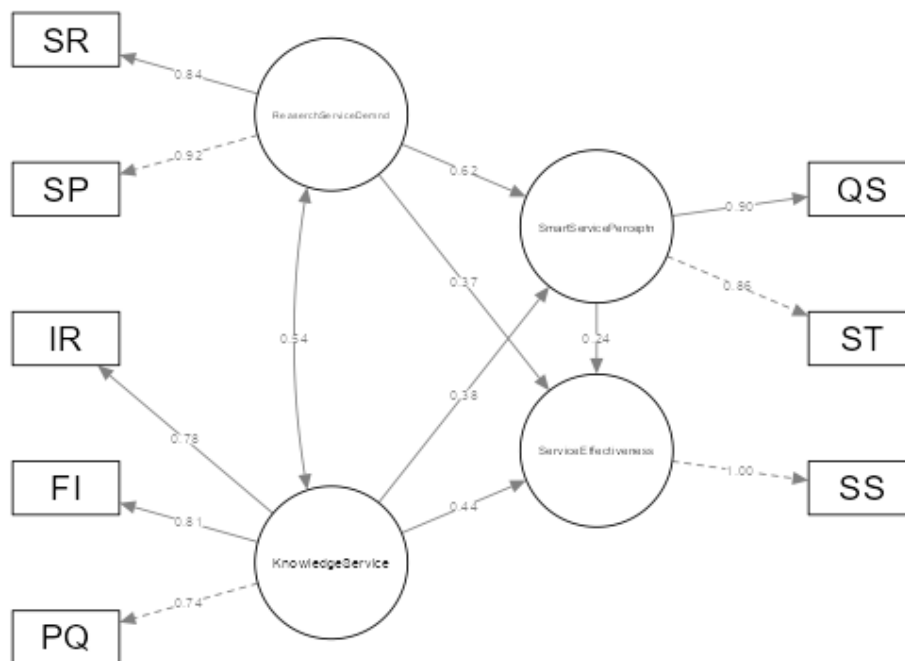
Figure 3 Structural Equation Models in Unstandardizatio

Figure 4 Structural Equation Models in Standardization

Table 5 Direct Impact

Dependent v.		Predicttors	Estimate	SE	β	z	p
H:1 Service Effectiveness	⇐	Knowledge Service	0.52	0.07	0.44	7.14	< .001
H:2 Service Effectiveness	⇐	Smart Service Perception	0.27	0.10	0.24	2.62	0.009
H:3 Service Effectiveness	⇐	Research Service Demand	0.36	0.07	0.37	5.00	< .001
H:4 Smart Service Perception	⇐	Knowledge Service	0.40	0.07	0.38	5.81	< .001
H:5 Smart Service Perception	⇐	Research Service Demand	0.54	0.06	0.62	9.57	< .001

Table 5 provides information on the relationship between predictive variables (knowledge, needs, and services) and dependent variables (effectiveness or services). Estimations, standard errors, confidence intervals, z-values, and p-values are crucial for evaluating the importance and direction of these relationships in statistical analysis.

Table 6 Hypothesis testing for indirect effects

Label	Description	Parameter	Estimate	SE	β	z	p
H:6	Knowledge Service ⇒ Smart Service Perception ⇒ Service Effectiveness	p12*p9	0.11	0.04	0.09	2.52	0.012
H:7	Research Service Demand ⇒ Smart Service Perception	p13*p9	0.15	0.06	0.15	2.57	0.010

Label	Description	Parameter	Estimate	SE	β	z	p
	⇒ Service Effectiveness						

Through the direct effect test results, it can be seen that knowledge services have a significant positive impact on the perception of intelligent services, and the demand for scientific research services has a significant positive impact on the perception of intelligent services; Both knowledge services and intelligent service perception have a significant positive impact on service effectiveness. Therefore, it is a prerequisite to explore whether intelligent service perception mediates between knowledge services and service effectiveness, as well as research service demand and service effectiveness. To further explore the mediating effect of intelligent service perception.

The research results indicate that in the mediating effect path test of Knowledge {Service} Effectiveness, the standardized influence coefficient of indirect effects is 0.090, Z=2.518, P=0.012<0.05, and the 95% confidence interval is [0.024; 0.190]. Therefore, 0 is not included in the 95% confidence interval of this path test. Therefore, Service has a significant mediating effect between Knowledge and Effectiveness. Therefore, there is a research hypothesis that there is a mediating effect between knowledge services and service effectiveness based on the perception of intelligent services.

In the process of mediating the effect path test, the standardized influence coefficient of indirect effects is 0.148, Z=2.570, P=0.0010<0.05, and the 95% confidence interval is [0.034; 0.255]. Therefore, 0 is not included in the 95% confidence interval of this path test. Therefore, Service has a significant mediating effect between Demand and effect. Therefore, there is a research hypothesis that the perception of intelligent services plays a mediating role between the demand for scientific research services and their effectiveness.

8. Conclusion

The research results show that as follows:

(1) The factors that affect the effectiveness of intelligent services in intelligent libraries of universities in Anyang City, Henan Province include knowledge services, intelligent perception services, and research demand services.

(2) After modifying the measurement model, it is very suitable for empirical data.

(3) Knowledge services, intelligent perception services, and research demand services have a positive impact on the efficiency of intelligent services in university libraries. Knowledge

services and intelligent perception services have a mediating effect. After data analysis and testing, the relationship model and empirical data are good.

9. Discussion

Research Objective 1: Based on literature review and questionnaire survey results. According to the data analysis results in Table 6, the significance results (P-values) of the direct hypothesis of HI-H6 in this study are all less than 0.05, indicating that all five direct hypotheses in this study are valid. The normalized path coefficients of HI-H5 are set to 0.437, 0.367, 0.240, 0.618, and 0.376, respectively. The P-values are all 3 * (P<0.01), indicating that knowledge services, perception of intelligent services, and demand for scientific research services have a positive impact on the effectiveness of intelligent services.

Research Objective 2:

Based on literature review and questionnaire survey results. According to the data analysis results in Table 6, during the mediation path test of Knowledge Service Effectiveness, the standardized influence coefficient of indirect effects is 0.090, Z=2.518, P=0.012<0.05, 95% confidence interval is [0.024; 0.190], and 0 is not included in the 95% confidence interval. Therefore, there is a mediation effect between knowledge service and service effectiveness in intelligent service perception.

In the process of testing the mediating effect path of Demand Service Effectiveness, the standardized impact coefficient of indirect effects is 0.148, Z=2.570, P=0.0010<0.05, and the 95% confidence interval is [0.034; 0.255]. Therefore, 0 is not included in the 95% confidence interval of this path test. Therefore, there is a mediating effect of intelligent service perception between scientific research service demand and service effectiveness.

10. Recommendation

Recommendation for policy formulation

1. Develop a smart library management mechanism. In terms of top-level design, smart libraries need to pay attention to the planning of incentive methods, guide the transformation of service concepts in management systems, strengthen the professional literacy of librarians in team building, and provide services and facilities that are suitable for users' continuous use as much as possible, with a user centered approach. On the other hand, on the basis of fully considering user needs, corresponding management and incentive mechanisms can be established, and librarians can appropriately guide users' continuous use activities. This will

provide adaptive and friendly performance, enhance user experience, stimulate users' interest and willingness to use, and actively guide the utilization and interaction of new users.

      2. Strengthen incentive policies for smart library management. Smart libraries are an emerging thing, and many knowledge service related work has a pioneering nature. Therefore, it is particularly necessary for smart libraries to strengthen management incentives, establish clear behavioral norms and reward measures, design appropriate working environments and external reward forms for librarians, and actively guide, stimulate, maintain, and normalize the behavior of library librarians through timely and effective information communication, Thus achieving the goal of intelligent library knowledge services to meet the diverse needs of users. The higher the incentive level of a smart library, the higher the effort and work efficiency of librarians to achieve their goals, and the stronger their job satisfaction; On the contrary, if the motivation level is consistently low, librarians will lack motivation to actively achieve organizational goals, and work efficiency will also be greatly reduced. It should be noted that in the management incentive process of smart libraries, it is not only necessary to rely on stimulus variables (money), but also to consider the existence of intermediate variables, namely the subjective factors of individual librarians.

Recommendation for practical application

      1. Develop new intelligent service professionals with core competitiveness. Smart libraries represent a leap forward in the new era of library service functions and models based on the rapid development of big data, Internet of Things technology, and artificial intelligence, directly targeting users to participate in their knowledge activities. Therefore, knowledge service personnel who solve practical problems for users are given multiple identities. They are not only educators of user information cognition, navigators of information utilization, collectors of information resources, creators of knowledge information, but also participants in knowledge services. This requires strengthening the construction of knowledge service talents in smart libraries. Only by clarifying the functional positioning and long-term development of smart libraries from a macro strategic perspective, restructuring internal business links from a micro strategic perspective, emphasizing the cultivation of librarians' new professional and service abilities, and continuously strengthening their adaptability and innovation abilities, can libraries better promote the transformation and development towards smart libraries. Personnel reengineering refers to the development of librarians' professional service capabilities, which have comparative advantages over users. New intelligent services require improving librarians' comprehensive information literacy and the ability to reasonably utilize new professional tools, highlighting the development and utilization of librarians' unique

knowledge and skill advantages, forming a professional team that serves users, and ultimately forming a core competitive professional advantage for future libraries.

2. Increase investment in the construction of smart libraries. The school library serves the entire school's teachers and students. Increasing investment in funds can significantly improve the overall service level of the library, and can effectively stimulate enthusiasm for investment in the library, produce a positive impact, and ultimately form the "Matthew effect", that is, the more investment, the better the library operates, and thus stimulate greater investment. With a certain investment in library construction funds, maximizing the rationalization of the resource allocation structure of physical personnel, finance, and materials in the library lays a solid hardware infrastructure foundation for improving the output efficiency of library investment, thereby maximizing the inheritance of social culture and the growth of knowledge, and creating conditions for the subsequent service work and service efficiency realization of smart libraries.

3. University libraries can consider establishing a library information technology training program to ensure that staff are proficient in intelligent service technology, and also need to work closely with the school's information technology department.

Recommendation for further research

1. Provide practical suggestions to university library administrators and policy makers to help them more effectively promote the transformation of libraries into intelligent libraries. University libraries can consider establishing training programs to ensure that their staff are proficient in intelligent service technologies, while also working closely with the school's information technology department.

2. Build an adaptive service scenario that accurately tracks users' personalized dynamic needs. Real time capture of user needs through data interconnection through IoT devices, improving the timely performance of service feedback, promoting timely response to user information demands, and promoting timely, moderate, and quality optimization of services, effectively providing users with knowledge services that meet their personalized development needs; Enable users to achieve collaborative innovation of knowledge discovery and sharing based on the free use and sharing of information, thereby enhancing the coordination and co creation of knowledge services in smart libraries; In order to enhance the applicability of knowledge services in smart libraries, efforts need to be made to optimize the service's usage and expansion capabilities. By comprehensively tracking user behavior to understand user preferences and behavioral habits, the gap between user expectations and user perceptions can be shortened to improve the effectiveness of services. Comprehensive understanding and

accurate prediction of user needs can be implemented, and information can be pushed based on the predicted results, ultimately achieving intelligent services. Future research can explore how to integrate virtual reality technology to enhance the effectiveness of intelligent services and conduct more detailed analysis of user satisfaction.

BIbliography

Chen Xiaoling. (2018). **Research on Personalized Recommendation Service System and Model of Smart Library.** Comparative Study on Cultural Innovation.

Chen Youtong. (2020). **Analysis on Intelligent services of University Libraries in the Big data Era, Intelligence.**

Cheng Yuexin. (2022). **Research on the Self service Mode of University Libraries in the Digital Intelligence Era.** Jiangsu: Jiangsu University.

Fan Wei and Hu Kanglin. (2020). **Research on Smart Library Intelligent Response Services in the Internet of Things Environment, Library and Information Work.**

Han Xiao. (2019). **Research on the Index Model Construction of Reader Satisfaction in University Libraries.** Information Management and Informatics.

Hao Dawei. (2018). **Analysis of Personalized Recommendation Service System and Mode in Smart Library.** Inner Mongolia Science and Technology and Economy.

He Wenhu, Wu Tong. (2023). **Research on the Path of Improving Librarian Data Literacy in University Libraries.** Shanxi Youth.

Hu Changping, Hu Yuan. (2013). **Empirical Study on User Satisfaction of Digital Library Services in Universities.** National Library Journal.

Hu Chaojun. (2019). **Research on Personalized Intelligent service Mode of Public Libraries Based on Knowledge Mining.** Tianjin University of Technology.

Hu Yuan. (2019). **Research on the Framework of Factors Influencing Data Demand Management for University Scientific Researchers.** Journal of China Library.

Administrator' S Competencies for Private
Vocational Colleges in Bangkok

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ABSTRACT

The objectives of this research were (1) to determine the components and indicators of administrator's competencies for private vocational colleges in Bangkok; and (2) to propose and verify the administrator's competencies model for private vocational colleges in Bangkok.

The research was a mixed method, including qualitative and quantitative research. The population consisted of 75 private vocational colleges in Bangkok, and selected to study by simple random sampling method, totaling 64 colleges, the representative of population were one administrator and four senior teachers in each college, totaling 320 persons. The instruments used for data collection were semi-structured interview and a five-level rating scale questionnaire. The statistics used for data analysis were descriptive statistics, Exploratory Factor Analysis (EFA.) and Confirmatory Factor Analysis (CFA.).

The research results reveal that (1) there were six components and 37 indicators of administrator's competencies for private vocational colleges in Bangkok, consisting of: leadership competency, directing subordinate competency, personal competency, professional competency, managerial competency, and analyzing and deciding competency; (2) the administrator's competencies model for private vocational colleges in Bangkok that developed was consistent with the empirical data. The value of Relative Chi-square (χ^2/df) = 1.91, Degree of Freedom (df) = 155, Goodness of Fit Index (GFI) = 0.95, Tucker-Lewis Index (TLI) = 0.98, and Root Mean Square Error of Approximation (RMSEA) = 0.05, all in line with specified criteria. And the key components had the weight between 0.91-0.97 higher than 0.70.

Keywords: Administrator's competencies, Private Vocational College, Bangkok

1. Introduction

Important person in education who brings about high-quality educational institution is an administrator who has competencies in administration which is a key to develop and push an educational institution forward to the success: school effectiveness. (Alexander, 2013) To this extent, it is absolutely necessary for the educational administrator in the 21st century to catch up with the rapid change of technology, information, learning method and plan to administer with professionalism. "Educational Administrator", therefore, is a key to the success of their institutions. Due to they have to be qualified, knowledgeable, and skillful as being the head of all educational staff. Moreover, they should be able to append parents and community to cooperate and help the institutions achieving their goals, which all these properties could be defined as "Competency". It can be said that private vocational college administrator who has high competencies will be able to induce a good turnover for the institution, which is effectiveness of private vocational college's administration.

In the context of "Private Vocational Education", It was initially under the supervision of the Office of the Vocational Education Commission which is a government section subsidiary to the Office of the Permanent Secretary, Ministry of Education. Later, on 12th February 2016, the Government announced an order from the head of the National Council for Peace and Order (NCPO) No. 8/2016 to transfer the authorities from the Office of the Private Education Commission concerning vocational education to be under the Office of Vocational Education Commission, appending both public and private vocational education together as a result, effective from 13rd February 2016. The purpose is to conform to the policy of the Ministry of Education in terms of merging an administration of both public and private vocational education to meet a quality standard with more agility and will provide benefits in the reformation of education. Moreover, there is another section that is crucial to the development of private vocational education of Thailand, at the present which is the Association of Private Colleges of Technology and Vocational Education of Thailand under the patronage of Her Royal Highness Princess Maha Chakri Sirindhorn. The association was established by the administrators of vocational colleges since 1974 and continuingly develops the operation through time. In the present, there are 457 private vocational colleges in total under the authorities of the Office of Vocational Education Commission divided into regions, especially in Bangkok, there are 75 in total.

Educational administration nowadays is required to be consistent with the change of global society, especially the society of learning in an era of technology in which all information is connected from every part of the world. An administrator must perform his/her

duty fully and employ strategy and high-level administrative techniques that will lead an organization to success. From the study of principles and theory of an educational administrator in the 21st century can be concluded that roles and duties of educational administrator must be consisted the role of academic, discipline, evaluator, institutional policy and procedure reviewer, academic program developer, schedule setter, learning environment enhancer, teacher and staff supporter, public relations officer, and the role of the delegator. (Meado, 2016); DoDEA, 2014). And according to Driscoll (2015) and Couros (2010) the characteristics of educational administrators in the new generation should own the property of being a leader with vision, academic skills, systematic creativity, communication skill, technological skill, being confident, having a positive inspiration, being able to create a learning community, and being a good model.

The researcher is very aware that the effectiveness of school management is largely dependent on the management under the limitations of the school administration. It is one way to help the performance of the management to achieve specific goals is to develop school administrators. Therefore, professional managers must develop themselves to achieve efficiency and effectiveness in school administration (Khaminkeaw, 2019), and one of the three areas of assessment of school administrators is competency, which is a tool that is used as a basis for creating a system or setting a guideline for school administrators. Human resource development of the organization in accordance with the strategy and operational goals of the organization and applied it to the human resource management for efficiency. Therefore, the researcher interested in studying according to the conceptual framework of the analysis, synthesize the relevant documents and researches. When taken to study in this new situation? What will the administrator's competencies be like in the new era? And that being so what competencies are involved or influencing effective school administration? It is expected that the data obtained from this research will be of great benefit to private vocational school administrators. It can be used as a framework and detail to further promote administrator competencies in line with 21stcentury education to be strengthened. This will directly affect the school administration for higher efficiency in order to provide educational administration to be of high quality and effective as it is expected to continue.

2. Research Questions

1. What components and indicators of competencies required by Administrators?

2. What competencies model for administrators of private vocational colleges in Bangkok?

3. Research Objectives

1. To determine the components and indicators of administrator's competencies for private vocational colleges in Bangkok

2. To develop the administrator' s competencies model for private vocational colleges in Bangkok.

4. Research Hypotheses

The components and indicators of the administrator's competencies for private vocational college in Bangkok was consistent with the empirical data.

5. Research Method

5.1 Research Design

Used mixed method, both qualitative and quantitative, first the qualitative to determine the components and indicators of the competencies model through content analysis from the document and research related, included 9 key informants. After that quantitative method was employed to collected the empirical data from the respondent through survey questionnaire.

5.2 Population and Sample

The population of the research were 75 private vocational colleges in Bangkok, and sampling by simple random sampling to study, totaling 64 colleges that came from the calculated by Taro Yamane formula which an error at 5%, and the representative of population were five persons included one administrator and four senior teachers in each college, totaling 320 persons.

5.3 Research Instruments

The data collection instruments, firstly, semi-structured interview form, and data record note were employed to collect data from document and experts, and secondly, used a three-part of questionnaire, it's consisted of:

Part I: Demographic variables or general information of the respondents, such as gender, age, education level, position, working years, etc.

Part II: Five-point rating scale questionnaire of administrator's competencies for private vocational colleges in Bangkok which was obtained from content analysis.

Part III: The open-end question about the commend of the respondents.

Validity and Reliability of the instrument

Through the questionnaire design, a total of 80 items were obtained. After the IOC conducted by 5 experts, it was found that overall items that were greater than 0.60 and remained.

Scale reliability, refer to the extent that the measurement instrument will consistently yield similar results when administered to the same sample under similar testing conditions. Cronbach's alpha coefficient will be used to measure the degree of the scale reliability. In this study, Cronbach's alpha coefficient, all items were higher than 0.80, overall Cronbach's alpha coefficient was 0.91, indicating that the reliability of this questionnaire is very high.

5.4 Data Collection

All data gathering by researcher under closely advised from the research committees.

The steps for data collection will be as follows:

Step 1: Request permission to collect data for research to the faculty of education, Bangkokthonburi University.

Step 2: Request a letter of recommendation for the researcher from faculty of education, Bangkokthonburi University.

Step 3: Selection the coordinating the school administrators to help assist in coordinating data collection in each institution. Those will be oriented to understand the details of the questionnaire administration and data collection.

Step 4: Carry out data collection with the selected samples by sending questionnaires to the coordinator teacher who will help for collect data with the selected samples in each private vocational college.

5.5 Data Analysis

1) Descriptive statistic for describe the variables namely frequency, percentage, arithmetic mean, standard deviation, skewness, and kurtosis, and the criteria was used to interpret the mean score were: (Best and Kahn James,1993)

1.00 – 1.49	Very low	1.50 – 2.49	Low
2.50 – 3.49	Moderate	3.50 – 4.49	High
4.50 – 5.00	Very high		

2) Exploratory Factor Analysis or EFA. was used to determine the components and indicators of administrator's competencies, in these analyzed the Bartlett's Test of Sphericity test, it was found that the Chi- Square = 41385.964 and the statistical significance = 0,000. and

KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value was 0.977, which greater than 0.50, indicating that the analyzed data was most appropriate for factor analysis.

3) Composite Reliability (CR), and Average Variance Extraction (AVE) used to check the convergent validity of Confirmatory Factor Analysis measurement model. In this context the CR. Must be have 0.7 and more, and AVE must be 0.5 and more (Fornell and Larcker, 1981; Hair, et.al.,2010)

4) Inferential statistics, in order to development the model of the administrator's competencies for private vocational colleges in Bangkok. Confirmatory factor analysis (CFA) would be employed for finding and estimate the parameter in this situation as follows:

- Data analysis to take into account the suitability of variables to be analyzed for further components by analyzing the Pearson correlation coefficient. In order to determine the degree and direction of correlation, if the variables are not correlated then there is no common component. There was a statistically significant correlation at the .01 level (p< .01) (Nongluck Wiratchai, 1999). Bartlett's statistical analysis, which is a statistical test of the correlation matrix hypothesis between variables and Identity Matrix, considering the Bartlett's test of Sphericity and the probability that Is there an appropriate correlation to be used for further component analysis. By considering the statistical significance and analysis of the Kaiser-Myers-Allkil index. (Kaiser-Mayer-Olkin Measurers of Sampling Adequacy: MSA) Considering the criterion, a value greater than .80 indicates very good, less than .50 indicates invalid (Klein, G. (2013).

- Confirmatory Factor Analysis by testing the conformity of the structural correlation model and weighting the sub variables used to generate the empirical data indicators obtained from the weighted analysis of the data from the questionnaire. The sub variables used to generate the indicators and to verify the coherence of the research model are the theoretical models created by the researcher by analyzing second-order confirmation elements with the empirical data. Thereafter, the coherence of the research model with the empirical data was examined. If the results of the first data analysis do not meet the specified criteria, the researcher must adjust the model to meet the specified criteria. According to the viewpoint of Nongluck Wirachchai (2005), the statistical values to be used as the audit criteria are as follows:

(1) Chi-square Statistics is a statistical value used to test the statistical hypothesis that the function Harmony is zero. The lower the Chi-square Statistics, the closer to zero the model is consistent with the empirical data.

(2) Harmony Level Index (Goodness-of- Fit Index: GFI), which is the ratio of the difference between the harmonious functions from the model before and after the model was adjusted to the harmonization functions before the model was adjusted GFI values from 0.90-1.00 indicate that the model was consistent with the empirical data.

(3) Adjusted Goodness-of-Fit Index (AGFI), in which the GFI is adjusted taking into account the size of freedom (df), which includes the number of variables and the sample size if the AGFI values from 0.90-1.00 indicate that the model is consistent with the empirical data.

(4) Root Mean Square Error of Approximation (RMSEA) error indicates the dissonance of the model generated with the population covariance matrix which is A value of RMSEA less than 0.05 indicates that the model is consistent with the empirical data.

(5) Apply the results of the analysis to verify the consistency of the model. The following criteria were selected for indicators showing Factor Loading: 1) equal to or greater than 0.7 for parent component (Farrell & Rudd, 2011), and 2) equal to or greater than 0.30 for sub-element and identifier (Tacq, Jaequs,1997).

6. Research Results

The research results revealed that

1. The administrator's competency for private vocational colleges in Bangkok by Exploratory Factor Analysis (EFA), there were 6 components and 49 indicators as follows:

1.1 Component 1, personal competency, consisting of 10 indicators

1.2 Component 2, professional competency, consisting of 9 indicators

1.3 Component 3, managerial competency, consisting of 8 indicators

1.4 Component 4, directing subordinate competency, consisting of 8 indicators,

1.5 Component 5, leadership competency, consisting of 4 indicators

1.6 Component 6, analyzing and deciding competency, consisting of 4 indicators

2. The administrator's competencies model for private vocational colleges in Bangkok that developed from EFA. Results by using Confirmatory Factor Analysis (CFA) which was consistent with the empirical data. The value of Relative Chi-square (χ^2/df) = 1.91, Degree of Freedom (df) = 155, Goodness of Fit Index (GFI) = 0.95, Tucker-Lewis Index (TLI) = 0.98, and Root Mean Square Error of Approximation (RMSEA) = 0.05, all in line with specified criteria. And the key components had the weight between 0.91-0.97 higher than 0.70.
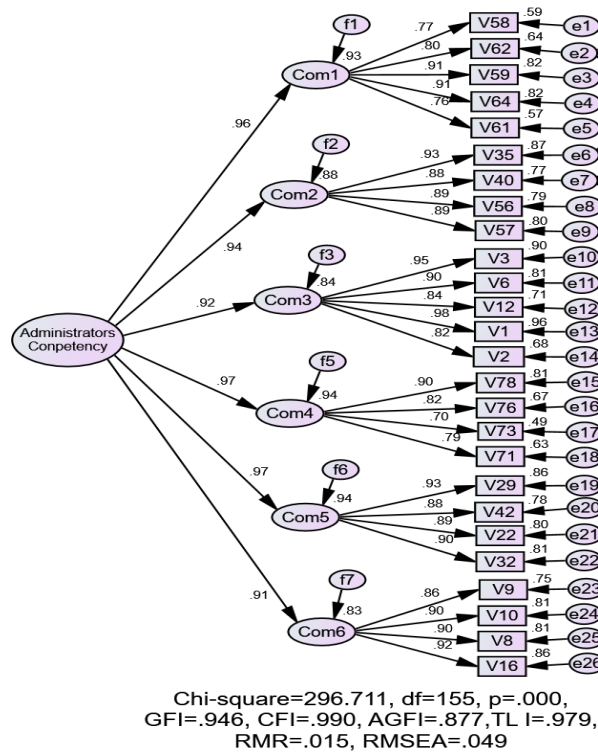
Chi-square=296.711, df=155, p=.000,
GFI=.946, CFI=.990, AGFI=.877,TL I=.979,
RMR=.015, RMSEA=.049

Figure 1 Second Order CFA of administrator' competencies model

for Private Vocational Colleges

Table 1 Index value to examine the consistent with the empirical data. (final adjustment)

Value	Standard	Value after adjustment	Result
χ^2/ df	2.00 or below	1.914	very good
GFI	0.90 to 1.**00**	0.946	very good
AGFI	0.90 to 1.**00**	0.877	very good
CFI	0.90 to 1.**00**	0.990	very good
TLI	0.90 to 1.**00**	0.979	very good
RMR	0.05 or below	0.015	very good
RMSEA	0.08 or below	0.049	very good

Note: Index to determine the CFA. model fit with the empirical data were cited from various

reference such as: Diamantopoulos & Siguaw, 2000; Schumacker & Lomax, 2010; Jöreskog &

Sörbom, 2012; Kelloway, 2015; Hair, et al, 2019; Suksawang, 2021).

Table 2: Statistical value of administrators' competency model for private vocational colleges

	Latent and observable	Standardized Factor loading	S.E.	Z-test	p	R^2
Administrators' Competencies for private vocational colleges in Bangkok	Component 1	0.963	0.04	24.324	***	0.928
	V59	0.908	0.04	20.617		0.824
	V64	0.906	0.03	22.022		0.821
	V62	0.803	0.04	-		0.645
	V58	0.767	0.03	28.821		0.588
	V61	0.758	0.04	19.976		0.575
	Component 2	0.936	0.05	21.520	***	0.876
	V35	0.933	0.03	26.696		0.870
	V56	0.879	0.04	-		0.773
	V57	0.887	0.03	24.824		0.787
	V40	0.892	0.04	27.414		0.796
	Component 3	0.918	0.04	22.454	***	0.843
	V1	0.997	0.03	31.772		0.994
	V3	0.948	0.03	-		0.899
	V6	0.900	0.04	28.147		0.810
	V12	0.845	0.04	26.989		0.714
	V2	0.824	0.04	18.379		0.679
	Component 4	0.970	0.06	15.876	***	0.940
	V78	0.901	0.05	17.776		0.811
	V76	0.821	0.04	24.367		0.673
	V71	0.792	0.04	-		0.627
	V73	0.697	0.03	18.428		0.486
	Component 5	0.971	0.04		***	0.944
	V29	0.927	0.04	29.073		0.859
	V32	0.899	0.03	-		0.808
	V22	0.893	0.03	26.393		0.798
	V42	0.882	0.03	26.650		0.778
	Component 6	0.914	0.04	22.783	***	0.835

	Latent and observable	Standardized Factor loading	S.E.	Z-test	p	R^2
	V16	0.925	0.04	26.756		0.855
	V8	0.900	0.03	29.784		0.811
	V10	0.900	0.03	29.809		0.810
	V9	0.864	0.03	-		0.747

From Figure 1 and Table 1-2 above the statistical value of second order CFA was analyzed by AMOS, indicated that the administrator's competencies for private vocational college in Bangkok was consisted with the empirical data, and the important components and indicators as rank order from high to low as follows:
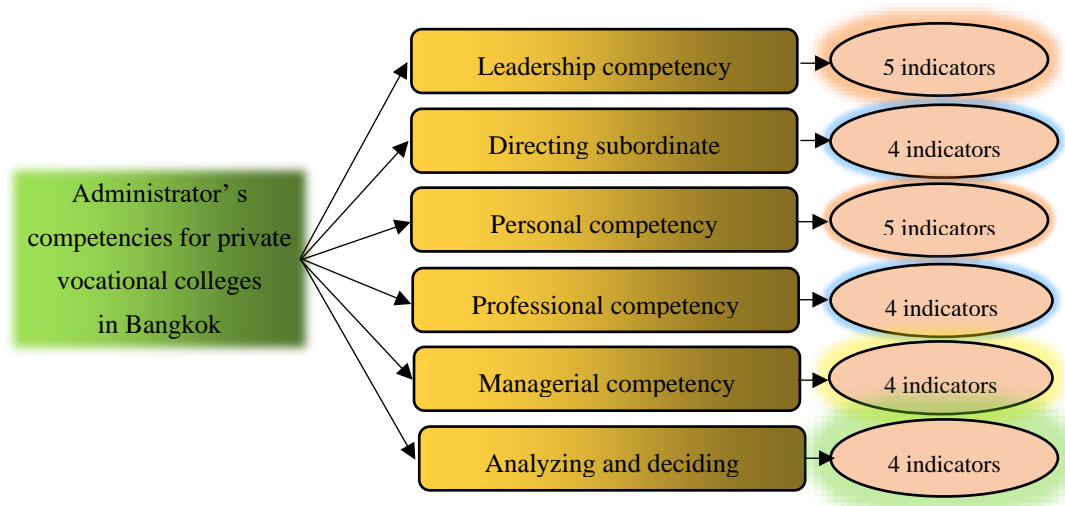

Figure 2 Administrator's competencies for private vocational colleges in Bangkok

1. Leadership competency, had predictive power = 94.40% and the best 3 indicators in this component were: V29: be able to build faith among personnel both inside and outside the educational institution in driving the mission of the college, V32: be able to make decisions and exercise leadership appropriately, and V22: there is fairness, commitment and respect for individual differences person.

2. Directing subordinate competency had predictive power = 94.40% and the best 3 indicators were: V78: assessment criteria are used to judge performance, V76: participate in conflict resolution negotiations, and V71: there are effective assignments emphasis on teamwork.

3. Personal competency had predictive power = 92.80% and the best 3 indicators were: V59: there is education and research. follow new knowledge academic and professional, V64: there is a strict work schedule. able to set the time to perform the work to be able to accomplish, and V62; focus on progress and seeking good opportunities.

4. Professional competency had predictive power = 87.60% and the best 3 indicators were: V35: the use of analytics data is encouraged. Research to find out the needs of teachers, learners and communities, V40: able to manage organization. Management structure and define the tasks of the teacher and official personnel study appropriately, and V57: modify your work style to suit the group.

5. Managerial competency had predictive power = 84.30% and the best 3 indicators were: V1: there is a way to put the policy into practice by creating an understanding with colleagues and having participate in every step, V3: apply knowledge to use in the development of work on a continuous basis, and V6: understand the principles of organizational management budgeting use of resources, finance, management and use of technology.

6. Analyzing and deciding competency", had predictive power = 83.50% and the best 3 indicators were: V16: able to set policies plan the operation and assess the quality of education management very well, V8: allocate financial resources to support the activities, development and review of the project, and V10: encourage finding resources, new innovations for research, or modern methods to enhance the teaching system.

7. Discussion

The research results found that the components and indicators of administrator's competencies for private vocational college in Bangkok, there were 6 components and 49 indicators, with a weight of 0.495 to 0.708, consisting of 10 indicators of personal competency, 9 indicators of professional competency, 8 indicators of managerial competency, 8 indicators of directing subordinate competency, 4 indicators of leadership competency. And 4 indicators of analyzing and deciding competency. These are all the guidelines for work in the roles and responsibilities of a new generation of educational institute administrators who focus on work achievement as the goal, which requires a knowledge-based society. and technologies modern in practice to be a leader in change which is the nature of all future executives. And most importantly competency indicators of the administrators in private vocational college were described the characteristics of effective educational institute administrators. The results were consistent with many researchers and academic scholars such as Boyatzis (1982), McClelland

(1999), Parry (1997), Clark, and Hinxman (1999), Mcshane, & Von Glinow (2000), Hellriegel, Jackson, & Slocum, (2005), Spencer and Spencer (2005), Chuanphit Sitthada (2009), Adéle Croucamp. (2012). Sittipong (2012). Ashwini Bapat & others (2017), Pichaphat Hona (2018), Patricia Lotich, (2019), and Yang Yang (2022) who has studied the competency model of school administrators that are effective.

Spencer and Spencer (1993), as well as Thongkaew, T. (2007), Civil Service Commission (2005), Areesawad, R. (2019). and Smithikrai, C. (2009) which stated that competency is the knowledge, abilities, skills, characteristics, values and personality that exist in a person. which can drive that person to create good performance work successfully according to the required standards or able to produce outstanding work and/or have higher performance than others measurable. The key components are knowledge, skills, self-concept, motives/attitude, traits, and the image of the person towards themselves that are combined can be summarized as the competency of executives in various aspects, that will result in successful operations accomplish the school ' s vision, mission, and goals efficiently and effectively.

There are also many educators' ideas on performance indicators. It represents a component of analytical and decision-making competency, such as Spencer and Spencer (1993). Must be able to convey the organization's vision and strategies that are practical. and achieve the goal that want people in the organization and stakeholders to practice to motivate and motivate him They want to work and make a community contract together in order to change the organization for the better. Consistent with the concept of performance of school administrators as effective school leaders of New York, where administrators must have courage when falling. at risk must be able to manage changes in plans and understand that some people may not support that change. The management's job is to take risks and be willing to take risks. Take that risk, even if it's contrary to others. as well as the concept of Gloeman, Boyatzis and McKee (2002), which has been presented on leadership competency. Emotional intelligence that managers should have been a charge catalyst relationship. Leaders must take into account challenging opportunities and excellence. It must support change, whether it is facing competitors. arguing about being forced to do Leaders must find ways to overcome obstacles. of change. In addition, Sukjinda, S. (2019). has mentioned the competencies that executives should have, namely, job creation and innovation. and use of resources that generate income which these indicators will achieve requires the ability to think analytically and executive decision Therefore, analytical thinking and decision-making competencies are essential elements. It is important to ask school administrators to work effectively.

8. Recommendations

Recommendation for Policies Formulation

1. According to this study, the key competencies that private vocational colleges' administrators should possess consist of 6 components: 1) personal competency, 2) professional competency, 3) managerial competency, 4) directing subordinate competency, 5) leadership competency, and 6) analyzing and deciding competency. Administrators should consider monitoring and evaluate; how much they have. Because if it is found that there are few in any part, it will be used to improve and develop to an appropriate level through the methods such as self-improvement, or in-service training. The results of this research may also be used as a criterion for auditing to select personnel to replace the older generation of administration.

2. The administrators' competency of the component 1, "personal competency should emphasis to maintain or improve on: skills development regarding enthusiasm to get the job done, focus on progress and the pursuit of good opportunities, there is a study to find knowledge which always keep up with new knowledge academically and professionally. Be a participant in personnel development and conducting oneself as a role model, supporting the development of personnel to be responsible for the work assigned, including being able to give advice, suggest and help solve problems for colleagues and those involved.

3. The administrators' competency of the component 2, professional competency", emphasis should be placed on developing skills related to supporting the use of analytical data. research to find teacher's needs learners and communities Including promoting community cooperation and participation in support. Administrators must be able to manage the organization. Administrative structure and define the tasks of teachers and educational personnel can adapt their work style to suit the group. Be a manager who can use communication skills and techniques for human relations with the community,　to exchange ideas that support the vision of the college including the ability to analyze, synthesize and create a body of knowledge in educational management, mobilize resources and local wisdom to promote education management and be able to bring knowledge and understanding of principles and theories of educational administration to apply in educational administration in order to be an educational institution administrator productive.

4. The administrators' competency of the component 3, "managerial competency" should give importance and develop skills in applying knowledge to develop work in their duties continuously and arrange the supervision for new personnel. There is a way to put the policy into practice by creating understand colleagues and involve them every step of the

way. Have creativity that can happen all the time without waiting for an opportunity, understands the principles of organizational management. budgeting resource utilization, finance, management and use of technology, other strategies have been formulated in relation to business, religion, politics and organizational management in support of the college vision. Administrators must have basic knowledge of process and law for personnel selection and learning the rules of practice; supporting student learning.

5. The administrators' competency of the component 4, "directing subordinate competency" emphasis should be given to and development skills related to the use of assessment criteria in decision-making. Must be able to participate in negotiations and jointly resolve conflicts. Be able to supervise and observe the work of personnel. Opinions go the same way who is decisive in considering every matter, administrators must have effective assignments. emphasis on teamwork including being able to persuade or give missions to subordinates to work together, can specify duties personnel responsibilities and communicate to colleagues the need for organizational change. Have ability to use, motivate, and persuade people to change their behavior in order to become school administrators effective and a leader in change.

6. The administrators' competency of the component 5, "leadership competency" should give importance to and develop skills related to the ability to build faith among personnel both within and outside the school in driving the mission of the college. Be a person who conducts himself according to the code of conduct of the school administrator profession includes fairness, commitment and respect for individual differences, the ability to make appropriate decisions and use leadership, have calmness and soberness, even under crisis in order to be an educational institution administrator can effectively lead the community to achieve sustainable development.

7. The administrators' competency of the component 6, "analyzing and deciding competency" Emphasis should be placed on developing support skills. integrate technology related to the teaching system including support to find resources new innovations for research challenges or modern methods to enhance the teaching system. Allocate financial resources to support project activities, development, and audits. Administrators must be able to formulate policies. plan operations and assess the quality of education management very well. and have wide-angle thinking, searching for information, gathering information before understanding the situation in a broad and in-depth manner in order to be productive.

8. Competency indicators of administrators should to be used as a guideline for training and preparing personnel for educational institute administrative positions for Private

Vocational Colleges and used as a leadership assessment model of administrators in educational institutions.

9. Educational institution and related agencies can use the components and indicators of administrators' competencies to be used as guidelines for adding knowledge in various competencies which will gain new knowledge that can be applied benefits in the administration of educational institutes in the future.

Recommendation for Further Research

1. There should be a comparative study of these administrators' competencies between public and private vocational colleges under the Office of the Vocational Education Commission.

2. There should be employed of research and development (R & D research) in order to look at the results, if provide the Management based on the results of this research really, it will be making the college administration effective or not.

3. In the next, the researchers may use a qualitative research model leading quantitative research to study information about various factors influencing the effectiveness of private vocational colleges in Bangkok or others area of Thailand. Then, the results from the study can be determined to determine the variables and create a conceptual framework, model, causal relationship, factors influencing the effectiveness of private vocational colleges as well as developing the tools for collecting data in quantitative research to test hypotheses and further confirm the model developed by the researcher.

BIbliography

Ashwini Bapat and 0ther. (2017). **A Leadership Competency Model: Describing the Capacity to Lead, accessed September 9, 2017.** Available from http://www.safiyahsatterwhite.com/wp-content/upload/2014/11/Leadership OnlineModel.pdf.

Adéle Croucamp. (2012). **Development a Competency Model for Head of Departments at Tertiary Education Institutions in South Africa Master Thesis in Social Science in Organizational Psychology, University of Cape Town Aitken.**

Alexander, N. (2013). **Policy analysis for educational leaders.** Burlington: Pearson Education, Inc.

Areesawad, R. (2019). **Study of the Competency of Educational Institution Administrators.** A paper presented at the 3rd National Research Conference, Chaiyaphum Rajabhat University, Thailand.

Best and Kahn James V. (1993). **Research in Education.** 7 th ed. Boston: Allyn and Bacon. p. 246.

Boyazis, R.E. (1982). **The Competency Manager: A Model of Effective Performance.** New York: John Wiley and Son Inc.

Chuanphit Sitthada. (2009). **An effective Competency Model of Educational Institute Administrators Effective Foundation**. Doctor of Philosophy Thesis (Educational Administration) Silpakorn University.

Clark, E. and Hinxman, L. (1999). **"Developing a framework of competencies for facilities management".** Facilities, Vol. 17 No. 7/8, pp. 246-252. https://doi.org/10. 1108/ 026 32779910270203.

Couros, G. (2010). **The 21st Century Principal.** Retrieved fromhttp://connectedprincipals. com/archives/1663.

Diamantopoulos, A., & Siguaw, A.D. (2000). **Introducing LISREL: A guide for the uninitiated.** Sage Publications, London.

DoDEA21. (2014). **Instructional Leadership: Self-Assessment and Reflection Continuum.** Retrieved from https://content.dodea.edu/teach_learn/professional_development/ 21/ principals_assessment_instructional.html.

Driscoll, M. (2015). **Top 10 Characteristics of Awesome 21st Century School Leaders.** Retrieved from https://thinkstrategicforschools.com/top-10-characteristics-21stcentury -school-leaders/.

Farrell, A. M., and Rudd, J. M. (2011). **Factor analysis and discriminant validity: A brief review of some practical issues.** Retrieved January 4, 2011,
from http://www. duplication.net.au/ANZMAC09/papers/ANZMAC2009-389.pdf

Fornell, C., & Larcker, D. F. (1981). **Evaluating Structural Equation Models with Unobservable Variables and Measurement Error.** Journal of Marketing Research and Case Studies, 18(1), 39-50.

Lunenburg and Allan C Ornstein. (2012). **Educational Administration: Concepts and Practices.** 6 th ed (Belmont, CA: Wadsworth, 2012), 21.

Goleman, D., Boyatzis, R., & Mckee, A. (2002). **The New leaders.** Boston: Harvard Business School Pree

Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010). **Multivariate Data Analysis.** (7th ed.). Pearson: New York.

_____ (2019). **Multivariate data analysis.** (8th ed.). India: Cengage.

Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2022). **A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).** 3rd Ed., Sage: Thousand Oaks.

Hellriegel, D., Jackson, S. E., & Slocum, J. W. (2005). **Management a Competency-Based Approach.** New Delhi: Cengage Learning.

Ingrid Potgieter, Johan Basson and Melinde Coetzee. (2011). **Management competencies for the development of heads of department in the higher education context: a literature overview South African.** Journal of Labor Relations. Vol 35 No 1 2011 Pages 81 – 103.

Jöreskog, K. G., & Sörbom, D., (2012). **LISREL 9.1: LISREL syntax guide.** Chicago: Scientific Software International, Inc,

Kelloway, E.K. (2015). **Using Mplus for Structural Equation Modelling; A Researcher's Guide.** CA: Sage Publications.

Suksawang. P (2021). **Structural equation modeling.** Third Edition. Chonburi: A.P. Blueprint.

Khaminkeaw, L. (2019). **Competency of Secondary School Administrators in the 21st Century.** Journal of Graduate Studies. Journal of Graduate Studies Valaya Alongkorn Rajabhat University, 13(3), 113-124.

Klein, G. (2013). **The Cartoon Introduction to Statistics.** Hill & Wamg.

McClelland, David C. (1999). **Identifying Competencies with Behavioral-event interviews.** Psychological Science, 9(5). Retrieved December 11, 2005, from www.eiconsortium. org/research/business_case_for_ei.htm.

Mcshane, S., & Von Glinow, M. (2000). **Organization Behavior.** Boston: McGraw-Hill.

Meado, D. (2016). **The Role of the Principal in Schools.** Retrieved from http://teaching. about.com/od/admin/tp/Role-Of-The-Principal.htm.

Nonglak Viratchai. (2005). **Statistics Chuan Singh.** Bangkok: Chulalongkorn University Press.

Office of the Civil Service Commission. (2005). **Development of human resource management performance Bangkok: Civil Service Commission.**

Parry, S. (1997). **Evaluating the Impact of Training. Alexandria.** Virginia: American Society for Training and Development.

Patricia, Lotich (2019). **12 Competencies Every Manager Should Master.** Retrieved from: www.thrivingsmallbusiness.com.

Pichaphat Hona. (2018). **Competency Development Model for School Administrators in the Thai Era 4.0.** Doctor of Education degree thesis (Educational Administration). Nakornsawan Rajabhat University.

Samithikrai, C. (2009). **Selection, recruiting and evaluation of personnel performance.** Bangkok: Chaulalongkorn University Printing House.

Schumacker, R. E. & Lomax, R. G., (2010). **A beginner's guide to structural equation modelling.** (3rd ed.). New Jersey: Lawrence Erlbaum Associates.

Sittipong Noxanman and others. (2012). **The Competency of Administrators of Industrial and Community Education Colleges.** Vocational Education Commission Hatyai Academic Journal 15(1) : 42-58.

Spencer, L M & Spencer, S M. (1992). **Competence at Work: Models for Superior Performance.** New York: John Wiley & Sons.

_____ (2005). **Competence at Work: Models for Superior Performance.** New York: John Wiley & Sons.

Sukjinda, S. (2019). **Development of Competency Model of Effective School Administrators under Local Administrative Organizations.** Doctor of Philosophy Program Thesis, Nakhon Pathom Rajabhat Universit.

Suksawang, P. (2021). **structural equation modeling.** Pacific Rim International Journal of Nursing Research 25 (3), 421-436,

Tacq, Jaequs. (1997). **Multivariate Analysis Techniques in Social Science Research from Problem to Analysis.** London: Sage Publication.

Toeng ThongKaew. (2007). **Core Performance of School Administrators.** Source: http://www opm gov/ses/defind html.

Wittayasirinan, A. (2014). **Required competencies of executive administrators on private higher education institutions Required competencies of executive administrators on private higher education institutions.** Journal of Rattana bundit University. Vol 8 No 2 November - April 2014, p 71-82.

Yamane, T. (1973). **Statistics: An introductory analysis.** 3rd ed. New York: Harper and Row Publication.

Yang Yang. (2022). **Art School Administrators' Competency for the Universities in Shenyang, Liaoning Province.** Dissertation in Administrational Leadership, Bangkokthonburi University.

The Innovation and Information Management of Painting Majors
in Universities in 21st Century under Liaoning Province

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ABSTRACT

The objectives of this research were: (1) To examine the components of innovation and information management of painting majors in universities in 21st century under Liaoning Province, People's republic of China. (2) To propose the managerial guidelines for innovation and information management of painting majors in universities in 21st century under Liaoning Province, People's republic of China. The research was a mixed methodology research. Population was included 460 teachers and administrators in painting education from 13 colleges and universities under Liaoning Province. The sample size was obtained by stratified sampling technique, totalling 210 teachers and administrators in painting major of universities in Liaoning Province. The 9 key informants were obtained by purposive sampling method. The instruments used for data collection were a semi-structured interview, a five-point rating scale questionnaire, and note taking by focus group discussion. The statistics used for data analysis were means, standard deviation and EFA.

The research findings revealed that; (1) There were 5 components and 26 key variables of the innovation and information management of painting majors in universities in 21st century under Liaoning Province， which consisted of information construction, administrative management, teacher ability, innovation environment and incentive mechanism; and (2) There were total 26 managerial guidelines for innovation and information management of painting majors in universities in 21st century under Liaoning Province.

1. Introduction

In 2012, the concept of "Internet plus" was first proposed. The continuous mention of the concept of "Internet plus" has inspired new reforms in various fields. Various industries have broken the inherent development model and actively sought synergistic development with other fields, including education. The emergence of the Internet has made education more effective.

The continuous development and renewal of information technology has subverted the management mode of traditional industries, and education is no exception. Foreign developed countries attach great importance to educational informatization and practice innovation, and have achieved remarkable results in higher education. After several years of hard work, the informatization construction of China's higher education is developing rapidly with the strong support and great attention of government. Education informatization has been established as a national strategy, and the construction of higher education informatization has been greatly promoted. The proposal of these policies is not accidental, but an inevitable result driven by new information technologies such as the Internet, big data, and cloud computing. The informatization of colleges and universities is imperative. All provinces, cities, and educational institutions at all levels have also begun to formulate development strategies related to educational informatization. long term planning.

Western countries also attach great importance to the impact and role of teacher education informatization on education and teaching, so they formulate reform plans one after another, increase investment in education informatization, focus on cultivating teachers' ability to use computer and other information technologies, comprehensively improve teachers' information literacy, and promote Informatization of teacher education.

After the rapid development of the education management of art colleges and universities in my country in recent years, great achievements have been made, and with the promulgation of the "National Medium and Long-term Education Reform and Development Planning Outline", the status of education informatization has risen to the national strategic level. The reform of higher education informatization has become an inevitable trend. Of course, the development and survival of colleges and universities not only depends on first-

class education, but also first-class management. Therefore, as an important support for the operation and development of colleges and universities, education management must become the central force of this transformation. However, the development and renewal of information technology has shown an unprecedented momentum, especially with the widespread application of the new generation of information technology, the current informationization of education management in colleges and universities seems to be full of problems. Although the current education management model can also realize a lot of information processing and business processing, the management efficiency and level are far behind the pace of the times. Therefore, the education management model of colleges and universities needs to be transformed from the traditional management by people relying on information technology to the information-based intelligent management that is deeply integrated with the new generation of information technology.

2. Research Objectives

1. To examine the components of innovation and information management of painting majors in universities in 21st century under Liaoning Province.

2. To propose the managerial guidelines for innovation and information management of painting majors in universities in 21st century under Liaoning Province.

3. Research Methodology

1. Research Design

The research was mixed methodology design which were comprised of quantitative and qualitative research. There were two steps of research which were research proposal preparation, research procedures, and research report.

2. Population and Sample

The researcher designed a five-point rating scale questionnaire. The scope of the questionnaire survey consists of 460 people, who are 379 teacher and 81 administrators, teaching in 13 universities with painting majors in Liaoning Province. The sample total of 210 cases. Consists 173 teacher and 37 administrators. Researchers use Krejcie and Morgan table to determine the sample size, and selected by cluster random sampling technique.

3. Research Instruments

The main instruments used in this research was a 5-point scale questionnaire that the researcher created from the review of literature and the validity checked by 5 experts, included the reliability the alpha coefficient was 0.990.

4. Data Collection

Data collection is done by researcher, who make contact with key informants and identify themselves. Send the questionnaire by sent by online, mail and the researcher. The steps of data collection are as follows:

Step 1: Apply to the BTU Faculty of Education, Bangkokthonburi University for permission to collect research data.

Step 2: Apply for a letter of recommendation from a researcher at the BTU Faculty of Education, Bangkokthonburi University.
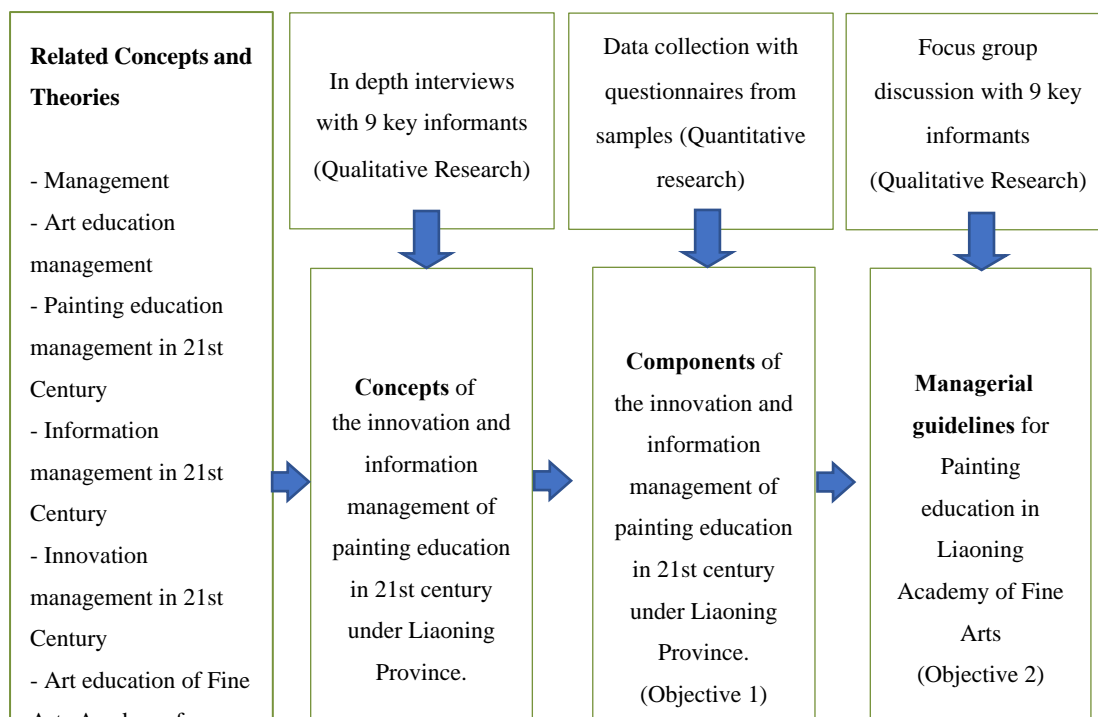
Step 3: Collect data from the samples. The questionnaires were sent online, mail, and researcher. And collect questionnaires online and by researcher.Step 4: Collect data on the selected samples by sending questionnaires to the coordinating teachers and administrators. The coordinating teachers will assist in collecting data on the selected samples of each school.
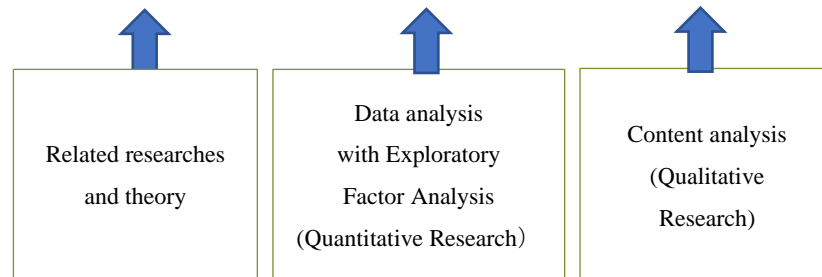
5. Data Analysis

Qualitative research analysis: For qualitative data, such as interviews and literature reviews, researchers will use content analysis methods. They will carefully read and analyze the collected data to identify important themes, viewpoints, and patterns.

Quantitative research analysis: For quantitative data, researchers will use SPSS software for data analysis. They will utilize the functions of SPSS for descriptive statistical analysis, inferential statistical analysis, and regression analysis. These analysis methods will help researchers reveal the relationships, trends, and significance levels between variables. Exploratory Factor Analysis (EFA) is used to analyze the factors that the innovation and information of painting majors in universities in 21st century under Liaoning Province, so as to reduce the irrelevant variables.

4. Research Conceptual Framework

Related Concepts and Theories - Management - Art education management - Painting education management in 21st Century - Information management in 21st Century - Innovation management in 21st Century - Art education of Fine	In depth interviews with 9 key informants (Qualitative Research)	Data collection with questionnaires from samples (Quantitative research)	Focus group discussion with 9 key informants (Qualitative Research)
	Concepts of the innovation and information management of painting education in 21st century under Liaoning Province.	**Components** of the innovation and information management of painting education in 21st century under Liaoning Province. (Objective 1)	**Managerial guidelines** for Painting education in Liaoning Academy of Fine Arts (Objective 2)

Related researches and theory	Data analysis with Exploratory Factor Analysis (Quantitative Research)	Content analysis (Qualitative Research)

5. Research Results

The researcher from the literature review and the variable outline of related studies, there were 80 items. The researcher selected ≥ 10 of the frequency items and finally obtained 65 items.

According to the information obtained from the interviews, there were a total of 65 items. As for the recognition degree of different items of key information providers, the researchers selected items with recognition degree ≥5, and finally reached 40 items.

The researchers combined 65 items derived from literature review and 40 items derived from interviews with key informants, resulting in a total of 105 items. Combining the total number of items between this two aspects, the 13 items are repeated. Therefore, 92 valid items were screened out.

In order to verify the validity of the questionnaire, the researcher sent the questionnaire to 5 research experts for verification. Targeted Item-Objective Congruence (IOC) is used to evaluate items in the questionnaire on a scale of -1, 0, +1. 17 items with scores below 0.5 were deleted. On the other hand, 72 items with scores of 0.60-1.00 were retained. So a total of 72 final items were obtained.

Section 2 Result of Data Analysis for Research Objective 1

Identify and identify effective components of the innovation and information management of painting majors in universities in 21st century under Liaoning Province. There were 210 valid questionnaires, and all of them were collected, among which 210 were selected as the final questionnaire results.

Part I: Result of Data Analysis on Questionnaire: Demographic Information shows that a total of 210 respondents participated in the survey, of which 83 were male (39.5%) and 127 were female (60.5%). Among them, 76 people under the age of 30 accounted for 36.2%, 19

people between 31 and 40 years old accounted for 9.0%, 79 people between 41 and 50 years old accounted for 37.6%, and 36 people over 51 years old accounted for more than 17.1%. In addition to lecturers, who account for half of the respondents, the next largest proportion is teaching assistants. Among the interviewees' academic qualifications, master's degree and doctor's degree account for more than 77%, the majority of them are those with middle or low teaching years (84.9%), and the job types are teachers (79.5%) and administrators (21.07%).

Part II questionnaire data analysis results: The greater the standard deviation, the greater the dispersion of the data. As can be seen from the standard deviation in the table, if the data value is not large, the degree of data dispersion is not high. The coefficient of variation represents the ratio of the fluctuation amplitude of the data to the average value, and the larger the coefficient of variation value, the stronger the volatility. It can be seen from the calculation results that the coefficient of variation of all variables fluctuates around 0, indicating that the volatility of the data is not strong. The calculated values of standard kurtosis and skewness are also approximately near 0, because it is a large sample data of more than 30 non-samples. In summary, it can be concluded that the questionnaire data roughly follow the normal distribution, and the subsequent distribution can be modeled based on the normal distribution.

Table 1: KMO and Bartlett's Test

KMO sample appropriateness measure		0.973
Bartlett's Test of Sphericity	Approx. ChiSquare	14779.038
	df	2556
	Sig	0.000

Table 2: The component matrixa after rotation

Variable	Component				
	1	2	3	4	5
Advanced information system	0.632				
Advanced computer, smart phone, smart media and other information equipment	0.599				

Variable	Component				
	1	2	3	4	5
Advanced new information technologies such as the Internet, big data and cloud computing	0.559				
Pay attention to downward learning to improve their ability to apply information to leaders	0.548				
"Virtual digital campus" or similar functional construction	0.538				
"Virtual digital campus" provides teachers and students with rich network resources and better communication and discussion platform	0.537				
Advanced information technology application level	0.536				
Information construction with reasonable organizational structure division	0.482				
Long-term guidance for information technology talents or professionals	0.480				
Information systems that can be shared	0.475				
Most of colleagues have the ability to use advanced information technology	0.473				
Information construction with perfect information system planning	0.461				
Management mode of stage innovation		0.598			
Scientific management structure		0.549			
Scientific management method		0.544			
Regularly assess the level of application of information technology in each position, so as to make scientific information management decisions		0.515			

Variable	Component				
	1	2	3	4	5
Reasonable management process and links		0.509			
Reasonable post setting		0.508			
High management efficiency		0.502			
Update the management method of serving teachers and students regularly		0.456			
The executive departments have clear responsibilities		0.454			
An effective, humanized, information-based educational management model		0.445			
Eliminate redundant administrative processes and simplify job approval procedures		0.453			
Attaching importance to collective dialogue and inviting members to participate in decision-making is conducive to stimulating members' innovative performance		0.391			
Regularly ask the staff of the department about the use of information platform or information technology, so as to make scientific information management decisions		0.382			
Managers with innovative thinking		0.381			
The benefits of innovative management models		0.380			
Educational affairs are open, procedures are open, and all aspects of administrative management are fair, just, open and transparent		0.378			
Management with the ability to innovate and adapt to needs		0.376			
Good management effect		0.372			

Variable	Component				
	1	2	3	4	5
Complete information management model provides accurate decision support		0.370			
Accurate decision-making brings perfect system and mechanism construction		0.352			
Diversity and individual development of teachers			0.671		
Take creative design as an effective means to improve the existing professional competence of teachers			0.584		
Basic quality training for teachers			0.581		
Teacher's rational thinking			0.552		
Regular training seminars for relevant teachers (including lecturers and administration teachers)			0.512		
Regular assessment of relevant teachers (including teaching teachers and administrative teachers)			0.506		
Incentives to encourage teachers to learn advanced information technology			0.505		
Training of teachers in the use of information technology			0.478		
Update the professional training process for art teachers			0.466		
Teachers with the ability to implement information management			0.445		
Attach importance to the interdisciplinary and innovative research methods of contemporary art				0.625	

Variable	Component				
	1	2	3	4	5
Improving the innovative management mode requires the formation of an innovative cultural atmosphere within the organization				0.622	
Attach importance to individual innovation, and provide individuals with greater action rights				0.608	
Attach importance to collective innovation to enhance the overall competitive advantage of the organization				0.567	
A variety of virtual laboratories to cultivate students' innovative ability				0.540	
Encourage inter-university cooperation and cross-disciplinary cooperation, and build platforms for innovation and entrepreneurship				0.522	
Innovate more teaching links, such as outdoor sketching, internship, etc.				0.515	
Create more kinds of teaching, such as creative painting courses, experimental painting courses, etc.				0.511	
Government policy support for innovation				0.448	
An environment that supports and encourages innovation				0.444	
"Learner-centered" resource-based learning and research-based learning atmosphere				0.415	
Teaching and learning should be one of the innovative results that the School of Art Management rethinks in the new era of art management				0.380	

Variable	Component				
	1	2	3	4	5
Encourage employees to innovate more cooperation models, such as establishing workshops and cross-professional cooperation, to improve their scientific research capabilities				0.378	
Attach importance to adopting a variety of innovative research methods to complete the whole research				0.371	
Sharing and co-construction of high-quality educational resources				0.365	
The innovative management mode of teachers and students to provide challenge new teaching auxiliary products from time to time				0.362	
Set up special funds to invest in the purchase of advanced equipment				0.360	
Establish a good innovation incentive mechanism, set up a gradient bonus system					0.680
Timely evaluation and feedback of innovation results					0.604
Innovative teachers will be rewarded in terms of salary and bonus					0.589
Organize and hold innovation competitions regularly, and reward innovation achievements					0.489
Reward innovative teachers in terms of promotion opportunities					0.481
Reward innovative teachers from the psychological level, such as public recognition					0.472

Variable	Component				
	1	2	3	4	5
Establish incentive systems such as performance appraisal, salary system and training incentive mechanism, and motivate around innovation					0.461
External innovative talents are introduced as the source of competition, and innovation is promoted through the reverse incentive of competition					0.456
Teachers who have made innovative achievements in courses and scientific research projects will be rewarded exclusively					0.446
Set up a special innovation fund to provide material incentives for innovative talents					0.438
Innovative teachers should be rewarded in terms of resource allocation, and resources should be tilted towards innovative projects and their results					0.427
Innovative teachers will be rewarded from the aspect of office environment treatment					0.409
Encourage applications for innovative projects and provide scientific research funding support					0.391

The data in this study were rotated using the maximum variance rotation method (varimax) in order to find out the corresponding relationship between factors and study items. The above table shows the information extraction of research items by factors and the corresponding relationship between factors and research items. It can be seen from the above table that the common degree value of all research items is higher than 0.6, which means that there is a strong correlation between research items and factors, and factors can effectively extract information. After ensuring that the factor can extract most of the information of the research item, the corresponding relationship between the factor and the

research item is analysed (when the absolute value of the factor loading coefficient is greater than 0.4, it indicates that the item has a corresponding relationship with the factor).

As can be seen from Table 2, since the principal component analysis method was used to determine the variable items, and then the factors were extracted and analyzed based on the orthogonal rotation method for the 72 variables summarized in the innovation and information management of painting majors in 21st century under Liaoning Province, five common components were extracted from the total variance explanation results in the above table, explaining 65.488% of the sample data was obtained, which is greater than 60%, consistent with the hypothesis of this study, indicating that the structural model can be established. Then, according to the rotated component matrix, variables with coefficients greater than 0.5 under each common factor are extracted, and the remaining observed variables that have a low impact on the common factor are eliminated. The observed variables in the 5 components are comprehensively obtained: "Information Construction", "Administrative Management", "Teacher Ability", "Innovation Environment" and "Incentive Mechanism".
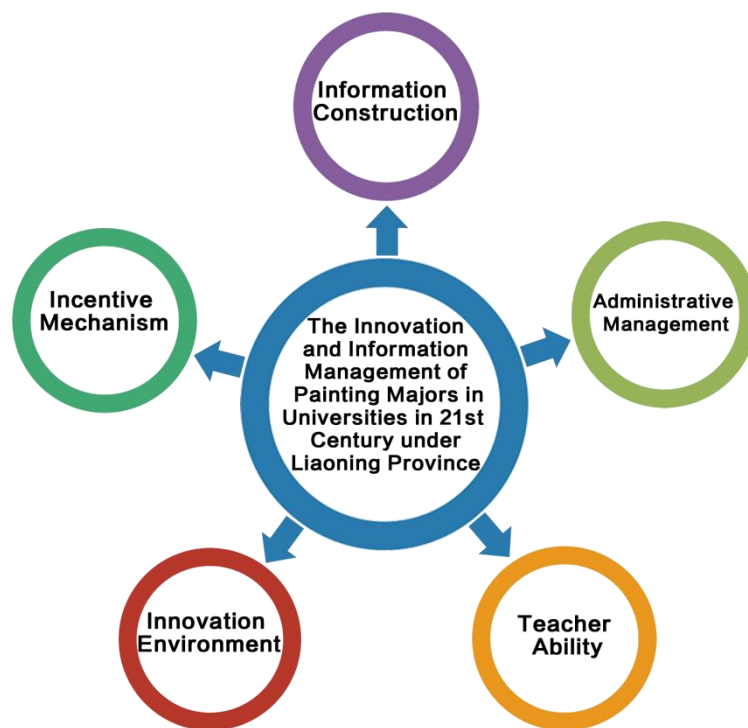
Table 3: Table of components of the innovation and information management of painting majors in universities in 21st century under Liaoning Province

Order	Assembly	Number of variable	Factor loading
1	Information construction	7	0.536-0.632
2	Administrative management	7	0.502-0.598
3	Teacher ability	7	0.505-0.671
4	Innovation environment	8	0.511-0.625
5	Incentive mechanism	3	0.589-0.680
	All	32	

According to Table 3, there are 5 qualified parts as follows: Component 1 "Information construction" contains 7 variables that describe this component, coefficient load is between 0.536-0.632. Component 2 "Administrative management" contains 7 variables, and the load coefficient of the component is between 0.502-0.598. Component 3 "Teacher ability" contains 7 variables describing components with factor loads ranging from 0.505-0.671. Component 4 "Innovation environment" contains 8 variables, describing the load between components and

the factors range from 0.511-0.625; Component 5 "Incentive mechanism" contains 3 variables, describing the load between components and the factors range is 0.589-0.680.

Figure 1 The 5 components of the innovation and information of painting majors in universities in 21st century under Liaoning Province

Section 3 Result of Data Analysis for Research Objective 2

The guideline to enhance the innovation and information of painting majors in universities in 21st century under Liaoning Province. Through qualitative research, quantitative research and factor analysis, the researchers obtained the guideline to enhance the innovation and information management of painting majors in universities in 21st century under Liaoning Province. A total of 9 experts participated in the panel's five sections. Finally, the relevant content is summarized, and There are 26 guiding principles for the to enhance the innovation and information of painting majors in universities in 21st century under Liaoning Province, including 4 guiding principles for Information Construction, 6 guiding principles for the Administrative Management, 6 guiding principles for the Teacher Ability, 7 guiding principles for the Innovation Environment and 3 guiding principles for the Incentive Mechanism.

6. Conclusion

The study procedure included two steps:

(1) Result of the innovation and information management of painting majors in universities in 21st century under Liaoning Province. The researcher from the literature review and the variable outline of related studies, there were 80 items. The researcher selected ≥ 10 of the frequency items and finally obtained 65 items. According to the information obtained from the interviews, there were a total of 65 items. As for the recognition degree of different items of key information providers, the researchers selected items with recognition degree ≥5, and finally reached 40 items. The researchers combined 65 items derived from literature review and 40 items derived from interviews with key informants, resulting in a total of 105 items. Combining the total number of items between this two aspects, the 13 items are repeated. Therefore, 92 valid items were screened out. In order to verify the validity of the questionnaire, the researcher sent the questionnaire to 5 research experts for verification. Targeted Item-Objective Congruence (IOC) is used to evaluate items in the questionnaire on a scale of -1, 0, +1. 17 items with scores below 0.5 were deleted. On the other hand, 72 items with scores of 0.60-1.00 were retained. So a total of 72 final items were obtained. And prepared a research instrument as a five-point evaluation subscale questionnaire.

on the basis of exploratory factor analysis (EFA), the variables were extracted and the key component variables were analysed seems to get five components of the innovation and information management of painting majors in universities in 21st century under Liaoning Province as follow; Component 1 consist of 12, researchers named it "Information Construction". Component 2 consist of 20 variables, the researchers named it "Administrative Management". Component 3 consist of 10 variables, the researchers named it "Teacher Ability". Component 4 consist of 17 variables, the researchers named it "Innovation Environment" and Component 5 consist of 13 variables, the researchers named it "Incentive Mechanism".

(2) The guideline to enhance the innovation and information management of painting majors in universities in 21st century under Liaoning Province. A total of 9 experts participated in the panel's five sections. Finally, the relevant content is summarized, which are divided into 5 parts as 2 guidelines to the innovation and information of painting majors in universities in 21st century under Liaoning Province, including 4 guidelines for Information Construction, 6 guidelines for the Administrative Management, 6 guideline for the Teacher Ability, 7 guidelines for the Innovation Environment and propose 3 guidelines for the Incentive Mechanism.

7. Discussion

   1. Discussion about major findings of objective 1

There were 5 components of innovation and information management of painting majors in 21st century under Liaoning Province which consisted of Information construction, Administrative management, Teacher ability, Innovation environment and Incentive mechanism.

There is no doubt that the informatization of system construction is a problem that we should pay attention to. The construction of educational administration management system greatly simplifies the process of students' course selection, not only can improve the enthusiasm of students to choose courses, but also can query results in time and summarize the semester learning.

The construction of educational administration management system greatly simplifies the process of students' course selection, not only can improve the enthusiasm of students to choose courses,but also can query results in time and summarize the semester learning.

Administrative management is a management problem that school staff should pay attention to. Administration is inseparable from teaching. Doing a good job in administrative security is the proper meaning of modern painting teaching. In addition, teachers' ability is the main body of painting major, so it is an urgent problem to improve teachers' comprehensive quality and enhance their teaching ability. Innovation environment and incentive mechanism are important to mobilize students' enthusiasm for learning, innovation and entrepreneurship. The conflict between the existing system and the existing system is inevitable, what we can do is to combine the reality, flexibly adjust, and strive to achieve the integration of the changes of The Times and the adherence to the tradition.

   2. Discussion about major findings of objective 2

   Component 1: Information Construction

This study aligns with Shen Ning's (2018:211) theoretical and research findings. The weight distribution in the evaluation system provides a theoretical foundation for decision-making, management, and the enhancement of efficiency in the painting major. Currently, information management is a prevailing trend in university education management. It involves the use of modern information technologies such as computers, multimedia, and networks to support education and teaching activities. This, in turn, fosters innovation in university management, contributing to the overall reform and development of education. The incorporation of information technology aims to enhance the efficiency of educational

management activities and student quality. Yao Song and Hou Dingyao (2023:41) also emphasized the significance of guidelines 1 and 2 in information construction for innovation management, yielding similar research outcomes. Emerging technologies, notably artificial intelligence, are exerting a considerable impact on management practices. For instance, in education management, artificial intelligence plays a crucial role in reshaping the social landscape. As a positive technological resource, it facilitates the shift in university management from "experiential" to "intelligent," organizational structure from "collectivized" to "personalized," management processes from "static" to "dynamic," and evaluation from "single output" to "multiple interaction." This paper, however, explores a different research direction compared to the works of the mentioned scholars.

Component 2: Administrative Management

Zheng Yimin (2023:106) and Zhang Mingxing (2022:113) pointed out in the study that the administrative needs guideline 6: in the information age, college administrators should attach importance to information management and information technology, try to strengthen information construction, further improve the level of college information management with the help of information technology, and efficiently complete the management objectives. The results of this study are similar to those of Ran Wei (2023:59), Ma Li, Gou Lihua (2021:137-140). The wide use of information technology in all walks of life makes it more closely related to education, and forms a new pattern of interconnection in college information management. For colleges and universities, improving the interconnection mechanism in the process of information management can make the storage, management, analysis and extraction of information more convenient, and can make the teaching and education management of colleges and universities more efficient. However, this paper holds that guidelines 2 and 3 are more important, which is different from the views of the above researchers.

Component 3: Teacher Ability

The results of this study are consistent with those of Li Yimin, Wang Jing (2023:113). Consistent with the theoretical or research results, it believes that With the development and widespread adoption of information technology, it has become an integral part of modern society. In the field of education, the application of information technology has gradually become an essential teaching tool. For art teachers, acquiring proficiency in information technology is not only a necessary skill but also provides them with numerous opportunities and advantages in their teaching. Guideline 6 in teacher ability is a factor that researchers generally think needs more attention, which is consistent with the purpose of this paper.

Component 4: Innovation Environment

In the study, Tian Huanhuan, Wu Yingzhen (2023:163) also pointed out the importance of guideline 3 and guideline 4 in the innovation environment for innovation management, and obtained similar research results. The deep integration of new media and universities painting majors are an inevitable trend of the future development of painting majors. Colleges and universities should make full use of new media technology to make education work "alive" and organically combine the advantages of traditional painting teaching and information technology. In this point, this article is in line with the views of Tian Huanhuan, Wu Yingzhen (2023:163), in which many inspirations have been gained.

In addition, as with the findings of Wang Xiao (2012:147), universities management is both science and art, and school management is a dynamic process. In the process of school system management, we have carried out practice and attempts to promote the improvement of universities internal management and universities quality, but we still need to make further efforts to continue to explore and innovate.

Component 5: Incentive Mechanism

The results of this study are consistent with the theoretical research results of Zeng Li (2012:28), which holds that innovation is an important driving force for social development, and education plays an important role in this. Education innovation lies in management innovation. How to incorporate innovative ideas into universities management to improve universities efficiency and education quality is an important subject that universities administrators must think carefully about. As a universities management theory, the study of innovative management is the driving force to promote the sustainable development of the universities, and it is the reason of the current situation of universities management. It strongly uses emergent thinking to create new values in activities. Zeng Li pointed out in the study that the incentive mechanism requires guideline 1 and guideline 2, but ignored guideline 3. However, this study believes that variable 3 is also influential, and appropriate salary encouragement can greatly improve the enthusiasm of teachers, just like setting up scholarships for students. Material encouragement is an indispensable part of people's life.

8. Recommendations

1. Recommendation for policy formulation

(1) Increase financial investment to establish comprehensive information systems in colleges and universities. Improve network infrastructure and cultivate a high-quality information technology talent pool for painting majors. This promotes the informationization

construction process, enhancing the core competitiveness of painting majors and adopting an open information technology education model. This integration aligns with the "internet plus education" model and nationwide higher education digitization. Utilizing advanced information technology like intelligent media and AI in universities creates a "virtual digital campus," facilitating richer resources, convenient communication, and educational resource sharing.

(2) Optimize the organizational structure of colleges and universities by redistributing administrative duties and streamlining processes. Enhance administrative efficiency by aligning administrative methods with the unique characteristics and developmental goals of the painting discipline. Consider the long-term university strategy to unify administrative management methods, reflecting a forward-looking vision.

(3) Emphasize the construction of college staff and teacher cultivation to boost the core competitiveness of painting majors. A high-quality teaching staff is crucial for talent training and scientific research achievements. Informatization and personalized teacher team construction provide development opportunities, ensuring colleges keep pace with modern trends and enhance educational competitiveness.

2. Recommendation for practical application

(1) Streamline college and university resources, optimize internal structures, and establish a humanized, scientific, and informative management mode. Colleges and universities, as academic organizations, must create an open and inclusive cultural atmosphere respecting individual needs. Strategic resource allocation, considering limitations, ensures scientific, reasonable, and effective resource distribution for painting majors.

(2) Increase capital investment, introduce modern information technology, update infrastructure, and enhance the performance pay and innovation incentive systems. Align painting professions with market competition rules in incentive mechanisms for market-oriented human resource management. Optimize departments, clarify responsibilities, and improve efficiency in resource utilization, reducing administrative costs.

(3) Prioritize teacher cultivation, increase talent introduction efforts, and optimize the teaching staff structure. Focus on relevant lectures and training to enhance teachers' teaching, organizational, research, and communication abilities. Attract high-quality talent through increased funding and policies, forming a high-quality information technology talent team for qualitative improvement in research results.

9. Recommendation for Further Research

Through the research on the innovation and information management of painting majors in universities in 21st century under Liaoning universities, the current situation of the innovation and information management of the painting majors in universities in 21st century under Liaoning Province is analyzed, and corresponding countermeasures are put forward, which is of guiding significance and practical significance to the management and change of the painting profession in Liaoning universities, which is conducive to the improvement of the disciplinary strength and core competitiveness of the painting profession of the universities, and to the promotion of "Internet plus Education" of the universities in Liaoning province. It is conducive to improving the disciplinary strength and core competitiveness of painting majors in colleges and universities in Liaoning Province, promoting the in-depth fusion of the "Internet plus Education" mode and higher education, promoting the development of professional competence in the cultural industry in Liaoning Province, and driving the high efficiency, high quality and sustainable economic prosperity of the cultural industry in Liaoning Province.

BIbliography

An Lu. (2023). **A practical exploration on improving the management efficiency of colleges and universities, Office Business.** 17(5), 45-52.

Bao Quanwan. (2004). **On Liaoning modern folk painting.** Art wide Angle,33(9), 71-83.

Cheng Gang. (2020). **Research on the development countermeasures of art education management in students' comprehensive quality education.** China National Expo,75(9), 12-20.

Chenying, Li. (2017). **New Perspective of Art Education Reform in Normal University under Elementary Art Education Reform.** Proceedings of the 2017 4th International Conference on Education, Management and Computing Technology,45(6), 52-54.

Deng Su. (2013). **Innovation management and university innovation management.** Journal of Fujian Financial Management Cadre College, (46)4, 25-31.

Dou, Xilin. (2014). **The advantages and disadvantages of the development of Liaoning figurative painting.** Mangzhong Literature,71(6), 223.

Henry, Mintzberg. (2004). **Managers not MBAs: A hard look at the soft practice of managing and management development.**

Henry, Mintzberg. (2009). **Managing.** San Francisco: Berrett-Koehler.

Hong Juncan. (2016). **Research and analysis of student status management system of China Academy of Art.** Yunnan University (29)8, 6-7.

Huang,Li. (2023). **The trend of painting art education in the information age.** Art Review,(27)6,36-40.

Hu,Ning, Wang,Yushen. (2019). **The characteristics of teacher-Child interaction in Kindergarten Art Education activities—Based on the investigation of a kindergarten in Shenyang, Survey of Education**. (29)8, 113-115.

Jing Yi. (2022). **The integration experience of science and innovation management mechanism in colleges and universities.** Management Consulting, (30)6, 18.

Li,Nana. (2022). **Research on contemporary art education courses — A case study of china's eight fine arts academies' painting majors after 2000.** East China Normal University,60-63.

Li Shouquan. (2017). **Research on the construction of university innovation management system.** Educational Research, (12)7, 6-9.

Li,Yimin, Wang, Jing. (2023). **Research on the Development of Art Education in Colleges and Universities under the Background of "Multi-Culture" in China — A Review of Research on the Theory and Development of Art Education in Colleges and Universities.** China University Science & Technology, (24)7, 110-113.

Leandre R. Fabrigar, & Duane T. Wegener. (2012). **Exploratory Factor Analysis.** Retrieved August 15, 2023, from https://books.google.co.th/books?hl=zh-CN&lr=&id= DSppAgAAQBAJ&oi=fnd&pg=PP1&dq=Exploratory+Factor+Analysis&ots=amOiXRh2Vx& sig=7tum6RyaRlUIe9BSPN7RXxbRyk&redir_esc=y#v=onepage&q=Exploratory%20Facto r%20Analysis&f=false

Ma,Li, Gou, Lihua. (2021). **Research on informatization of scientific research management from the perspective of university governance modernization.** Journal of Yulin Normal University, (24)9, 137-140.

Ran Wei. (2023). **Application strategy of interworking in university information management**. Internet Week, (2)3, 45-59.

Shen Ning. (2018). **Thoughts on strengthening school information management in the new period**. Chinese Management Informatization, (24)5, 209-211.

Tian Huanhuan, Wu Yingzhen. (2023). **Deep integration of new media and college art education.** Art Education Press, 163.

Wang Xiao. (2012). **How to carry out school innovation management.** Extracurricular Reading, (12)3, 145-147.

Yao Song, Hou Dingyao. (2023). **The innovation and remolding of school management in the age of artificial intelligence.** Journal of Ningbo University, (12)9, 40-41.

Yong, Liu. (2015). **The influence of network technology on higher educational management and its optimization method.** Open Journal of Social Sciences, (24)6, 242-247.

Zeng Li. (2012). **Current situation, practical difficulties and path selection of school innovation management.** Teaching and Management, (24)8, 8-12.

Zhang, Hao. (2022). **Research on Drucker's management ethics thought.** Shanghai University of Finance and Economics, (24)4, 22-26.

Zhang, Mingxing. (2022). **Innovation management in school education management.** Exploration and Echo, (24)5, 111-113.

Zhao Sifa. (2022). **The teaching reform of art education in Chinese colleges and universities in the information age.** Journal of Taiyuan City Vocational and Technical College, (12)1, 113-125.

Zheng, Xinwen. (2009). **Introduction to art management.** Shanghai Music Publishing House, (12)2, 2-5.

Zheng, Yimin. (2023). **Problems and optimization strategies of informatization in university educational administration**. Journal of Jiamusi Vocational Institute, (34)12, 102-106.

Zhou Sanduo. (2014). **Management.** Fudan University Press, 25.

Zhou Zhou. (2021). **Research on innovative education management in colleges and universities in the new era.** Shanxi South, (12)3, 81-82.

Zhu Yue. (2020). **The application research of MIS in school information management.** Modern Information Technology, (12)6,176-179.

Teacher Professional Development Model for Art Universities under Shandong Province

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ABSTRACT

The objectives of this research were: (1) to investigate the components and indicators of teacher professional development for art universities under Shandong Province; and (2) to propose the teacher professional development model for art universities under Shandong Province with empirical data.

The research was a mixed methodology research with quantitative research and qualitative research. The research subjects were 2308 full-time teachers from art universities of Shandong Province. A total of 594 samples were selected using proportional stratified random sampling method. The instruments used for data collection were semi-structured interviews and a five-point rating scale questionnaire. The statistical data analysis were descriptive statistics and Confirmatory Factor Analysis.

The research findings revealed that; (1) there were seven components and 21 indicators of the teacher professional development for art universities under Shandong Province, which consisted of national education policy, personal teaching ability, school management capability, social status, social environment, work environment and career prospects; and (2) the teacher professional development model for art universities under Shandong Province was fit with the empirical data. The value of Relative Chi-square (χ^2/df) = 1.799, Goodness of Fit Index (GFI) = 0.95, Tucker-Lewis Index (TLI) = 0.977, and Root Mean Square Error of Approximation (RMSEA) = 0.037, all in line with specified criteria.

Keywords: Teacher Professional Development Model, Art Universities, Shandong Province

1. Introduction

Talents are an important driving force for national development, education is an important means of cultivating talents, and teachers are an important condition for carrying out educational activities. In today's era, social competition is intensifying, ultimately it is a competition in talent cultivation. Building a high-level teaching team and cultivating excellent talents is crucial. Teacher professional development refers to the process in which teachers, as professionals, continuously develop and improve their professional ideas, knowledge, and abilities, from novice teachers to expert teachers. The professional development of teachers is related to the overall development and long-term interests of schools and even social education.

Du Yan (2021) believes in her research on the impact of teaching and research groups on the professional development of teachers that, under the goal of the reform of teacher team construction in the new era, teacher professional development plays an important role in improving teaching quality and building an educational powerhouse.

2. Research Questions

1. What are the components and indicators of teacher professional development for art universities under Shandong Province?

2. What are the teacher professional development model for art universities under Shandong Province congruence with empirical data?

3. Research Objectives

1. To investigate the components and indicators of teacher professional development for art universities under Shandong Province.

2. To propose the teacher professional development model for art universities under Shandong Province with empirical data.

4. Research Hypothesis

The teacher professional development model for art universities under Shandong Province is consistent with empirical data.
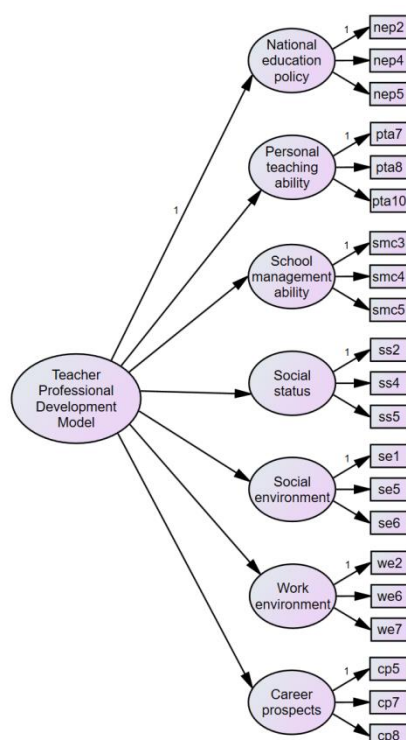
5. Conceptual Framework

Figure 1 Conceptual framework

6. Research Design

According to the two objectives of this research, the research design is divided into the following two parts.

Part 1: Determining the components and indicators of teacher professional development model for art universities under Shandong Province. Using qualitative research methods, collect data related to the components and indicators of teacher professional development from all relevant literature, and conduct interviews with key informants.

Part 2: Developing the model of teacher professional development model in art universities under Shandong Province.Using quantitative research methods confirmatory factor analysis (CFA) methods, based on the first part of this study, the factors affecting teacher development were analyzed through questionnaire survey results, and AMOS was used to analyze the model.

7. Population and sample

The population consists the teachers who are working in art universities in Shandong province, including Shandong University of Art, Shandong University of Art & Design, Qingdao Film Academy, Shandong Communication & Media College, Shandong Vocational Institute of

Clothing Technology and Shandong Vocational College of Art & Design. The total number will be 2308.The samples are 594 teachers calculate by G*Power program at power of test .80.

Data analysis

The data was analyzed by content analysis and confirmatory factor analysis (CFA).

Research Result

(1) The basic information of respondents

Table 1 Basic information of respondents

Basic Information		Frequency	Percent
Gender	Male	320	53.9%
	Female	274	46.1%
Age	Lower than 30 years old	66	11.1%
	31 – 40 years old	238	40.1%
	41– 50 years old	177	29.8%
	51– 60 years old	74	12.5%
	More than 60 years old	39	6.6%
Educational level	Bachelor	69	11.6%
	Master	305	51.3%
	Doctor	220	37.0%
Professional title	Assistant	53	8.9%
	Lecturer	252	42.4%
	Associate Professor	253	42.6%
	Professor	36	6.1%
Working Experience	1 – 5 years	184	31.0%
	6 – 10 years	213	35.9%
	11 – 20 years	158	26.6%
	More than 20 years	39	6.6%
Major	Fine Arts	19	3.2%
	Design	63	10.6%
	Art Theory	33	5.6%
	Music	54	9.1%
	Dance	54	9.1%

Basic Information		Frequency	Percent
	Theatre	207	34.8%
	Others	164	27.6%

From the table, it can be seen that:

In terms of gender, more than half of the respondents were male, accounting for 53.9%, while the remaining 274 were female, accounting for 46.1%.

In terms of age, the majority of respondents are between 31 and 40 years old, accounting for 40.1%, 41 to 50 years old, accounting for 29.8%, and 51 to 60 years old, accounting for 12.5%. However, there are fewer respondents under 30 years old and those over 60 years old, accounting for 11.1% and 6.6%, respectively.

In terms of education level, teachers with master's and doctoral degrees are the majority, accounting for 51.3% and 37.0% respectively, while bachelor's degrees only account for 11.6%.

In terms of professional titles, lecturers and associate professors are the majority, accounting for 42.4% and 42.6% respectively, with teaching assistants accounting for 8.9% and professors accounting for 6.1%.

In terms of work experience, it can be seen that middle-aged and young teachers are the majority. 31% work for 1-5 years, 35.9% work for 6-10 years, 26.6% work for 10-20 years, and only 6.6% work for more than 20 years.

In terms of majors, most of them are common art majors, accounting for 73.4%, while other majors that are not included in the options, such as film, calligraphy, etc., account for 27.6%.

(2) Descriptive statistical results of indicators

Table 2 Descriptive statistic

Indicators	$\bar{x}$	SD	SKE	KU	Level
nep1	4.04	.929	-.988	.998	High
nep2	3.94	1.053	-.881	.188	High
nep3	3.86	1.068	-.930	.423	High
nep4	3.88	.848	-.664	.202	High
nep5	3.79	.845	-.794	.992	High
nep6	3.5690	.75906	-.165	-.054	High
nep7	3.5859	.77495	-.245	.038	High
nep8	3.5926	.76541	-.314	.479	High

Indicators	$\bar{x}$	SD	SKE	KU	Level
pta1	3.88	1.148	-1.003	.292	High
pta2	3.70	1.141	-.700	-.274	High
pta3	3.82	1.134	-.826	-.070	High
pta4	3.72	.963	-.606	-.004	High
pta5	3.70	.966	-.495	-.184	High
pta6	3.72	.955	-.608	.046	High
pta7	3.78	.856	-.463	.146	High
pta8	3.83	.793	-.382	.023	High
pta9	3.48	.803	-.115	-.285	High
pta10	3.79	.780	-.351	-.051	High
pta11	3.70	.898	-.976	1.405	High
pta12	3.8418	.81006	-.620	.426	High
pta13	3.7795	.76618	-.280	-.205	High
pta14	3.7104	.79011	-.508	.281	High
smc1	3.99	.959	-.847	.349	High
smc2	3.68	1.096	-.700	.012	High
smc3	3.89	1.007	-.756	.179	High
smc4	3.84	.864	-.527	-.111	High
smc5	3.72	.858	-.509	.086	High
smc6	3.5286	.80052	-.311	-.020	High
smc7	3.5303	.75492	-.351	-.156	High
smc8	3.5387	.76783	-.209	-.214	High
ss1	3.91	1.113	-1.009	.361	High
ss2	3.76	1.142	-.629	-.379	High
ss3	3.86	1.136	-.991	.448	High
ss4	3.82	.922	-.859	.832	High
ss5	3.81	.916	-.724	.392	High
ss6	3.6027	.82359	-.095	-.429	High
se1	3.98	.990	-.680	-.196	High
se2	3.89	1.055	-.807	.117	High
se3	4.01	1.004	-.986	.687	High
se4	3.74	.897	-.270	-.488	High
se5	3.93	.828	-.503	.227	High

Indicators	$\bar{x}$	SD	SKE	KU	Level
se6	3.92	.865	-.705	.469	High
se7	3.8653	.80599	-.429	.013	High
se8	3.6936	.81122	-.223	-.219	High
we1	3.76	1.064	-.467	-.906	High
we2	3.78	1.056	-.332	-1.056	High
we3	3.62	1.124	-.286	-1.092	High
we4	3.90	.952	-.425	-.755	High
we5	3.60	1.029	-.133	-1.122	High
we6	3.71	.882	-.187	-.622	High
we7	3.73	.917	-.446	-.156	High
we8	3.4512	.87987	-.313	-.031	High
cp1	4.01	.966	-.702	-.208	High
cp2	4.16	.879	-1.001	.836	Highest
cp3	4.01	1.001	-.814	-.009	High
cp4	3.87	.902	-.687	.333	High
cp5	3.72	.924	-.452	-.025	High
cp6	3.66	.959	-.468	-.144	High
cp7	3.73	.875	-.496	.059	High
cp8	3.75	.842	-.579	.362	High

From the analysis results in Table 2, it can be seen that the overall distribution of the sample data used in this research is relatively uniform, and the $\bar{x}$ of the indicators is mainly distributed between 3.40 and 4.00. Each indicator is at a high level, and the data distribution is more concentrated, belonging to the moderate and good levels. From the perspective of skewness and kurtosis, each indicator has a skewness of less than 3 and a kurtosis of less than 5, indicating that the sample data follows an approximate normal distribution and can be empirically analyzed using a model.

(3) Select indicators for each component measurement model

1) National education policy
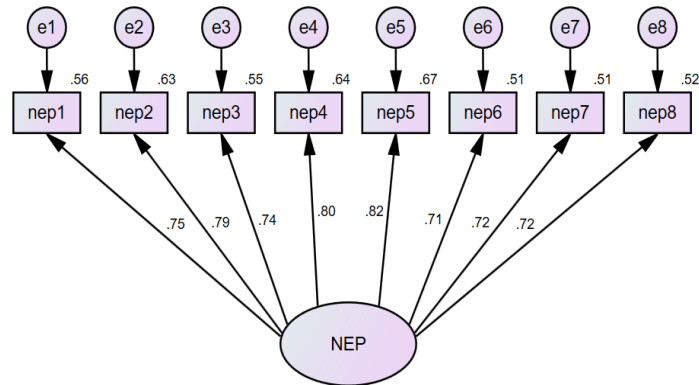
Chi-square=50.378 Degree of freedom=20 GFI=.979
AGFI=.961 CFI=.988 RMSEA=.051 TLI=.984 IFI=.989 RMR=.016

Figure 1 Measurement results of component 1 indicators

Figure 1 shown the component 1 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with empirical data, with GFI, AGFI, TLI, CFI>0.95, and RMSEA<0.08. It met the standards (Hair et al., 2019, Pulpong Sooksawang, 2021). The model consisted of three indicators, namely nep2, nep4, and nep5, with factor loadings of 79, 80, and 82, respectively. Therefore, these indicators were chosen as representatives to describe this component.

2) Personal teaching ability
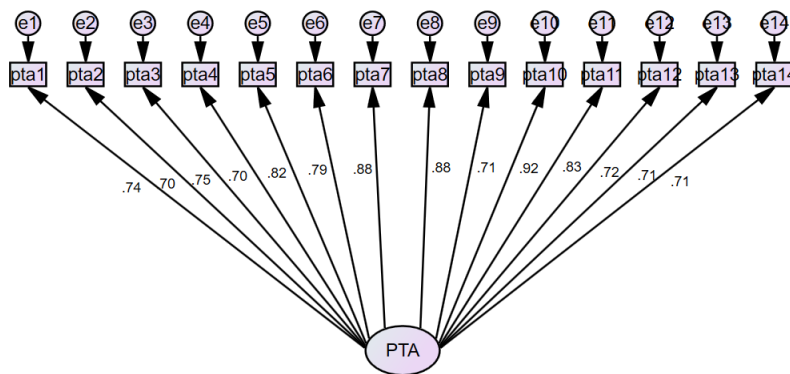
Chi-square=216.606 Degree of freedom=77 GFI=.942
AGFI=.921 CFI=.978 RMSEA=.055 TLI=.974 IFI=.978 RMR=.024

Figure 2 Measurement results of component 2 indicators

Figure 2 shown the component 2 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with empirical data, with GFI, AGFI, TLI, CFI>0.90, and RMSEA<0.08. It met the standards (Hair et al., 2019,

Pulpong Sooksawang, 2021). The model consisted of three indicators, namely pta7, pta8, and pta10, with factor loadings of 88, 88, and 92, respectively. Therefore, these indicators were chosen as representatives to describe this component.

3) School management capability
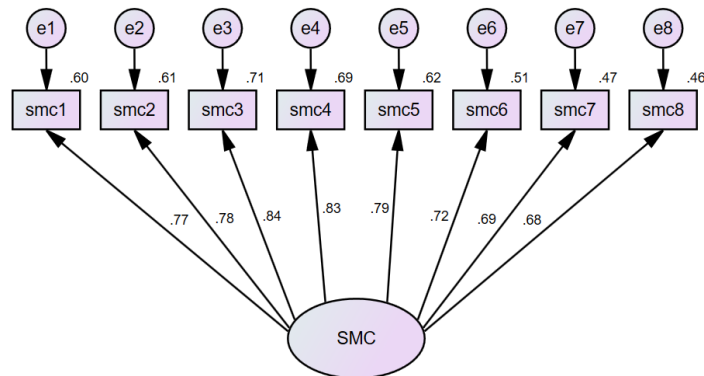
Chi-square=57.414 Degree of freedom=20 GFI=.977
AGFI=.958 CFI=.987 RMSEA=.056 TLI=.981 IFI=.987 RMR=.016

Figure 3 Measurement results of component 3 indicators

Figure 3 shown the component 3 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with empirical data, with GFI, AGFI, TLI, CFI>0.90, and RMSEA<0.08. It met the standards (Hair et al., 2019, Pulpong Sooksawang, 2021). The model consists of three indicators, namely smc3, smc4, and smc5, with factor loadings of 84, 83, and 79, respectively. Therefore, these indicators were chosen as representatives to describe this component.

4) Social status
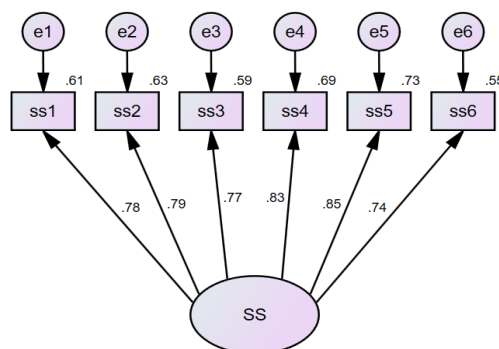
Chi-square=27.532 Degree of freedom=9 GFI=.986
AGFI=.966 CFI=.991 RMSEA=.059 TLI=.986 IFI=.992 RMR=.015

Figure 4 Measurement results of component 4 indicators

Figure 4 shown the component 3 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with

empirical data, with GFI, AGFI, TLI, CFI>0.90, and RMSEA<0.08. It met the standards (Hair et al., 2019, Pulpong Sooksawang, 2021). The model consists of three indicators, namely ss2, ss4, and ss5, with factor loadings of 79, 83, and 85, respectively. Therefore, these indicators were chosen as representatives to describe this component.

5) Social environment
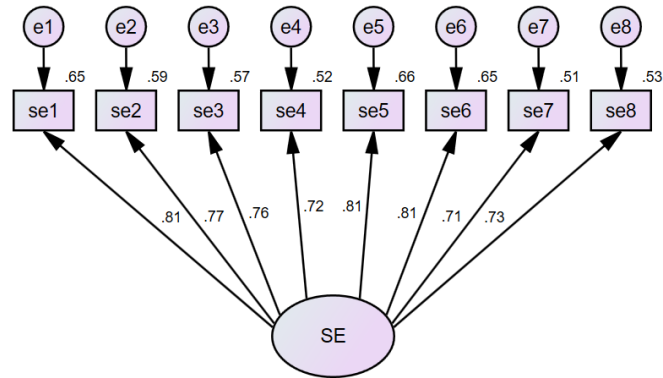
Chi-square=58.694 Degree of freedom=20 GFI=.974
AGFI=.953 CFI=.986 RMSEA=.057 TLI=.980 IFI=.986 RMR=.019

Figure 5 Measurement results of component 5 indicators

Figure 5 shown the component 3 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with empirical data, with GFI, AGFI, TLI, CFI>0.90, and RMSEA<0.08. It met the standards (Hair et al., 2019, Pulpong Sooksawang, 2021). The model consists of three indicators, namely se1, se5, and se6, with factor loadings of 81, 81, and 81, respectively. Therefore, these indicators were chosen as representatives to describe this component.

6) Work environment
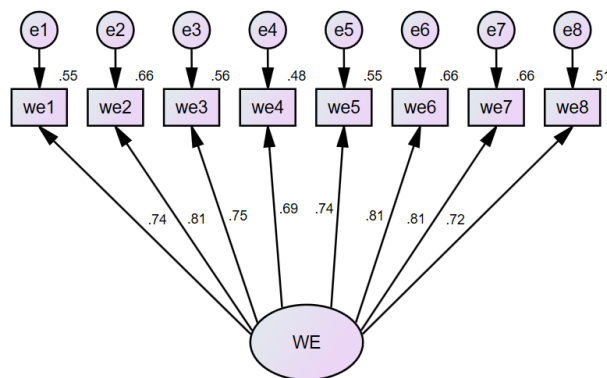
Figure 6 Measurement results of component 6 indicators

Chi-square=61.461 Degree of freedom=20 GFI=.974
AGFI=.953 CFI=.985 RMSEA=.059 TLI=.979 IFI=.985 RMR=.024

Figure 6 shown the component 3 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with

empirical data, with GFI, AGFI, TLI, CFI>0.90, and RMSEA<0.08. It met the standards (Hair et al., 2019, Pulpong Sooksawang, 2021). The model consists of three indicators, namely we2, we6, and we7, with factor loadings of 81, 81, and 81, respectively. Therefore, these indicators were chosen as representatives to describe this component.

7) Career prospects
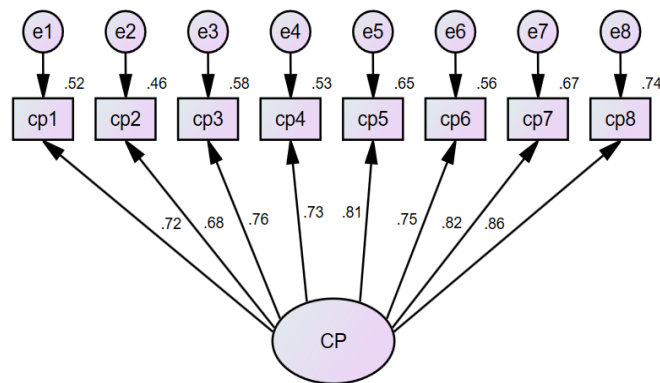
Chi-square=58.736 Degree of freedom=20 GFI=.974
AGFI=.952 CFI=.986 RMSEA=.057 TLI=.981 IFI=.986 RMR=.019

Figure 7 Measurement results of component 7 indicators

Figure 7 shown the component 3 measurement model of AMOS analysis, and it was found that the optimal indicator of this measurement model was consistent with empirical data, with GFI, AGFI, TLI, CFI>0.90, and RMSEA<0.08. It met the standards (Hair et al., 2019, Pulpong Sooksawang, 2021). The model consists of three indicators, namely cp5, cp7, and cp8, with factor loadings of 81, 82, and 86, respectively. Therefore, these indicators were chosen as representatives to describe this component.

After identifying the required indicators for each component, perform second-order CFA validation. Before conducting second-order confirmatory factor analysis, the researcher tested the correlation between 21 indicator scales to determine the appropriateness of the correlation matrix to be analyzed. The analysis results are shown in Table 3.

Table 3 Pearson correlation coefficients for various indicators

	nep2	nep4	nep5	pta7	pta8	pta10	smc3	smc4	smc5	ss2	ss4	ss5	se1	se5	se6	we2	we6	we7	cp3	cp7	cp8
nep2	1																				
nep4	.639	1																			
nep5	.646	.618	1																		
pta7	.336	.343	.401	1																	
pta8	.322	.350	.395	.789	1																
pta10	.335	.360	.397	.833	.827	1															
smc3	.171	.197	.170	.360	.365	.376	1														
smc4	.140	.175	.140	.347	.353	.375	.705	1													
smc5	.159	.163	.175	.297	.321	.343	.677	.610	1												
ss2	.192	.184	.212	.363	.334	.337	.340	.282	.289	1											
ss4	.221	.283	.287	.367	.383	.371	.307	.270	.262	.661	1										
ss5	.248	.291	.296	.395	.390	.398	.320	.250	.291	.687	.685	1									
se1	.290	.244	.317	.359	.391	.411	.370	.262	.257	.297	.308	.351	1								
se5	.249	.224	.272	.348	.340	.332	.365	.301	.211	.256	.265	.250	.656	1							
se6	.270	.255	.318	.383	.390	.397	.363	.334	.269	.310	.331	.332	.636	.649	1						
we2	.171	.275	.233	.358	.362	.360	.219	.208	.135	.233	.259	.223	.176	.277	.303	1					
we6	.178	.297	.283	.387	.363	.370	.281	.242	.176	.257	.241	.231	.256	.315	.324	.685	1				
we7	.143	.205	.203	.307	.314	.319	.199	.206	.134	.227	.253	.218	.157	.252	.300	.681	.653	1			
cp3	.108	.186	.181	.313	.307	.315	.253	.282	.208	.223	.221	.226	.362	.328	.312	.249	.277	.188	1		
cp7	.142	.199	.240	.303	.345	.317	.308	.334	.271	.223	.294	.252	.392	.402	.392	.322	.315	.266	.618	1	
cp8	.174	.223	.220	.307	.327	.321	.286	.283	.245	.209	.231	.219	.435	.399	.367	.278	.262	.185	.634	.745	1

According to Table 3, the Pearson correlation coefficient analysis results of the model could be seen. 21 indicators had a statistically significant positive correlation at 0.01 (p<0.01), with the highest correlation indicator pta10 had a correlation coefficient of 0.833, while the lowest correlation indicator cp3 had a correlation coefficient of 0.108. Overall, in the cross-correlation matrix of empirical rules not exceeding 0.90 reported by Hair et al. (2010)

(4) Developing the teacher professional development model for art universities under Shandong Province
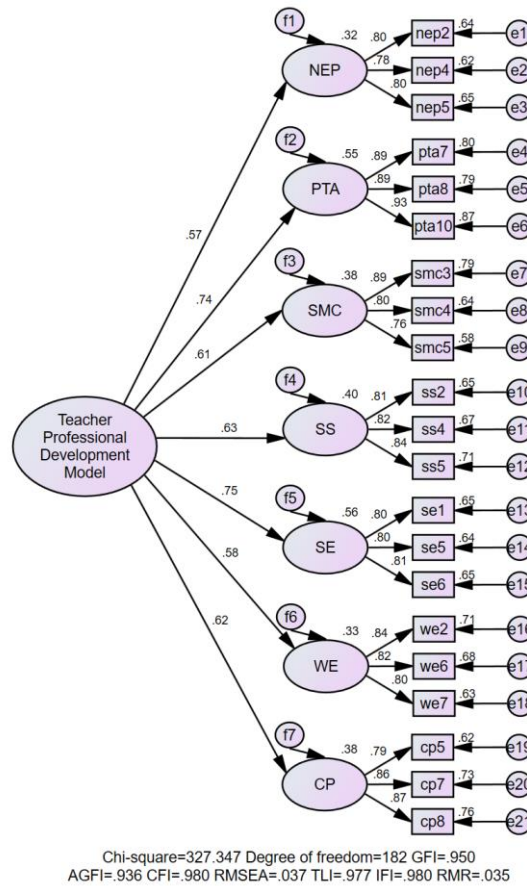

Figure 8 Second order CFA of the teacher professional development for art universities under Shandong Province

Table 4 Show statistical value of model

Title	Latent and observable	Std. Estimate	S.E.	C.R.	CR	p	AVE
The Teacher Professional Development Model for Art Universities under Shandong Province	NEP (0.569)						
	nep2	0.799	-	-	0.839	-	0.634
	nep4	0.781	0.43	18.526		***	
	nep5	0.809	0.43	18.973		***	
	PTA (0.744)						
	pta7	0.893	-	-	0.931	-	0.818
	pta8	0.888	0.029	31.598		***	
	pta10	0.931	0.027	34.531		***	
	SMC(0.613)						
	smc3	0.889	-	-	0.857	-	0.668
	smc4	0.798	0.036	21.491		***	
	smc5	0.759	0.036	20.356		***	
	SS(0.634)						
	ss2	0.809	-	-	0.863	-	0.678
	ss4	0.815	0.039	20.739		***	
	ss5	0.846	0.039	21.353		***	
	SE (0.751)						
	se1	0.809	-	-	0.846	-	0.647
	se5	0.804	0.042	20.02		***	
	se6	0.801	0.043	19.939		***	
	WE(0.575)						
	we2	0.844	-	-	0.860	-	0.673
	we6	0.821	0.038	21.28		***	
	we7	0.795	0.04	20.698		***	
	CP (0.620)						
	cp5	0.793	-	-	0.877	-	0.705

Figures 8 and Table 4 shown the results of second-order CFA using the AMOS statistical software program. Based on the results of this analysis, it could be concluded that the professional development model for teachers in art universities in Shandong Province had seven components. From the component weight equal of this second-order CFA study, the following results can be obtained. As shown in Table 4.5:

Table 5 Show the result of second-order CFA

NO.		Component and Indicator	Factor Loading
Component 1: Social environment (0.751)			
1	se6	The social security system and unemployment benefits reflect the current social situation, create a stable social environment, and are conducive to the development of teachers.	0.807
2	se1	Economy is the foundation of social development, and the speed of economic development affects the level of social development and reflects the current situation of society.	0.802
3	se5	The population size and structure of a country reflect the current social and educational environment and market conditions	0.804
Component 2: Personal teaching ability (0.744)			
1	pta10	The degree of application of digital technology by teachers affects their teaching work and helps them obtain more information.	0.931
2	pta7	The planning of a teacher's future career affects their investment in the education industry.	0.893
3	pta8	Teachers have good eloquence, standard pronunciation, and clear speech, which is more conducive to the development of their teaching work.	0.888
Component 3: Social status (0.634)			
1	ss5	The relevant protection policies for teachers in legal regulations reflect the country's emphasis on the teaching profession and the social status of teachers.	0.845

NO.		Component and Indicator	Factor Loading
2	ss4	The accumulation of personal wealth of teachers reflects the current development status of their profession and also reflects their social status.	0.816
3	ss2	The satisfaction of family members with the teaching profession reflects the status of teachers in society.	0.809
Component 4: Career prospects (0.62)			
1	cp8	The success rate of job hopping as a teacher reflects their professional status.	0.871
2	cp7	The amount of research funding for teachers reflects their professional development.	0.855
3	cp5	The way teachers are promoted affects their career paths and reflects their professional development prospects.	0.79
Component 5: School management capability (0.613)			
1	smc3	The ranking of the school both domestically and internationally reflects the teaching level and leadership ability of the school.	0.889
2	smc4	The work experience and personal background of school leaders reflect their personal abilities and influence the development of the school.	0.797
3	smc5	The number of registrations and admissions of a school reflects its reputation and social recognition, as well as its leadership	0.759
Component 6: Work environment (0.575)			
1	we2	The working hours and workload of teachers affect their work content, reflecting the working environment of teachers	0.809
2	we6	The area of the school teaching venue reflects the teaching environment of the teachers. Adequate teaching venues are conducive to teachers carrying out teaching work.	0.816
3	we7	The classroom management system is an important indicator of the working environment for teachers, which affects their teaching activities.	0.845

NO.		Component and Indicator	Factor Loading
Component 7: National education policy (0.569)			
1	nep5	The development plan and direction of teachers reflect the degree of importance that educational policies on teachers	0.805
2	nep2	The education level of social members reflects the implementation of national education policies.	0.801
3	nep4	The level and growth rate of teacher salaries reflect the degree to which national policies attach importance to education and teachers.	0.785

8. Conclusion

In this research, there were three research objectives that are mentioned and the conclusion of them were as follows.

(1) Through content analysis, it was found that there were 7 components and 60 indicators for the teacher professional development for art universities under Shandong Province.Namely (1) National education policy,it had 8 indicators, (2) Personal teaching ability,it had 14 indicators, (3) School management capability,it had 8 indicators, (4) Social status,it had 6 indicators, (5) Social environment,it had 8 indicators, (6) Work environment,it had 8 indicators,and (7) Career prospects,it had 8 indicators..

(2) According to the results of Second-order CFA analysis, the teacher professional development model of teachers for art universities under Shandong Province was consistent with empirical data, the statistical value of =327.347, df=182,/df=1.799, GFI = 0.950, AGFI = 0.936, CFI = 0.980, TLI = 0.977, RMR = 0.035, and RMSEA = 0.037.

9. Discussion

1. Discussion of Research Objective 1

Through literature analysis and expert interviews, this research collects 7 components and 60 indicators that affect the professional development of teachers in art universities in Shandong Province There were 7 components and 60 indicators of teacher professional development for art universities under Shandong Province. Including: (1) National education policy; (2) Personal teaching ability; (3) School management ability; (4) Social status; (5) Social environment; (6) Work environment; (7) Career prospects.

The reason for revealing this main discovery was that these components and indicators conform to the characteristics and laws of professional development of teachers in art universities in Shandong Province, and can also provide important reference and basis for improving the professional development ability and level of teachers. For art universities in Shandong Province, promoting the professional development of teachers will effectively enhance their work ability and enthusiasm, improve their teaching level and personal abilities, and even enhance the artistic cultivation and aesthetic quality of all people.

Now this research is consistent with the relevant research of Zhang You (2022), Sun Caixia (2015), Huang Chunmei (2019) and others found that national education policies can have an impact on teacher professional development planning, individual teaching abilities determine the speed and breadth of a teacher's professional development, school management ability will affect the enthusiasm of teachers for professional development, social status is an important factor affecting the number of teachers employed and their professional development, social environment affects the attitude of teachers towards professional development, working environment of teachers has the most direct impact on their professional development and career prospects are the space and value that best reflect the professional development of teachers.

2. Discussion of Research Objective 2

Through Confirmatory factor analysis (CFA), the teacher professional development model for art universities in Shandong Province is consistent with empirical data.

The main reason for revealing this discovery was that establishing a teacher professional development model can enable managers to find suitable leadership and management models for teacher development under corresponding conditions. Teachers can also self adjust and dynamically manage in different environments, thus achieving the best state. The teacher professional development model should be based on the actual situation of school development, in line with the true abilities and levels of teachers, and in line with the short-term goals and long-term interests of teacher professional development.

Now this research is consistent with the relevant research of Zheng Yutong (2017), Qiu Xueqing&Li Zhengyi.(2013), Liu Zhizhong (2021) and others found that teachers' planning for future career development is complementary to their professional interests, family identification and support for teachers are important driving forces for teacher professional development, overall education level of a member of society is the most reflective of the rationality and effectiveness of educational policy formulation, and other related findings.

10. Recommendation

1. Recommendation for Policies Formulation

1) The government needs to increase financial support for art universities.

2) The government should strengthen policy support and institutional guarantees for art universities.

3) The government should attach importance to all stages of art education, especially basic art education.

2. Recommendation for Practical Application

1) University administrators should strengthen the institutional construction of teacher professional development.

2) University administrators should pay attention to the introduction and training of new teachers.

3) University administrators need to optimize the paths for teacher promotion.

4) University administrators should strengthen student management.

5) University administrators need to strengthen teacher training.

3. Recommendation for Further Research

In the process of constructing a professional model for teachers in art universities, there are still aspects that have not been deeply discussed in this research but have research significance:

1) The Path of Professional Development for Young Teachers in Art Universities

2) Evaluation methods for practical abilities of art university students

3) Evaluation scale and testing standards for the professional development model of teachers in art universities

4) Methods for enhancing the management ability of managers in art universities

Reference

Du Yan. (2021). **Research on the Impact of Teaching and Research Groups on Teacher Professional Development.** Master's Thesis, East China Normal University.

Fissler Christensen. (2005). **Teacher Career Cycle: Guidance on Teacher Professional Development.** China Light Industry Press.

Gao Zhanchang & Ren Guiting. (2009). **The Current Situation and Countermeasures of Scientific Research Ability of Young Teachers in Ordinary Universities.** Journal of Inner Mongolia Normal University (Education Science Edition), (01), 153-156.

Huang Chunmei. (2019). **Research on the Academic Career Development of Female University Teachers in China.** Doctoral thesis. Shaanxi Normal University.

Zhang You. (2022). **Research on the Development of Preschool Art Education Policies in China since the Reform and Opening up.** Chinese Journal of Education, (01),150.

Zheng Yutong. (2017). **A Study on the Professional Development Issues, Influencing Factors, and Countermeasures of First time Teachers in Universities: Taking Yunnan Normal University as an Example.** Master's thesis. Yunnan Normal University.

Sun Caixia. (2015). **The Construction of Teacher's Emotional Geography under Curriculum Reform.** Doctoral thesis. Southwest University.

Lliu Zhizhong. (2021). **Policy Changes for the Development of College Teachers in China: Themes, Characteristics, and Experiences: Vivo Analysis Based on Policy Texts from 1949 to 2020.** Jiangsu Higher Education, (12),56-63.

Qiu Xueqing & Li Zhengyi. (2013). **Research on the Professional Development Strategy of University Teachers from the Perspective of Knowledge Management.** Higher Engineering Education, (06), 81-85.

การศึกษาเชิงวิเคราะห์ทางสายกลางแห่งปฏิจจสมุปบาท
Analytical Study of the Middle Way of Paticcasamuppada

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บทคัดย่อ

บทความวิจัยนี้ เป็นการวิจัยเชิงคุณภาพโดยวิเคราะห์เนื้อหา แล้วเขียนบรรยายเชิงพรรณนา มีวัตถุประสงค์เพื่อวิเคราะห์ทางสายกลางแห่งปฏิจจสมุปบาท ผลการวิจัยพบว่า "ทางสายกลางแห่งปฏิจจสมุปบาท" นั้น ได้แก่ ความหลุดพ้นจากความยึดมั่นถือมั่นใน 3 ลักษณะ ดังนี้ 1) ความหลุดพ้นจากความยึดมั่นถือมั่นในทิฏฐิอันสุดโต่ง ได้แก่ การหลุดพ้นจากมิจฉาทิฏฐิ 2 ประการ คือ สัสสตทิฏฐิและอุจเฉททิฏฐิ 2) ความหลุดพ้นจากความยึดมั่นถือมั่นในสถานที่และเวลา ได้แก่ การหลุดพ้นจากความยึดมั่นถือมั่น (อุปาทาน) ในภพ (31 ภพภูมิ) ประการหนึ่ง และความยึดมั่นถือมั่นในสังขารที่ ปรุงแต่งอดีต อนาคต และปัจจุบัน ประการหนึ่ง 3) ความหลุดพ้นจากความยึดมั่นถือมั่นในขันธ์ 5 ได้แก่ การหลุดพ้นจากความยึดมั่นถือมั่นในรูป เวทนา สัญญา สังขาร และวิญญาณ ประการหนึ่ง กล่าวโดยสรุปได้ว่า ทางสายกลางแห่งปฏิจจสมุปบาท คือ องค์ความรู้ใหม่ที่ผู้เขียนได้สรุปขึ้นเพื่อให้เป็นประโยชน์ต่อวงการทางพุทธศาสนาหรือพุทธปรัชญา โดยสรุปแล้ว ทางทางสายกลางแห่งปฏิจจสมุปบาทก็คือ ทางแห่งการดับทุกข์โดยสิ้นเชิง เป็นทางแห่งความไม่ยึดมั่นถือมั่นในทิฏฐิอันสุดโต่ง หลุดพ้นจากความยึดมั่นถือมั่นในสถานที่และเวลา และหลุดพ้นจากความยึดมั่นถือมั่นในขันธ์ 5 ในที่สุด

คำสำคัญ: ปฏิจจสมุปบาท, ทางสายกลาง, การศึกษาเชิงวิเคราะห์

ABSTRACT

This research is a qualitative study that analyzes content and then presents a descriptive narrative. The objective is to analyze the middle way of Paticcasamuppada. The research findings indicate that the middle way of the path to enlightenment involves three

aspects of liberation from firm adherence : 1) Liberation from firm adherence to the ultimate view, including liberation from wrong views in two aspects: eternalism view and annihilationism view. 2) Liberation from firm adherence to place and time, such as liberation from attachment in one existence (31 realms) and attachment in the cycles of past, present, and future. 3) Liberation from firm adherence in the five aggregates, including liberation from attachment to form, feeling, perception, mental formations, and consciousness. In summary, the middle way of Paticcasamuppada is a new body of knowledge summarized by the author for the benefit of the Buddhist community or philosophy. In conclusion, the middle way of Paticcasamuppada is the way to extinguish suffering completely, representing the path of non-firm adherence to the ultimate view, liberation from attachment to place and time, and liberation from attachment in the five aggregates.

Keywords: Paticcasamuppada, the middle way, analytical study

1. บทนำ

เมื่อพระพุทธเจ้าตรัสรู้ สิ่งที่ทรงกระทำหลังจากนั้นก็คือ การมนสิการปฏิจจสมุปบาทตลอดปฐมยาม มัชฌิมยาม และปัจฉิมยาม ทรงถือว่า ปฏิจจสมุปบาท เป็นอริยญายธรรม คือ "สิ่งควรรู้อันประเสริฐ" และได้ตรัสแก่ภิกษุทั้งหลายที่พระเชตวันวิหาร กรุงสาวัตถีว่า

ดูก่อนภิกษุทั้งหลาย ก็อริยญายธรรมเป็นสิ่งที่อริยสาวกเห็นแล้วด้วยดี แทงตลอดแล้ว ด้วยดี ด้วยปัญญา เป็นอย่างไรเล่า

ดูก่อนภิกษุทั้งหลาย อริยสาวกในกรณีนี้ ย่อมกระทำไว้ในใจโดยแยบคายเป็นอย่างดี ซึ่งปฏิจจสมุปบาทนั่นเทียว ดังนี้ว่า ด้วยอาการอย่างนี้ เมื่อสิ่งนี้มี สิ่งนี้จึงมี เพราะความเกิดขึ้น ของสิ่งนี้ สิ่งนี้จึงเกิดขึ้น เมื่อสิ่งนี้ไม่มี สิ่งนี้ย่อมไม่มี เพราะความดับของสิ่งนี้ สิ่งนี้จึงดับ ข้อนี้ ได้แก่สิ่งเหล่านี้

เพราะมีอวิชชาเป็นปัจจัยจึงมีสังขาร

เพราะมีสังขารเป็นปัจจัยจึงมีวิญญาณ

เพราะมีวิญญาณเป็นปัจจัยจึงมีนามรูป

เพราะมีนามรูปเป็นปัจจัยจึงมีสฬายตนะ

เพราะมีสฬายตนะเป็นปัจจัยจึงมีผัสสะ

เพราะมีผัสสะเป็นปัจจัยจึงมีเวทนา

เพราะมีเวทนาเป็นปัจจัยจึงมีตัณหา

เพราะมีปัญหาเป็นปัจจัยจึงมีอุปทาน

เพราะมีอุปทานเป็นปัจจัยจึงมีภพ

เพราะมีภพเป็นปัจจัยจึงมีชาติ

เพราะมีชาติเป็นปัจจัย ชรา มรณะ โสกะ ปริเทวะ ทุกขะ โทมนัส อุปายาสทั้งหลายจึง
เกิดขึ้นครบถ้วน ความเกิดขึ้นพร้อมแห่งกองทุกข์ทั้งปวงนี้ ย่อมมีด้วยอาการอย่างนี้

การพิจารณาปฏิจจสมุปบาทแบบนี้เรียกว่า พิจารณาโดยอนุโลม คือ ตามลำดับ ต่อจากนั้น
พระพุทธเจ้าก็ทรงพิจารณาปฏิจิริสมุปบาท โดยปฏิโลม คือ ย้อนลำดับ ดังนี้

เพราะมีการดับ (โดยไม่เหลือ) แห่งอวิชชา จึงมีความดับแห่งสังขาร

เพราะมีการดับแห่งสังขาร จึงมีความดับแห่งวิญญาณ

เพราะมีการดับแห่งวิญญาณ จึงมีการดับแห่งนามรูป

เพราะมีการดับแห่งนามรูป จึงมีการดับแห่งสฬายตนะ

เพราะมีการดับแห่งสฬายตนะ จึงมีการดับแห่งผัสสะ

เพราะมีการดับแห่งผัสสะ จึงมีการดับแห่งเวทนา

เพราะมีการดับแห่งเวทนา จึงมีการดับแห่งตัณหา

เพราะมีการดับแห่งตัณหา จึงมีการดับแห่งอุปาทาน

เพราะมีการดับแห่งอุปทาน จึงมีการดับแห่งชาติ

เพราะเหตุการณ์ดับแห่งชาติ นั่นแล ชรา มรณะ โสกะ ปริเทวะ ทุกขะ โทมนัส และอุปายาสทั้งหลาย
จึงดับ การดับทุกข์ทั้งปวง ย่อมมีได้ด้วยอาการอย่างนี้แล (จำนงค์ ทองประเสริฐ, 2556)

นอกจากนี้ ปฏิจจสมุปบาทยังได้ชื่อว่าเป็นทางสายกลางที่มีความละเอียด ลึกซึ้ง หยั่งยาก พุทธทาส
ภิกขุ (2540) เสนอแนะเกี่ยวกับทางสายกลางไว้ว่า *"ในการศึกษาเรื่องมัชฌิมาปฏิปทานั้น ควรจะศึกษา
มัชฌิมาปฏิปทาขั้นพื้นฐานทั่วไป คือ อัฏฐังคิกมรรค เป็นลำดับแรก แล้วศึกษามัชฌิมาปฏิปทาในความหมาย
ชั้นกว้าง คือ โพธิปักขิยธรรมทั้งหมด เป็นลำดับที่สอง แล้วจึงศึกษามัชฌิมาปฏิปทาในความหมายชั้นลึก คือ
ปฏิจจสมุปบาท เป็นลำดับสุดท้าย มิฉะนั้นจะลำบาก"*

ปฏิจจสมุปบาทเป็นวิสัยของพระพุทธเจ้าเท่านั้นที่จะบรรลุได้อย่างแจ่มแจ้ง ซึ่งถือได้ว่าเป็น
คุณลักษณะพิเศษของปฏิจจสมุปบาท แม้ว่าบุคคลในระดับสาวกจะสามารถมีญาณหยั่งรู้เข้าถึงธรรมข้อนี้ แต่ก็
เข้าถึงในระดับหนึ่ง ไม่ลึกเท่าระดับของพระพุทธเจ้า

ในคืนแรกหลังจากที่พระองค์ตรัสรู้อนุตรสัมมาสัมโพธิญาณแล้ว พระองค์ได้ทรงพิจารณาปฏิจจสมุป
บาททั้งโดยอนุโลมและปฏิโลมตลอดคืน ส่วนในด้านคำสอนนั้น พระพุทธเจ้าทรงแสดงถึงสภาวะที่ต่างฝ่ายต่าง
เป็นปัจจัยให้กันและกัน โดยการอาศัยกันซึ่งกันของอวิชชา สังขาร วิญญาณ นามรูป สฬายตนะ ผัสสะ เวทนา
ตัณหา อุปาทาน ภพ ชาติ ชรามรณะ ธรรมทั้ง 12 ประการนี้เกิดขึ้น และเป็นต้นเหตุของการเกิดความทุกข์
และการสืบต่อของภพชาติ และพระองค์ยังทรงแสดงในรูปของกฎธรรมชาติ เป็นกฎเกณฑ์ที่ไม่มีการ
เปลี่ยนแปลงตามกาลเวลา แม้พระพุทธเจ้าทุกพระองค์จะทรงอุบัติขึ้นในเวลาที่ต่างกัน แต่กฎธรรมชาติ
ของปฏิจจสมุปบาทก็ยังคงอยู่เหมือนเดิมไม่มีพระเจ้าหรือศาสดาองค์ใด บัญญัติหรือสร้างขึ้นมา ไม่เกี่ยวกับการ
อุบัติของพระศาสดาทั้งหลาย การตรัสรู้ของพระพุทธเจ้า พระองค์ได้ทรงค้นพบ และได้แสดงความเป็นไป
ของปฏิจจสมุปบาทว่าเป็นสภาวธรรมที่เป็นที่เกิดขึ้นแห่งทุกข์ และเพื่อใช้ในการดับทุกข์ของสรรพสัตว์ทั้งหลาย
ดังมีพระพุทธพจน์แสดงไว้ว่า ตถาคตทั้งหลาย จะอุบัติหรือไม่ก็ตาม ธาตุ (หลัก) นั้น ก็ยังคงมีอยู่ เป็นธรรมฐิติ
เป็นธรรมนิยาม คือ หลักอิทัปปัจจยตา (พระสาทิพย์ อนาลโย และคณะ, 2562)

เรื่องปฏิจจสมุปบาทนี้เป็นเรื่องที่ลึกซึ้งและยากที่สุด ครั้งหนึ่งพระอานนท์ได้เคยกราบทูลพระพุทธเจ้า ว่า ปฏิจจสมุปบาทได้ปรากฏแจ่มแจ้งแก่ท่านแล้ว พระพุทธเจ้าได้ตรัสว่า "ดูก่อนอานนท์ อย่ากล่าวอย่างนั้น ปฏิจจสมุปบาทนี้เป็นสิ่งที่ละเอียด ลึกซึ้ง หยั่งยาก ดูก่อนอานนท์ เพราะไม่รู้ ไม่รู้ตามลำดับ เพราะไม่แทง ตลอดซึ่งธรรมคือปฏิจจสมุปบาทนี้ (จิตของ) หมู่สัตว์นี้ จึงเป็นเหมือนกลุ่มด้ายยุ่ง ๆ ยุ่งเหยิงเหมือนความยุ่ง ของกลุ่มด้ายที่หนาแน่นไปด้วยปม พันกันยุ่งเหมือนเชิงหญ้ามุญชะ และหญ้าปัพพชะ อย่างนี้ ย่อมไม่ล่วงพ้น สังสาร ทุคติ วินิบาตไปได้"

แม้ว่าปฏิจจสมุปบาทจะเป็นสิ่งที่ละเอียด ลึกซึ้ง หยั่งยาก ก็มิใช่ว่าไม่สามารถศึกษาเรียนรู้ได้ ขึ้นอยู่กับ การปฏิบัติตนตามหลักธรรมจนเกิดปัญญาญาณ ฉะนั้น ปฏิจจสมุปบาทจึงเป็นผลของการปฏิบัติตนตาม หลักธรรมจนหลุดพ้นจากความทุกข์ แม้จะมีการตีความที่แตกต่างกันไป แต่ปฏิจจสมุปบาทก็เป็นการกล่าวถึง เหตุปัจจัยแห่งอิทัปปัจจยตา คือ "เมื่อมีสิ่งนี้ สิ่งนี้จึงมี เพราะสิ่งนี้เกิดขึ้น สิ่งนี้จึงเกิดขึ้น และเมื่อสิ่งนี้ไม่มี สิ่งนี้ จึงไม่มี เพราะสิ่งนี้ดับ สิ่งนี้จึงดับ" เมื่อขยายความออกไปปฏิจจสมุปบาทคือผลแห่งการปฏิบัติตามทางสาย กลางที่ทำลายความยึดมั่นถือมั่นในตัวตน เป็นความยึดมั่นถือมั่นที่ทำให้เกิดมิจฉาทิฏฐิสุดโต่ง ได้แก่ สัสสตทิฏฐิ (ความเห็นว่าอัตตานี้เที่ยงแท้ ตายแล้วเกิด) และ อุจเฉททิฏฐิ (ความเห็นว่า ตายแล้วสูญ เชื่อว่าขาดสูญ ไม่มีผล แห่งความดีความชั่ว)

อย่างไรก็ตาม การศึกษาทางพุทธปรัชญาที่ผ่านมายังไม่มีนักวิชาการท่านใดอภิปรายอย่างชัดเจนว่า ทางสายกลางแห่งปฏิจจสมุปบาทนั้นคืออะไร มีแต่ส่วนที่อธิบายว่ากระบวนการแห่งปฏิจจสมุปบาทเป็น อย่างไรทั้งสายเกิดและสายดับ ดังนั้น ผู้วิจัยจึงสนใจศึกษาเชิงวิเคราะห์ทางสายกลางแห่งปฏิจจสมุปบาท เพื่อ แก้ข้อสงสัยนี้ และนำมาอธิบายเพื่อให้เกิดองค์ความรู้ใหม่ในทางพุทธปรัชญา อันเกิดจากการวิเคราะห์วิจัยหลัก พุทธธรรมที่มีมาแล้วกว่า 2,500 ปี เพื่อเป็นพุทธบูชา ธรรมบูชา และสังฆะบูชา สืบไป

2. วัตถุประสงค์ของการวิจัย

เพื่อวิเคราะห์ทางสายกลางแห่งปฏิจจสมุปบาท

3. วิธีดำเนินการวิจัย

การวิจัยครั้งนี้เป็นการวิจัยเชิงคุณภาพโดยวิเคราะห์เนื้อหา จากนั้นจึงเขียนบรรยายเชิงพรรณนาเพื่อ สรุปและอภิปรายผลการวิจัย โดยสรุปวิธีดำเนินการวิจัยเป็นข้อ ๆ ตามลำดับดังนี้

1. ขั้นรวบรวมข้อมูล ได้แก่ การเก็บข้อมูลที่เกี่ยวข้องจากเอกสาร บทความวิจัย

2. ขั้นเรียบเรียงข้อมูล ได้แก่ การนำข้อมูลที่ได้จากเอกสาร บทความวิจัย โดยแบ่งออกเป็นด้าน ๆ เพื่อให้ง่ายต่อการนำไปวิเคราะห์

3. ขั้นวิเคราะห์ข้อมูล ได้แก่ การนำข้อมูลที่ได้เรียบเรียงมาแล้ว มาวิเคราะห์เพื่อหาความสัมพันธ์ ทางด้านต่าง ๆ เพื่อตอบโจทย์งานวิจัย

4. ขั้นสรุปผล อภิปรายผล ได้แก่ การสรุปผลการวิเคราะห์ และอภิปรายผลในส่วนต่าง ๆ โดย เชื่อมโยงกับเอกสารและบทความวิจัยที่เกี่ยวข้อง

4. สรุปผลการวิจัย

จากผลวิเคราะห์พบว่า "ทางสายกลางแห่งปฏิจจสมุปบาท" นั้น ได้แก่ ความหลุดพ้นจากความยึดมั่น
ถือมั่นใน 3 ลักษณะ ดังนี้

1. ความหลุดพ้นจากความยึดมั่นถือมั่นในทิฏฐิอันสุดโต่ง ได้แก่ การหลุดพ้นจากมิจฉาทิฏฐิ 2
ประการ คือ สัสสตทิฏฐิและอุจเฉททิฏฐิ

2. ความหลุดพ้นจากความยึดมั่นถือมั่นในสถานที่และเวลา (Space & time) ได้แก่ การหลุดพ้น
จากความยึดมั่นถือมั่น (อุปาทาน) ในภพ (31 ภพภูมิ) ประการหนึ่ง และความยึดมั่นถือมั่นในสังขารที่ ปรุงแต่ง
อดีต อนาคต และปัจจุบัน ประการหนึ่ง

3. ความหลุดพ้นจากความยึดมั่นถือมั่นในขันธ์ 5 ได้แก่ การหลุดพ้นจากความยึดมั่นถือมั่นในรูป
เวทนา สัญญา สังขาร และวิญญาณ ประการหนึ่ง

กล่าวโดยสรุปได้ว่า ทางสายกลางแห่งปฏิจจสมุปบาท คือ องค์ความรู้ใหม่ที่ผู้เขียนได้สรุปขึ้นเพื่อให้
เป็นประโยชน์ต่อวงการทางพุทธศาสนาหรือพุทธปรัชญา โดยสรุปแล้ว ทางทางสายกลางแห่งปฏิจจสมุปบาทก็
คือ ทางแห่งการดับทุกข์โดยสิ้นเชิง เป็นทางแห่งความไม่ยึดมั่นถือมั่นในทิฏฐิอันสุดโต่ง หลุดพ้นจากความยึด
มั่นถือมั่นในสถานที่และเวลา และหลุดพ้นจากความยึดมั่นถือมั่นในขันธ์ 5 ในที่สุด

5. อภิปรายผล

จากผลการวิจัยสามารถอภิปรายได้ว่า

1. ความหลุดพ้นจากความยึดมั่นถือมั่นในทิฏฐิอันสุดโต่ง ได้แก่ สัสสตทิฏฐิและอุจเฉททิฏฐินั้นมี
ความเชื่อมโยงกับตัณหา 3 ได้แก่ กามตัณหา ภวตัณหา และวิภวตัณหา ซึ่งเป็นทางแห่งการเกิดทุกข์ใน
สังสารวัฏ ซึ่งสอดคล้องกับคำอธิบายในพระสุตตันตปิฎก ทีฆนิกาย สีลวรรค (9/42/24) ที่ว่า โยคีผู้เจริญรูป
สมาบัติ ซึ่งภวตัณหานี้ส่งผลให้ไปเกิดเป็นพรหมในรูปภูมิ 16 ชั้น ตัวอย่างนี้แสดงให้เห็นถึง สัสสตทิฏฐิ คือ
ความเชื่อที่ว่ามนุษย์เกิดมาแล้วต้องตาย เมื่อตายแล้วก็จะกลับมาเกิดอีก วนเวียนเช่นนี้ซ้ำแล้วซ้ำเล่า ด้วย
ทรรศนะดังกล่าวนี้ เป็นเหตุให้บุคคลเกิด ภวตัณหา หมายถึง ความปรารถนาพ้นทุกข์ที่ประกอบด้วยสัสสตทิฏฐิ
นอกจากนี้ยังสอดคล้องกับ คำอธิบายในพระสุตตันตปิฎก ทีฆนิกาย สีลวรรค (ที.สี. 9/68-92/39-47) ที่ว่า
ความปรารถนาพ้นทุกข์ที่ประกอบด้วยอุจเฉททิฏฐิ (คือมีความเห็นผิดว่าขาดสูญจากรูปธรรมเป็นสุข) ของโยคีผู้
ปฏิบัติเห็นรูปธรรมเป็นตัวก่อสร้างทุกข์จึงเจริญอรูปสมาบัติ (สมถะภาวนาประเภทรูปวิราคะภาวนา เบื่อหน่าย
ในรูปธรรม) ซึ่งวิภวตัณหานี้ส่งผลให้ไปเกิดเป็น อรูปพรหมในอรูปภูมิ 4 ชั้น ส่วนบุคคลที่ยึดในอุจเฉททิฏฐิ ติด
อยู่ในกามตัณหา กามตัณหาดังกล่าวนี้จะส่งผลให้ไปเกิดในกามภูมิ 11 ชั้น ภวตัณหาและวิภวตัณหานี้ เป็น
ภาวะของคนที่มีความเห็นผิดอย่างแรงกล้าที่หมกมุ่นอยู่กับความเป็นตัวตนจึงคิดออกบวชเป็นโยคีปฏิบัติอย่าง
จริงจัง ซึ่งสอดคล้องกับคำอธิบายในพรหมชาลสูตร (ที.สี. 9/68/39) ซึ่งพระพุทธองค์ตรัสว่า อนาคาริย ปพพชิ
โต สมาโน เป็นต้น ส่วนกามตัณหาเป็นภาวะของคนทั่วไปที่มีความเห็นผิดชนิดสัสสตทิฏฐิอย่างอ่อน ๆ จึงไม่คิด
ออกบวช ส่วนคนทั่วไปที่ติดในกามตัณหาและมีความเห็นผิดชนิดอุจเฉททิฏฐินั้นก็ไม่ได้ปรารถนาออกบวชอยู่
แล้ว เพราะเชื่อว่าโลกหน้าไม่มีอยู่จริง จึงมุ่งเสพกามสุขให้เต็มที่ก่อนที่จะจากโลกนี้ไป นอกจากนี้ยังสอดคล้อง
กับงานวิจัยของ พิชัย สุขวุ่น (2556) กล่าวว่า การเรียนรู้ปฏิจจสมุปบาทก็จะหมดปัญหาว่าตายแล้วเกิดใหม่

หรือตายแล้วขาดสูญ ปฏิจจสมุปบาทอธิบายว่า คำว่า ตาย คือ ดับความเป็นตัวตนได้ คำว่า เกิด คือ เมื่อ
ประสาทสัมผัสกระทบแล้วยึดถือเป็นตัวตน การเกิดใหม่จะมีได้วันละหลายหนและเป็นวิทยาศาสตร์ การเกิด
และการตายเช่นนี้ มีความหมายมากกว่าตายทางร่างกาย ส่วนจะเกิดใหม่หรือขาดสูญนั้น ควรเอาเวลาทั้งหมด
ของชีวิตไปแก้ไขความยึดถือแห่งความเป็นตัวตน

      2. ความหลุดพ้นจากความยึดมั่นถือมั่นในสถานที่และเวลา (Space & time) อภิปรายได้ว่าความ
ยึดมั่นถือมั่นในภพนี้เชื่อมโยงกับวิญญาณที่ทำหน้าที่ "ปฏิสนธิ" (การนำมาเกิด) เพื่อทำหน้าที่สืบต่อจากปัจจัย
คือ อวิชชาและสังขารที่ปัจจัยเบื้องต้นของปัจจัย ดังนั้น วิญญาณที่จะอธิบายในบริบทนี้จึงไม่ใช่บริบทของ
มากกว่าวิญญาณที่เป็นความรู้แจ้งอารมณ์ตามนัยของขันธ์ 5

      การยึดมั่นถือมั่นในสถานที่นั้น ก็คือ การยึดมั่นถือมั่นในภพภูมิ ซึ่งสอดคล้องกับพระสุตตันตปิฎก อัง
คุตตรนิกาย ติกนิบาต (20/81/305-308) ที่แบ่งภพภูมิออกเป็น 31 ภพภูมิ ได้แก่ กามภูมิ 11 ภูมิ รูปภูมิ 16
ภูมิ และอรูปภูมิ 4 ภูมิ และสอดคล้องกับแนวคิดของ ธนสิทธิ์ ฉัตรสุวรรณ (2560) ที่วิเคราะห์ว่า แนวคิดเรื่อง
ภพในพระพุทธศาสนา ได้รับการตีความใน 2 ลักษณะ คือ 1) ภพเชิงโครงสร้างทางจักรวาลวิทยา (the
cosmological becoming) ภพที่มีลักษณะเชิงโครงสร้างทางจักรวาลวิทยาจัดเป็นภพที่มีอยู่จริงเชิง
อภิปรัชญาที่เชื่อมโยงอยู่กับหลักคำสอนเรื่องกรรมซึ่งสนับสนุนความเชื่อเรื่องการทำความดีนำไปสู่ภพที่เป็น
สุคติและการทำความชั่วนำไปสู่การเกิดในภพที่เป็นทุคติ แนวคิดเรื่องภพตามเชิงโครงสร้างทางจักรวาลวิทยา
ในพระพุทธศาสนาจึงแสดงให้เห็นความมีอยู่จริงของภพเชิงอภิปรัชญาในฐานะเป็นฐานรองรับคำสอนทางจริย
ศาสตร์ แต่แนวคิดเรื่องภพในลักษณะดังกล่าวก็ถูกมองว่ามีปัญหาตรงที่เป็นความมีอยู่ ที่อยู่เหนือการรับรู้ หรือ
การตรวจสอบด้วยอายตนะ 2) ภพเชิงจิตวิทยา (the psychological becoming) ลักษณะของภพเชิง
จิตวิทยาเน้นภาวะทางจิตอันเป็นนามธรรมที่เกี่ยวข้องกับความรู้สึกที่ยึดมั่นในความมีตัวตนที่เกิดจาก
ประสบการณ์ทางอายตนะและการมุ่งเน้นที่จะใช้ประโยชน์ จากแนวคิดเรื่องภพในการปลูกฝังศีลธรรมเพื่อ
ความสงบสุขของสังคม ภพเชิงจิตวิทยาด้านหนึ่งเป็นภพที่สามารถตรวจสอบได้ด้วยอายตนะ แต่อีกด้านหนึ่ง
มุ่งเน้นประโยชน์จากคำสอนมากกว่าการตรวจสอบความมีอยู่จริง หากจิตยึดมั่นถือมั่นในภพ ความเป็นชาติ
ชรา มรณะ ก็จะตามมาติด ๆ เพราะความยึดมั่นถือมั่น ทำให้วิญญาณปฏิสนธิคือเกิดในครรภ์บ้าง ในไข่บ้าง ใน
เถ้าไคลบ้าง หรือเกิดผุดขึ้นบ้าง เป็นเหตุให้เกิดวังวนแห่งสังสารวัฏ ส่วนทางจิตก็เป็นอาการของการเกิดขึ้น ชรา
และมรณะเช่นกัน แต่ถ้ายึดมั่นในจิต เช่น จิตโกรธ จิตโลภ จิตหลง การเกิดขึ้นซึ่งภพแห่งจิตก็จะเกิดขึ้นเช่นกัน
เช่น คนที่ยึดในความโกรธ เมื่อโกรธขึ้นแล้วก็จะต่อยอดขยายความโกรธไปเรื่อย ๆ เกิดเป็นนรกในใจ ดังที่
โบราณกล่าวไว้ว่า "สวรรค์อยู่ในอก นรกอยู่ในใจ" นั่นเอง และสอดคล้องกับแนวคิดของ พระวิสัชนา วรปญฺโญ
(พงษ์อาดิต) (2559) กล่าวว่า สิ่งที่ท่านพุทธทาสภิกขุนำเสนอออกมานั้นเป็นประโยชน์อย่างมากในแง่ของการ
ปฏิบัติ ซึ่งถ้าเราเข้าใจหลักข้อนี้ ก็จะเห็นว่าไม่จำเป็นต้องรอให้ข้ามภพข้ามชาติเพื่อจะเกิดรอบการเกิดขึ้นของ
ทุกข์ที่มีภพและชาติเป็นปัจจัย และก็ไม่ต้องรอให้เกิดการดับลงของชีวิตเมื่อมีชรา มรณะ ทุกข์ โทมนัส... เป็น
ปัจจัย แต่จะเห็นตามสภาวธรรมตามความเป็นจริงว่ารอบปฏิจจสมุปบาทนั้นจะเกิดขึ้นทุกครั้งที่มีการกระทบ
กันทางอายตนะภายนอกและภายใน เพราะจะเกิดความรู้สึกว่าเป็นตัวกู-ของกู และเกิดความรู้สึกยึดมั่นถือมั่น
จนไม่สามารถจะละวาง และหลุดออกจากวงจรแห่งกระแสการเกิดทุกข์ได้ และมัวแต่ไปคิดว่า "เรา" ทำบุญ

ทำบาปในชาตินี้ พอตายไปแล้ว "เรา" ก็ต้องไปเสวยผลกรรมในชาติต่อๆ ไป ซึ่งถ้าเป็นอย่างนี้ เมื่อไรที่จะ
เข้าถึงความหลุดพ้นได้ เพราะมัวแต่รอชาติหน้า ชาติโน้นไปเรื่อยๆ

ส่วนเรื่องความยึดติดในเวลานั้น เป็นการที่จิตไปยึดในอดีตบ้าง ยึดในอนาคตบ้าง ยึดในปัจจุบันบ้าง
เพราะความไม่เข้าใจในสังขารจิต ขาดปัญญาแยกแยะความจริงโดยสมมติกับความจริงปรมัตถะในลักษณะที่
เป็นสภาวะธรรม จึงหลงยึดติดในสมมติในส่วนอดีตบ้าง อนาคตบ้าง ปัจจุบันบ้าง เช่น ในปัจจุบันเวลา 09.00
น. ก็มีความเชื่อตามนั้น ทั้ง ๆ ที่จริงแล้ว เวลาปัจจุบัน 09.00 น. ไม่มีอยู่จริง มีแต่ขณะจิตที่เคลื่อนไป ปัจจุบัน
แบบสมมติ กับ ความเป็น "ปัจจุบันธรรม" นั้น ไม่เหมือนกัน ปัจจุบันธรรมมีลักษณะเป็นสันตติ คือ เกิด-ดับ
ตามการรับรู้ของวิญญาณ เพราะการรับรู้ของวิญญาณก็มีการ   เกิด-ดับแบบถี่ ๆ เช่นกัน การเกิดดับใน
ลักษณะที่ต่อเนื่องนี้เรียกว่า "สันตติ" ดังนั้น อดีต ปัจจุบัน และอนาคต ในลักษณะแบบสมมตินั้นต่างเป็นเพียง
การปรุงแต่งของจิตสังขารเท่านั้น การหลุดพ้นจากความยึดมั่นถือมั่นในภพและการปรุงแต่งของสังขาร จึงเป็น
ทางสายกลางแห่งปฏิจจสมุปบาทที่ช่วยให้จิตไม่ติดอยู่ทั้งในส่วนของอดีต ปัจจุบัน และอนาคต ไม่ว่าจะเกิด
ความพอใจหรือไม่พอใจใด ๆ ก็ตาม

3. ความหลุดพ้นจากความยึดมั่นถือมั่นในขันธ์ 5 ได้แก่ รูปขันธ์ เวทนาขันธ์ สัญญาขันธ์ สังขารขันธ์
และวิญญาณขันธ์ การหลุดพ้นจากความยึดมั่นถือมั่น 5 โดยมีปัญญาเห็นว่า กายและใจนี้ไม่ใช่เรา ไม่ใช่ตัวตน
ของเรา ก็จะเกิดการสลัดคืนขันธ์ทั้ง 5 สู่ธรรมชาติ เพราะเมื่อขันธ์ 5 นี้ไม่ใช่เรา ไม่ใช่ตัวตนของเรา แล้วขันธ์ 5
นี้เป็นของใคร หากไม่ใช่เป็นของสาธารณะ เป็นของธรรมชาติ เป็นสิ่งที่เกิดดับ และถูกนำมาปรุงแต่งประกอบ
ขึ้นซ้ำแล้วซ้ำเล่าในระบบสังสารวัฏนี้ ดังนั้น การสลัดคืนขันธ์ 5 สู่ธรรมชาติจึงเป็นการหลุดพ้นจากปฏิจจสมุป
บาทสายเกิดไปตลอดกาล หรือแม้จะดำรงขันธ์นี้อยู่ในขณะที่เข้าใจเรื่องนี้แล้ว จิตก็จะไม่ยึดติด มีเพียงกิริยา
กาย กิริยาจิต ที่ดำรงชีวิตไปตามเหตุตามปัจจัย บนทางสายกลางแห่งปฏิจจสมุปบาทนี้ ซึ่งสอดคล้องกับ
แนวคิดของ บรรจบ บรรณรุจ (2561) สรุปว่า ปฏิจจสมุปบาท คือ กระบวนธรรมที่นำไปสู่การตรัสรู้ซึ่ง
พระพุทธเจ้าทรงค้นพบด้วยตัวพระองค์เองแล้วนำออกสอนชาวโลก โดยทรงปรับให้เป็นรูปแบบของอริยสัจ 4
เพื่อความเข้าใจง่าย ซึ่งจะเห็นว่าพระองค์ทรงแบ่งอริยสัจ 4 ออกเป็น 2 ฝ่าย คือ ฝ่ายเกิดทุกข์ที่ต้องกำหนดรู้
หรือต้องรู้ให้ตลอดกับฝ่ายดับทุกข์ที่ต้องทำให้แจ้งประจักษ์ ทำให้ผู้ฟังเห็นภาพว่า ทุกข์มาจากเหตุ และทุกข์นั้น
ดับได้ด้วยวิธีการดับที่ต้องเริ่มต้นด้วยสติและปัญญา พระพุทธเจ้าทรงสอนหลักการนี้หลักการเดียวตลอดพระ
ชนม์ชีพ แต่ทรงใช้วิธีการสอนหลากหลาย และสอดคล้องกับแนวคิดของ พระมหาธีระยุทธ เขมธมฺโม (ปราชญ์
นิวัฒน์) กล่าวว่า ปฏิจจสมุปบาทที่พระพุทธเจ้าตรัสไว้มีหลายแนวหลายแบบแต่ที่นิยมนำมาศึกษากัน
คือปฏิจจสมุปบาทที่มีปัจจัยหรือองค์ประกอบ 12 อย่าง คือ อวิชชา สังขาร วิญญาณ นามรูป สฬายตนะ
ผัสสะ เวทนา ตัณหา อุปาทาน ภวะ ชาติ ชรา มรณะ ซึ่งพระพุทธองค์ทรงให้คำจำกัดความขององค์ประกอบ
12 อย่างเหล่านี้ไว้ และสอดคล้องกับแนวคิดของ พระมหาปรีชา รตนโชโต และพระครูพิศาลสารบัณฑิต
(2565) กล่าวว่า ปฏิจจสมุปบาท หมายถึง สภาวธรรมที่อาศัยปัจจัยเกิดขึ้นหรือการเกิดขึ้นพร้อมแห่งธรรม
ทั้งหลายโดยอาศัยกัน การที่สิ่งทั้งหลายอาศัยกันจึงเกิดมีขึ้นเป็นกระบวนการของธรรมชาติที่เกิดขึ้นมีอยู่อย่าง
นั้น คือ เมื่อสิ่งนี้มีสิ่งนี้จึงมี เพราะสิ่งนี้เกิดขึ้นสิ่งนี้จึงเกิดขึ้น เพราะสิ่งนี้ดับสิ่งนี้จึงดับ ปฏิจจสมุปบาทจึงเป็น
หลักธรรมที่มีความสำคัญเนื่องจากเป็นหลักธรรมที่แสดงเกี่ยวกับกฎธรรมชาติหรือหลักความจริงที่มีอยู่ตาม
ธรรมชาติที่ไม่มีใครสร้างหรือดลบันดาลให้เกิดมีขึ้น แต่เป็นสิ่งที่มีอยู่และเกิดขึ้นจริงตามธรรมชาติ และ

สอดคล้องกับแนวคิดของ พระสาทิพย์ อนาลโย และคณะ (2562) สรุปว่า หลักปฏิจจสมุปบาทนั้น เป็น
กระบวนการแห่งเหตุปัจจัยในวงจรของชีวิตมนุษย์ โดยเริ่มจากตัวอวิชชา ตลอดจนชรา มรณะ เป็นต้น อวิชชา
คือ ความไม่รู้ในขันธ์ 5 พระไตรลักษณ์ มีอนิจจัง ทุกขัง และอนัตตา มีการเวียนว่ายตายเกิดไม่จบสิ้น ที่เป็นกฎ
สำคัญแห่งธรรมชาติอันเป็นสายเกิด ส่วนการบรรลุธรรมนั้น มีความสัมพันธ์กันกับหลักปฏิจจสมุปบาท เพราะผู้
ที่จะบรรลุธรรม ต้องเป็นผู้รู้แจ้งในกฎธรรมชาติ คือ เป็นผู้ละอาสวกิเลสและสังโยชน์ทั้งหลาย โดยไม่เกี่ยวข้อง
กับเหตุปัจจัยแห่งวงจรชีวิตที่เป็นสายดับ โดยเฉพาะพัฒนาตนถูกต้องตามหลักไตรสิกขา จนได้บรรลุปัญญา
สูงสุด คือ พระนิพพาน และสอดคล้องกับแนวคิดของ เสฐียร ทั้งทองมะดัน (2562) กล่าวว่า หลักคำสอนเรื่อง
ปฏิจจสมุปบาทหรืออิทัปปัจจยตาในพระพุทธศาสนา เป็นหลักธรรมที่มีความสำคัญ และมีเนื้อหาสาระ
ครอบคลุมหลักธรรมทุกหมวดทุกข้อ ปฏิจจสมุปบาทกับอิทัปปัจจยตานั้น หากจะมองในแง่มุมที่ต่างกันก็มองได้
หากจะมองในแง่มุมที่เหมือนกันก็มองได้ จึงดูเหมือนจะมีความไม่แตกต่างในความแตกต่างกัน ในหัวข้อต่อไป
จะได้กล่าวถึงการตีความเรื่องอิทัปปัจจยตาของท่านพุทธทาสภิกขุ ซึ่งผู้เขียนจะใช้คำว่าอิทัปปัจจยตา ซึ่งใน
ทัศนะของพุทธทาสภิกขุแล้ว ถือว่า อิทัปปัจจยตามีความหมายกว้างทั่วไปจะใช้กับรูปธรรมอย่างใดอย่างหนึ่ง
ในกรณีใดกรณีหนึ่งก็ยังได้ เป็นกฎวิทยาศาสตร์ทั่วไปก็ได้ ส่วนปฏิจจสมุปบาทนั้นมุ่งหมายใช้เฉพาะเรื่องทุกข์
และดับทุกข์โดยตรงใน พระพุทธศาสนาเท่านั้น

6. ข้อสรุปและข้อเสนอแนะ

1. ข้อเสนอแนะในการนำผลการวิจัยไปใช้ประโยชน์

งานวิจัยเรื่อง "การศึกษาเชิงวิเคราะห์ทางสายกลางแห่งปฏิจจสมุปบาท" นี้ เป็นประโยชน์ต่อการ
สร้างความเข้าใจให้กับสังคมไทยในปัจจุบัน ที่มุ่งเน้นการพัฒนาคุณภาพชีวิตในปัจจุบัน หากมีการนำไปผลิต
ตำรา หนังสือ หลักสูตรอบรม เพื่อสื่อสาร เผยแพร่ ขยายผล ก็จะเกิดประโยชน์อย่างมากในการปรับทัศคติให้
ตรงต่อธรรม มีสัมมาทิฏฐิ และคลายออกจากทุกข์ในใจได้ ดังนั้น ผู้วิจัยจึงเสนอนโยบายให้มีการสร้างเอกสาร
ตำราและจัดตั้งหลักสูตรเพื่อการอบรมแก่ประชาชนผู้สนใจในพุทธธรรม โดยมีการสร้างเครื่องมือและ
กระบวนการที่เหมาะสมกับคนในยุคปัจจุบัน ในรูปแบบการเรียนรู้เชิงรุก (active learning) สามารถจัดใน
หลักสูตรที่เกี่ยวกับพระพุทธศาสนา ปรัชญา จริยศาสตร์ เพื่อเป็นการบริการวิชาการให้กับสังคม

2. ข้อเสนอแนะสำหรับการวิจัยครั้งต่อไป

การวิจัยเรื่อง "การศึกษาเชิงวิเคราะห์ทางสายกลางแห่งปฏิจจสมุปบาท" ในครั้งนี้ ผู้วิจัยมี
ข้อเสนอแนะสำหรับการวิจัยครั้งต่อไป ดังนี้

1) วิเคราะห์ปฏิจจสมุปบาทเพื่อการประยุกต์ใช้ด้านการศึกษา

2) วิเคราะห์ปฏิจจสมุปบาทเพื่อการประยุกต์ใช้ด้านสังคม

บรรณานุกรม

มหาจุฬาลงกรณราชวิทยาลัย. (2506). **พระไตรปิฎกภาษาบาลี ฉบับมหาจุฬา เตปิฏกํ 2500.** กรุงเทพมหานคร: โรงพิมพ์รุ่งเรืองธรรม.

มหาจุฬาลงกรณราชวิทยาลัย. (2539). **พระไตรปิฎกภาษาไทย ฉบับมหาจุฬาลงกรณราชวิทยาลัย.** กรุงเทพมหานคร: โรงพิมพ์มหาจุฬาลงกรณราชวิทยาลัย.

จำนงค์ ทองประเสริฐ. (2556). **บทความพิเศษ ปฏิจจสมุปบาท.** วารสารพุทธศาสน์ศึกษา จุฬาลงกรณ์ มหาวิทยาลัย, 20(1), 75-98.

บรรจบ บรรณรุจิ. (2555). **ปฏิจจสมุปบาท : ขั้นตอนการรู้แจ้งความจริงของพระพุทธเจ้าและการปรับใช้ เพื่อแก้ปัญหาสังคม.** วารสารราชบัณฑิตยสถาน, 37(3), 148-171.

พระมหาปรีชา รตนโชโต และพระครูพิศาลสารบัณฑิต. (2565). **ปฏิจจสมุปบาทกับการพัฒนาคุณภาพชีวิต.** วารสาร มจร อุบลปริทรรศน์, 7(1), 1111-1128.

พระวิสัชนา วรปญฺโญ (พงษ์อาดิต). (2559). **การศึกษาวิเคราะห์แนวคิดเรื่องอิทัปปัจจยตาในฐานะที่เป็นกฎ ของธรรมชาติ.** วารสารวิชาการธรรมทรรศน์, 16(3), 191-202.

พระสาทิพย์ อนาลโย, พระปลัดสมชาย ปโยโค และพระมหาขวัญชัย กิตฺติเมธี. (2562). **การวิเคราะห์ ความสัมพันธ์ระหว่างปฏิจจสมุปบาทกับการบรรลุธรรม.** วารสาร มจร พุทธปัญญาปริทรรศน์, 4(2), 225-236.

พิชัย สุขวุ่น. (2563). **ปริทัศน์หนังสือ"ปฏิจจสมุปบาทจากพระโอษฐ์".** วารสารมนุษยศาสตร์และ สังคมศาสตร์ มหาวิทยาลัยราชภัฏสุราษฎร์ธานี, 12(2), 255-273.

เสฐียร ทั่งทองมะดัน และพระมหายุทธนา นรเชฏโฐ. (2562). **ศึกษาปฏิจจสมุปบาทในพุทธปรัชญาเถรวาท กับแนวคิดแบบธรรมชาตินิยม.** วารสาร มจร พุทธศาสตร์ปริทรรศน์, 3(1), 61-78.

ธนสิทธิ์ ฉัตรสุวรรณ. (2560). การศึกษาวิเคราะห์แนวคิดเรื่องภพในพระพุทธศาสนาเถรวาท. วารสาร บัณฑิตศึกษาปริทรรศน์. 13(1), 1-11.

สมรรถนะของผู้บริหารที่ส่งผลต่อการบริหารงานวิชาการในสถานศึกษา
สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2
The Competencies of School Administrators Affecting Academic Administration
in Schools under Lopburi Primary Educational Service Area Office 2

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บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อ (1) ศึกษาสมรรถนะของผู้บริหารสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 (2) ศึกษาการบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 และ (3) ศึกษาสมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงานวิชาการในสถานศึกษาสังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2

การวิจัยนี้เป็นการวิจัยแบบสำรวจ ประชากรในการวิจัย ได้แก่ ครูในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 จำนวน 940 คน กลุ่มตัวอย่าง ได้แก่ ครูในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 กำหนดขนาดกลุ่มตัวอย่างตามตารางของเครจซี่และมอร์แกน และวิธีการสุ่มอย่างง่าย จำนวน 273 คน วิธีดำเนินการวิจัยมี 4 ขั้น ได้แก่ (1) ศึกษาเอกสารและงานวิจัยที่เกี่ยวข้อง (2) สร้างเครื่องมือในการวิจัย (3) เก็บรวบรวมข้อมูล และ (4) วิเคราะห์ข้อมูล เครื่องมือที่ใช้ในเก็บรวบรวมข้อมูล

เป็นแบบสอบถามมาตราส่วนประมาณค่า 5 ระดับ สถิติในการวิเคราะห์ข้อมูล ได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และวิเคราะห์การถดถอยพหุคูณแบบขั้นตอน

        ผลการวิจัย พบว่า (1) สมรรถนะของผู้บริหารสถานศึกษาสังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 โดยภาพรวมและรายด้านอยู่ในระดับมากทุกด้าน (2) การบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 โดยภาพรวมอยู่ในระดับมาก และ (3) สมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 มีความสัมพันธ์กันปานกลางในทางบวก อย่างมีนัยสำคัญทางสถิติที่ระดับ .01

คำสำคัญ: สมรรถนะ, ผู้บริหารสถานศึกษา, การบริหารงานวิชาการ

ABSTRACT

        The objectives of this research were: (1) to study the competencies of school administrators under Lopburi Primary Educational Service Area Office 2; (2) to study the academic administration in schools under Lopburi Primary Educational Service Area Office 2; and (3) to study the competencies of school administrators affecting academic administration in schools under Lopburi Primary Educational Service Area Office2.

        This research was a survey research. The population consisted of 940 teachers in schools under Lopburi Primary Educational Service Area Office 2. The sample size was determined according to Krejci and Morgan's table. and a simple random sampling method with totaling 273 teachers. The research method has 4 steps: (1) studying related documents and research, (2) creating research instruments, (3) collecting data, and (4) analyzing the data. The instruments used to collect data were a 5-level rating scale questionnaire. The statistics used for data analysis were frequency, percentage, mean, Standard Deviation, and a stepwise multiple regression analysis.

        The results of research were found that: (1) the competencies of school administrators under Lopburi Primary Educational Service Area Office 2, overall and aspect were at high level in all aspects; (2) the academic administration in schools under Lopburi Primary Educational Service Area Office 2, overall was at high level; and (3) the competencies of school administrators affecting academic administration in schools under Lopburi Primary Educational Service Area Office 2, had moderate positive correlation with statistically significant at .01 level.

Keywords: Competencies, School Administrators, Academic Administration

1. บทนำ

การพัฒนาการศึกษาของประเทศไทยในช่วงเวลาที่ผ่านมา นับเป็นความสำเร็จที่น่าพอใจ เพียงในระดับหนึ่งโดยเฉพาะในด้านปริมาณ ในขณะเดียวกันยังมีปัญหาที่สั่งสมอยู่อีกมากมาย เช่น ด้านคุณภาพและการจัดการ อย่างไรก็ตามบทบาทของการศึกษาในปัจจุบัน นับว่าได้มีความสำคัญ ยิ่งขึ้นด้วย เพราะมีปัจจัยและการเปลี่ยนแปลงต่างๆ ที่ท้าทายในสังคมของไทย การศึกษาจึงเป็นเครื่องมือและ กระบวนการเตรียมความพร้อมเพื่อให้คนไทย สังคมของไทยให้ก้าวไปสู่ยุคใหม่อย่างมั่นคงและรู้เท่าทันโลก

ความสำเร็จในผลของการจัดการศึกษาที่ผ่านมาหรือการปฏิรูปแก้ไข ปัญหาที่กำลังเผชิญอยู่ย่อมไม่เป็นการเพียงพอ การพัฒนาการศึกษาจำเป็นต้องวิเคราะห์กระแสโลกาภิวัตน์และสิ่งแวดล้อมต่างๆ ที่จะมีปฏิสัมพันธ์ที่ดีกับการศึกษาในแง่ของตัวเหตุและผลกระทบที่ได้รับควบคู่ไปกับการพิจารณาแก้ไขปัญหาอุปสรรคข้อขัดข้องต่าง ๆ (กระทรวงศึกษาธิการ, 2552: 60) ทั้งจากในแผนพัฒนาการเศรษฐกิจและสังคมแห่งชาติ ทุกฉบับที่ได้กำหนดด้านแนวคิดที่ยึด "คนเป็นศูนย์กลางของการพัฒนา" โดยในทุกมิติอย่างเป็นองค์รวมและให้ความสำคัญกับการพัฒนาที่สมดุลทั้งด้านตัวคน สังคม เศรษฐกิจและสิ่งแวดล้อม โดยเฉพาะอย่างยิ่งการสร้างระบบ บริหารจัดการภายในที่ดีให้เกิดขึ้นในทุกระดับ อันจะทำให้เกิดการพัฒนาที่ยั่งยืนที่มี "คน" เป็น ศูนย์กลางได้อย่างแท้จริง (วงศกร ภู่ทอง และอลงกต ศรีเสน, 2560: 9) ดังนั้น การศึกษาในฐานะที่เป็นกลไกพื้นฐานในการพัฒนาคนจึงเป็นกระบวนการที่สังคม หวังพึ่งพาให้เป็นเครื่องมือในการเตรียมคนและสังคม ให้พร้อมที่จะรับการเปลี่ยนแปลงเพื่อการพัฒนาประเทศอย่างมีประสิทธิภาพ ในขณะที่อีกหลาย ๆ ประเทศได้เล็งเห็นถึงความสำคัญพร้อมกับทุ่มเททรัพยากรเพื่อปรับปรุงการศึกษาให้เข้ากับสภาวะและสภาพชีวิตสมัยใหม่ แต่ปรากฏว่าการศึกษาในฐานะคลังปัญญาในสังคมของไทย โดยรวม ส่วนใหญ่กลับถูกมองข้ามละเลยไป

ผู้บริหารสถานศึกษาควรปรับบทบาทหน้าที่ที่จะปฏิบัติงานจริงในการบริหารงานวิชาการให้สอดคล้องกับสภาพปัจจุบันในเขตพื้นที่การศึกษา เกี่ยวกับสมรรถนะหรือคุณลักษณะพึงประสงค์ที่ส่งผลต่อการบริหารงานวิชาการของ ผู้บริหารสถานศึกษามืออาชีพ ประกอบด้วย 4 สมรรถนะหลัก คือ 1) การมุ่งผลสัมฤทธิ์ ได้แก่ มีความรู้ มีความคิดริเริ่ม มีการพัฒนาตนเองอย่างต่อเนื่อง 2) การบริการที่ดี ได้แก่ การปรับปรุงระบบบริการ ให้มีประสิทธิภาพ 3) การพัฒนาตนเอง ได้แก่ การศึกษา ค้นคว้า หาความรู้ ติดตามองค์ความรู้และ เทคโนโลยีใหม่ ๆ และ 4) การทำงานเป็นทีม ได้แก่ การให้ความร่วมมือ ช่วยเหลือ สนับสนุน เสริมแรงจูงใจในการปรับตัวเข้ากับบุคคลอื่น (สำนักงานเขตพื้นที่การศึกษาลพบุรี เขต 2, 2565: 11-14) สอดคล้องกับงานวิจัยของจิตทิวัตถ์ สีพา. (2564: 3-15) อีกทั้งยังสอดคล้องกับงานวิจัยของ อัจฉรา สระวาสี (2559)

ด้วยเหตุนี้จึงเป็นความสำคัญและจำเป็นอย่างยิ่งที่ผู้บริหารการศึกษาทุกระดับ ตั้งแต่ ระดับสูงและลดหลั่นลงมาถึงระดับปฏิบัติในสถานศึกษาจะต้องมีวิสัยทัศน์ มองเห็นความสำคัญของ การพัฒนาคุณภาพการศึกษา และพร้อมที่จะเป็นผู้นำในการเปลี่ยนแปลง ปรับเปลี่ยนกระบวนทัศน์ของ การบริหารการจัดการส่งเสริมให้บุคคลมีความรู้ ความเข้าใจและมีทักษะในการจัดกระบวนการเรียนรู้ เพื่อการศึกษาพัฒนาตนเองอย่างต่อเนื่องตลอดชีวิต (จิตทิวัตถ์ สีพา.(2564: 3).) นอกจากนี้ ผู้บริหารสถานศึกษาจะต้องเป็นบุคคลที่มีความสำคัญที่สุด เพราะเป็นผู้มีบทบาทหน้าที่มากที่สุดและมี อิทธิพลมากที่สุดต่อการเปลี่ยนแปลงทั้งสิ่งใหม่ ๆ ภายในสถานศึกษารวมทั้งมีผลต่อ

การเปลี่ยนแปลง ทั้งในและนอกเขตพื้นที่การศึกษา ผู้บริหารสถานศึกษาจะต้องเป็นผู้บริหารสถานศึกษามืออาชีพ กล่าวคือเป็นบุคคลที่มีอาชีพในการบริหารงานจริงๆ สามารถบริหารงานการศึกษาได้อย่างมี ประสิทธิภาพและประสิทธิผล เป็นที่ยอมรับของหน่วยงานระดับต่าง ๆ และเป็นที่ยอมรับของสังคม โดยทั่วไป การมีผู้บริหารสถานศึกษามืออาชีพในเขตพื้นที่การศึกษาจำนวนมาก จะทำให้การพัฒนา การศึกษาในเขตพื้นที่การศึกษาต่างๆ มีความเจริญก้าวหน้าได้อย่างรวดเร็ว รวมทั้ง การบริหารงานวิชาการ ถือเป็นหัวใจสำคัญของการบริหารการศึกษา ที่ผู้บริหารจำเป็นต้องให้ ความสำคัญอย่างยิ่ง ที่จะให้สถานศึกษามีประสิทธิผลสูงสุด และบรรลุเป้าหมายขององค์กร (Ivancevich, J.M. 1998 อ้างถึงใน จิตทิวัตถ์ สีพา (2564: 4) ผู้บริหารต้องพัฒนาความรู้ ทักษะ ความสามารถ ของ บุคลากรให้มีสมรรถนะในการปฏิบัติงานให้บรรลุเป้าหมาย เนื่องจากการประเมินผลสมรรถนะการปฏิบัติงาน เป็นกระบวนการหนึ่งในการบริหารงานให้เกิดประสิทธิภาพสูงสุด (Stahl, 1971: 88, อ้างถึงใน จิตทิวัตถ์ สีพา.(2564: 4) ดังที่กระทรวงศึกษาธิการ (2552: 33) ได้กล่าวว่างานวิชาการเป็นงานหลัก หรือเป็น ภารกิจหลักของสถานศึกษาที่พระราชบัญญัติการศึกษาแห่งชาติ พ.ศ. 2542 และที่ แก้ไขเพิ่มเติม (ฉบับที่ 2, 3) มุ่งกระจายอำนาจในการบริหารจัดการไปให้สถานศึกษาให้มากที่สุด ด้วยเจตนารมณ์ที่สถานศึกษาดำเนินการได้ โดยอิสระ คล่องตัว รวดเร็ว สอดคล้องกับความต้องการของ ผู้เรียน สถานศึกษา ชุมชน ท้องถิ่น และการมีส่วนร่วม จาก ผู้มีส่วนได้เสียทุกฝ่าย ซึ่งจะเป็นปัจจัยสำคัญทำให้สถานศึกษามีความเข้มแข็งในการบริหาร และการจัดการ สามารถพัฒนาหลักสูตร และ กระบวนการเรียนรู้ตลอดจนการวัดผล ประเมินผล รวมทั้งการจัดปัจจัยเกื้อหนุนการพัฒนาคุณภาพ นักเรียน ชุมชน ท้องถิ่นได้อย่างมีคุณภาพ และมีประสิทธิภาพ

จากความสำคัญของปัญหาดังกล่าว ผู้วิจัยจึงสนใจที่จะศึกษาสมรรถนะของผู้บริหาร สถานศึกษาที่ส่งผลต่อการปฏิบัติงานด้านวิชาการของครูในสถานศึกษาขั้นพื้นฐาน วิชาการของครูในสถานศึกษาขั้นพื้นฐานสังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 ใน 4 ด้าน คือ ด้านการพัฒนาหลักสูตร ด้านการพัฒนากระบวนการเรียนรู้ ด้านการพัฒนาและใช้สื่อเทคโนโลยีเพื่อการศึกษา ด้านการพัฒนาระบบประกันคุณภาพภายใน และมาตรฐานการศึกษาเพื่อใช้เป็นแนวทางในการวางนโยบายที่จะส่งเสริมสนับสนุนให้ ผู้บริหารสถานศึกษามีสมรรถนะทางการบริหารงานวิชาการที่เหมาะสมสอดคล้องกับการปฏิบัติงาน ตามสมรรถนะหลักของผู้บริหารสถานศึกษาของสำนักงานคณะกรรมการข้าราชการครูและบุคลากร ทางการศึกษาและเป็นการพัฒนายกระดับคุณภาพการบริหารงานวิชาการของสถานศึกษาต่อไป

2. วัตถุประสงค์การวิจัย

1. เพื่อศึกษาสมรรถนะของผู้บริหารสถานศึกษาใน สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2

2. เพื่อศึกษาการบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2

3. เพื่อศึกษาสมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงานวิชาการในสถานศึกษา สังกัด สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2

**3. ขอบเขตของการวิจัย/ประชากรและกลุ่มตัวอย่าง**

        ประชากรที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ครูในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 จำนวนทั้งหมด 940 คน

        กลุ่มตัวอย่าง ได้แก่ ครูในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 จำนวน 273 คน โดยการกำหนดขนาดของกลุ่มตัวอย่างตามตารางเครจซี่และมอร์แกน (Krejcie & Morgan) และได้ทำการสุ่มอย่างง่าย

        ตัวแปรต้น ได้แก่ สมรรถนะหลักของผู้บริหารสถานศึกษา (สำนักงาน ข้าราชการครูและบุคลากรทางการศึกษา)ใน 4 ด้าน คือ 1. การมุ่งผลสัมฤทธิ์ 2. การบริการที่ดี 3. การพัฒนาตนเอง และ 4. การทำงานเป็นทีม

        ตัวแปรตาม ได้แก่ การบริหารงานวิชาการของผู้บริหารสถานศึกษา (คู่มือการปฏิบัติการประเมินข้าราชการครูบุคลากรทางการศึกษา ของกระทรวงศึกษาธิการ พ.ศ.2552) ใน 4 ด้าน คือ 1. การพัฒนาหลักสูตรของสถานศึกษา 2. การพัฒนากระบวนการเรียนรู้ 3.การพัฒนาและใช้สื่อเทคโนโลยีเพื่อการศึกษาและ 4. การวิจัยเพื่อพัฒนาคุณภาพการศึกษาในสถานศึกษา

ตารางที่ 1 กรอบแนวคิดในการวิจัย

ตัวแปรต้น	ตัวแปรตาม

สมรรถนะของผู้บริหารสถานศึกษา (X_{tot})
 	
    1.การมุ่งผลสัมฤทธิ์ (X_1)
    2.การบริการที่ดี (X_2)
    3.การพัฒนาตนเอง (X_3)
    4.การทำงานเป็นทีม (X_4)
	การบริหารงานวิชาการของผู้บริหารสถานศึกษาใน 4 ด้าน (Y_{tot})
	
	 1. การพัฒนาหลักสูตรของสถานศึกษา (Y_1)
	2. การพัฒนากระบวนการเรียนรู้ (Y_2)
	3. การพัฒนาและใช้สื่อเทคโนโลยีเพื่อการศึกษา (Y_3)
	4. การวิจัยเพื่อพัฒนาคุณภาพการศึกษาในสถานศึกษา (Y_4)
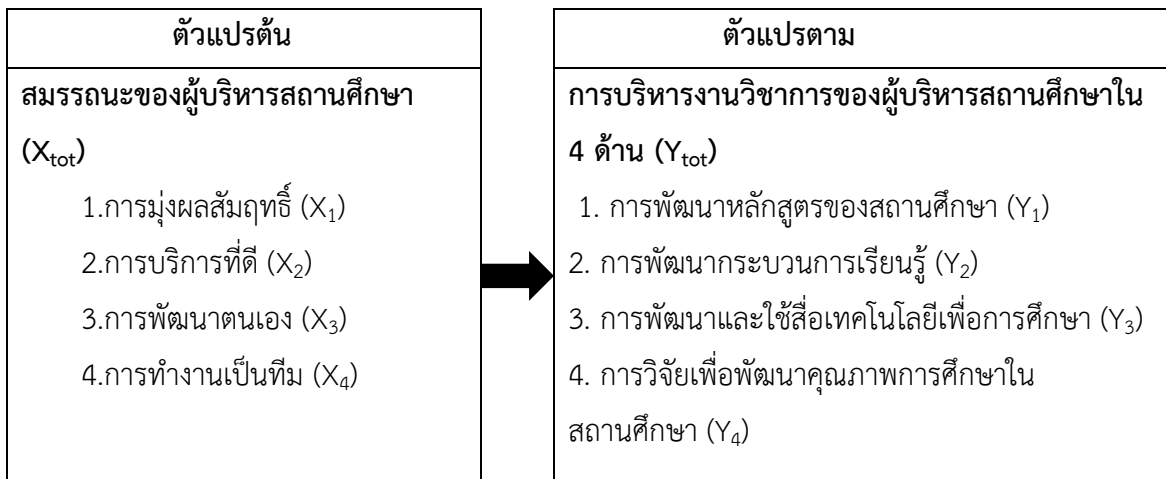
ที่มา: **สมรรถนะของผู้บริหารสถานศึกษา**, สำนักงานคณะกรรมการข้าราชการและพลเรือน (2558: 5 - 6), และ
      การปฏิบัติงานด้านวิชาการของผู้บริหารสถานศึกษาใน 4 ด้าน, สำนักงานคณะกรรมการข้าราชการครูและบุคลากรทางการศึกษา, กระทรวงศึกษาธิการ (2552: 32)

4. ประโยชน์ของการวิจัย

        1. เป็นข้อมูลในการกำหนดแนวทางในการพัฒนาสมรรถนะของผู้บริหารสถานศึกษาในสังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2

        2. นำผลจากการวิจัยไปประยุกต์ในการส่งเสริมสมรรถนะของผู้บริหารและพัฒนาการบริหารงาวิชาการของสถานศึกษาให้มีประสิทธิภาพสูงยิ่งขึ้น

5. เครื่องมือที่ใช้ในการวิจัย

เครื่องมือที่ใช้ในการวิจัย เป็นแบบสอบถามเพื่อใช้ในการเก็บข้อมูล แบ่งเป็น 3 ตอน คือ

<u>ตอนที่ 1</u> สอบถามเกี่ยวกับสถานภาพของผู้ตอบแบบสอบถาม คือ อายุ ระดับการศึกษา และประสบการณ์ในการทำงาน ลักษณะเป็นแบบสำรวจรายการ

<u>ตอนที่ 2</u> แบบสอบถามเกี่ยวกับสมรรถนะของผู้บริหารสถานศึกษา เป็นแบบสอบถาม แบบมาตราส่วนประมาณค่า 5 ระดับ ประกอบด้วยคำถามรวม 32 ข้อตามสมรรถนะหลักของผู้บริหารสถานศึกษา จำนวน 4 ด้าน

<u>ตอนที่ 3</u> แบบสอบถามเกี่ยวกับการบริหารงานวิชาการ เป็นแบบสอบถามแบบมาตรา ส่วนประมาณค่า 5 ระดับ ประกอบด้วยคำถามรวม 59 ข้อ ตามกรอบการบริหารงานวิชาการของสถานศึกษา จำนวน 4 ด้าน

6. การเก็บรวบรวมข้อมูล

ในการวิจัยครั้งนี้ ผู้วิจัยดำเนินการเก็บรวบรวมข้อมูลตามลำดับดังต่อไปนี้

1. ผู้วิจัยขอหนังสือในนามคณะฯ มหาวิทยาลัยกรุงเทพธนบุรี ส่งถึงผู้อำนวยการสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 และผู้อำนวยการสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 จำนวน 21 โรงเรียนเพื่อขอความร่วมมือในการตอบแบบสอบถาม

2. ผู้วิจัยดำเนินการส่งและรับแบบสอบถามด้วยตนเอง โดยจัดส่งแบบสอบถามให้กับ ผู้บริหารสถานศึกษาแต่ละแห่งเพื่อดำเนินการเก็บข้อมูลจากกลุ่มตัวอย่างที่ระบุในคำชี้แจงเกี่ยวกับกลุ่มตัวอย่าง เมื่อดำเนินการแล้วรวบรวมแบบสอบถามส่งผู้วิจัยโดยตรงตามเวลาที่กำหนด ได้รับกลับคืนทั้ง 273 ฉบับ คิดเป็นร้อยละ 100

3. ผู้วิจัยนำแบบสอบถามที่ได้รับคืนมาตรวจสอบความสมบูรณ์ เพื่อนำไปวิเคราะห์ข้อมูลต่อไป

7. การวิเคราะห์ข้อมูล

ผู้วิจัยนำข้อมูลที่รวบรวมได้จากแบบสอบถามมาวิเคราะห์ ดังนี้ 1. นำแบบสอบถามที่ได้รับคืนมาตรวจสอบความสมบูรณ์ 2. นำข้อมูลที่ได้จากแบบสอบถามมาวิเคราะห์โดยใช้โปรแกรมสำเร็จรูปดังนี้: 2.1 วิเคราะห์ข้อมูลทั่วไปของกลุ่มตัวอย่างโดยคำนวณหาความถี่ และร้อยละ 2.2 วิเคราะห์ระดับสมรรถนะของผู้บริหารสถานศึกษาขั้นพื้นฐาน และระดับการงานวิชาการของสถานศึกษาขั้นพื้นฐาน ตามการประเมินของครูผู้สอนโดยการหาค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ซึ่งได้กำหนดเกณฑ์การพิจารณาค่าเฉลี่ย (Best, 1970: 190) และ 2.3 วิเคราะห์สมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงานวิชาการของสถานศึกษาขั้นพื้นฐาน สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 ใช้การวิเคราะห์การถดถอยพหุคูณแบบขั้นตอน

8. สถิติที่ใช้ในการวิจัย

1. การวิเคราะห์สถานภาพผู้ตอบแบบสอบถาม ประกอบด้วย เพศ วุฒิการศึกษา ประสบการณ์ในการทำงาน และตำแหน่งหน้าที่ปัจจุบัน ใช้การวิเคราะห์ข้อมูลด้วยความถี่ และร้อยละ

2. การวิเคราะห์ระดับสมรรถนะของผู้บริหารสถานศึกษา และการบริหารงานวิชาการ โดยใช้ค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน

3. การตรวจสอบคุณภาพของเครื่องมือในการวิจัย โดยการหาค่าความสอดคล้องของแบบสอบถาม และ
หาค่าความเชื่อมั่นของแบบสอบถามโดยวิธีหาค่าสัมประสิทธิ์แอลฟาตามวิธีของครอนบัค (Cronbach, 1990:
202-204)

4. การวิเคราะห์สมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงานวิชาการในสถานศึกษา
สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 ด้วยการวิเคราะห์การถดถอยพหุคูณแบบขั้นตอน

ตารางที่ 2 ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน สมรรถนะของผู้บริหารสถานศึกษาในสถานศึกษาสังกัด
สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 โดยภาพรวม

สมรรถนะของผู้บริหารสถานศึกษา	$\bar{x}$	S.D	ระดับ
1.ด้านสมรรถนะการมุ่งผลสัมฤทธิ์	3.99	0.43	มาก
2.ด้านสมรรถนะการบริการที่ดี	3.96	0.37	มาก
3.ด้านสมรรถนะการพัฒนาตนเอง	4.02	0.35	มาก
4.ด้านสมรรถนะการทำงานเป็นทีม	4.04	0.39	มาก
เฉลี่ย	**4.00**	**0.23**	**มาก**

ตารางที่ 3 ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน การบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขต
พื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 โดยภาพรวม

การบริหารงานวิชาการ	$\bar{x}$	S.D	ระดับ
1. การพัฒนาหลักสูตรสถานศึกษา	4.05	0.42	มาก
2. การพัฒนากระบวนการเรียนรู้	4.03	0.44	มาก
3. การวัดผลและประเมินผลและเทียบโอนผลการเรียน	3.88	0.46	มาก
4. การวิจัยเพื่อพัฒนาคุณภาพการศึกษา	3.90	0.47	มาก
เฉลี่ย	**3.74**	**0.21**	**มาก**

ตารางที่ 4 การวิเคราะห์การถดถอยพหุคูณแบบขั้นตอน สมรรถนะของผู้บริหารสถานศึกษาส่งผลต่อการการ
บริหารงานวิชาการในสถานศึกษาสังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2

สมรรถนะของผู้บริหาร	X_1	X_2	X_3	X_4	X_{tot}
X_1	-	-	-	-	-
X_2	.248**	-	-	-	-
X_3	.085**	.198**	-	-	-

สมรรถนะของผู้บริหาร	X_1	X_2	X_3	X_4	X_{tot}
X_4	.105**	.040	.261**	-	-
X_{tot}	.165**	.185**	.173**	.169**	-

** มีนัยสำคัญทางสถิติที่ระดับ .01

ตารางที่ 5 ตัวแปรที่คัดเลือกเข้าสมการในการวิเคราะห์การถดถอยพหุคูณแบบขั้นตอน

ตัวแปรที่ได้รับการคัดเลือกเข้าสมการ	b	β	t
ด้านสมรรถนะการบริการที่ดี (X_2)	0.075	0.132	3.073**
ด้านสมรรถนะการทำงานเป็นทีม (X_4)	0.067	0.125	2.921**
ด้านสมรรถนะการมุ่งผลสัมฤทธิ์ (X_1)	0.055	0.110	2.585**
ด้านสมรรถนะการพัฒนาตนเอง (X_3)	0.064	0.105	2.423**
ค่าคงที่ = 2.840, F =12.167**	R = 0.284	R^2 = 0.082	S.E.=0.151

* * มีนัยสำคัญทางสถิติที่ระดับ .01

     ค่าสัมประสิทธิ์สหสัมพันธ์พหุคูณของตัวแปรสมรรถนะของผู้บริหารสถานศึกษาทั้ง 4 ด้าน มีค่าอยู่ระหว่าง 0.085 ถึง 0.261 มีค่าความสัมพันธ์ซึ่งกันและกันระดับปานกลางในทางบวก แสดงว่า ตัวแปรทั้งสองสัมพันธ์กัน อย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และสามารถเขียนเป็นสมการถดถอยในรูปคะแนนดิบ และใน รูปคะแนนมาตรฐานได้ดังนี้

     สมการถดถอยในรูปคะแนนดิบ

$\hat{y}_{tot}$ = 2.840+ 0.075 X_2 + 0.067X_4+0.055 X_1 +0.064X_3

     สมการถดถอยในรูปคะแนนมาตรฐาน

$\hat{z}_{tot}$ 2 = 0.132X_2+ 0.125X_4+0.110X_1 +0.105X_3

     โดยมีค่าสัมประสิทธิ์สหสัมพันธ์พหุคูณสมรรถนะของผู้บริหารสถานศึกษากับการ ปฏิบัติงานด้านวิชาการ ของครูในสถานศึกษาขั้นพื้นฐาน (Y_{tot}) เท่ากับ 0.284 ประสิทธิภาพในการทำนาย คิดเป็นร้อยละ 82.00

9. การอภิปรายผล

     ผลการวิเคราะห์ข้อมูลจากการวิจัย เรื่อง สมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงาน วิชาการในสถานศึกษา สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 สามารถอภิปรายผลได้ดังนี้

1. จากผลการวิจัย พบว่า สมรรถนะของผู้บริหารสถานศึกษาในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 โดยภาพรวมอยู่ในระดับมาก เมื่อพิจารณาแยกเป็นรายด้าน พบว่า สมรรถนะของผู้บริหารสถานศึกษาอยู่ในระดับมากทุกด้าน โดยเรียงจากมากไปน้อย ดังนี้ ด้านสมรรถนะการทำงานเป็นทีม ด้านสมรรถนะการพัฒนาตนเอง ด้าน สมรรถนะการมุ่งผลสัมฤทธิ์ และด้านสมรรถนะการบริการที่ดี ทั้งนี้อาจเนื่องมาจาก ผู้บริหารสถานศึกษาได้มีการพัฒนาตนเองในเรื่องการทำงานเป็นทีม การบริการที่ดี และการบริหาร แบบมุ่งเน้นผลงานมาอย่างต่อเนื่อง ซึ่งสอดคล้องกับ แพรี่ (Pairy, 1996: 13 -14) ได้ศึกษาเกี่ยวกับสมรรถนะที่ต้องการในหน่วยงานการบริหารทรัพยากร มนุษย์เป็นสมรรถนะหลักที่จำเป็นต่อการปฏิบัติงาน ทั้ง 12 สมรรถนะ แบ่งออกเป็น 3 ส่วน คือ (1) สมรรถนะหลัก (Core Competency) เป็นสมรรถนะที่ทุกตำแหน่งงานในหน่วยงานการ บริหารทรัพยากรมนุษย์ (2) สมรรถนะเสริม เป็นสมรรถนะเสริมที่ใช้ในการปฏิบัติงาน ทั้ง 6 สมรรถนะ คือ การสร้างผลกระทบทางอ้อม, การใช้ทรัพยากรอย่างรู้คุณค่า, ความตระหนักในการต้องการของลูกค้า, ความคิดสร้างสรรค์, การตั้งคำถามและตีความ, และความรู้สึกส่วนบุคคล (3) สมรรถนะประจำตำแหน่งงาน นักกลยุทธ์ทางด้านทรัพยากรมนุษย์, การริเริ่ม และคิดค้นในงานด้านทรัพยากรมนุษย์, การสนับสนุนงานด้านทรัพยากรมนุษย์, ที่ปรึกษาด้านทรัพยากรมนุษย์, ผู้นำด้านการบริหาร ทรัพยากรมนุษย์ โดยทั้งหกตำแหน่งงานจะประกอบด้วย 33 สมรรถนะ ที่แต่ละ ตำแหน่งงาน ต้องการต่างกันและตอบสนองหน้าที่การทำงานเฉพาะทาง

2. จากผลการวิจัย พบว่า ระดับการบริหารงานวิชาการในสถานศึกษา สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 โดยภาพรวมและรายด้านอยู่ในระดับมาก เมื่อพิจารณาเป็นรายด้าน โดยเรียงตามค่าเฉลี่ย ดังนี้ คือ ด้านการพัฒนาหลักสูตรสถานศึกษา ด้านการพัฒนากระบวนการเรียนรู้ ด้านการส่งเสริมความรู้ด้านวิชาการแก่ชุมชน ด้านการส่งเสริมและสนับสนุนงานวิชาการแก่บุคคลครอบครัว องค์กร หน่วยงาน และสถาบันอื่นที่จัดการศึกษาด้านการประสานความร่วมมือในการพัฒนาวิชาการกับ สถานศึกษาอื่น ด้านการวิจัยเพื่อพัฒนาคุณภาพการศึกษาด้านการวัดผลและประเมินผลและเทียบโอน ผลการเรียนด้านการพัฒนาสื่อนวัตกรรมและเทคโนโลยีเพื่อการศึกษา ด้านการแนะแนวการศึกษา ด้านการพัฒนาระบบการประกันคุณภาพภายในสถานศึกษา ด้านการนิเทศการศึกษาและด้านการพัฒนา แหล่งเรียนรู้ ทั้งนี้อาจเนื่องมาจากการบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 ได้รับการพัฒนางานทางด้านวิชาการมาอย่างต่อเนื่อง จนเกิดทักษะ และมีความชำนาญในการปฏิบัติงานวิชาการอย่างมาก สอดคล้องกับธารินี กิตติกาญจนโสภณ, วีระ วงศ์สรรค์ และเบญจภรณ์ รัญระนา (2563). การพัฒนาบุคลากรด้านการจัดการเรียนรู้ฯ พบว่า โรงเรียนมีการปฏิบัติงานวิชาการอยู่ใน ระดับมาก โดยเฉพาะในด้านการพัฒนากระบวนการเรียนรู้ การพัฒนาระบบประกันคุณภาพการศึกษา การวัดผลและประเมินผลการพัฒนาหลักสูตรสถานศึกษา และการพัฒนาแหล่งเรียนรู้

3. สมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการบริหารงานวิชาการในสถานศึกษา สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2 ทั้ง 4 ด้าน คือ ด้านสมรรถนะการบริการที่ดี ด้านสมรรถนะการ

ทำงานเป็นทีม ด้านสมรรถนะการมุ่ง ผลสัมฤทธิ์ และด้านสมรรถนะการพัฒนาตนเอง โดยมีประสิทธิภาพในการ
ทำนาย คิดเป็นร้อยละ 82.0 ทั้งนี้อาจเนื่องมาจากการบริหารงานวิชาการยังมีปัจจัยอื่นๆ ที่อาจจะส่งผลต่อการ
บริหารงานวิชาการในสถานศึกษา อาทิ สมรรถนะของครูด้วย กระบวนการบริหาร การจัดการศึกษา และรวมทั้ง
ปัจจัยนำเข้าต่างๆ ในการบริหารงานวิชาการ ดังนั้นสมรรถนะของผู้บริหาร สถานศึกษาจึงเป็นเพียง ส่วนหนึ่ง
เท่านั้นที่ส่งผลต่อกัน

10. ข้อเสนอแนะ

ข้อเสนอแนะในการนำผลการวิจัยไปใช้ประโยชน์

จากผลการวิจัย พบว่า สมรรถนะของผู้บริหารสถานศึกษาทั้ง 4 ด้าน คือ ด้านบริการที่ดี ด้านการทำงาน
เป็นทีม ด้านการมุ่งผลสัมฤทธิ์ และด้านการพัฒนาตนเอง ส่งผลต่อการการบริหารงานวิชาการในสถานศึกษา สังกัด
สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2   ดังนั้นผู้บริหารสถานศึกษา สังกัดสำนักงานเขตพื้นที่
การศึกษาประถมศึกษาลพบุรี เขต 2 ควรนำข้อมูลไปประยุกต์ใช้ในการบริหารงานด้านการมุ่งผลสัมฤทธิ์ให้มี
ประสิทธิภาพ และประสิทธิผลมากยิ่งขึ้น และควรนำข้อมูลไปประยุกต์ใช้ในการบริหารงานด้านการพัฒนาตนเอง
และการบริการที่ดีในการบริหารงานการจัดการศึกษา

ข้อเสนอแนะในการวิจัยครั้งต่อไป

1. ควรศึกษาวิจัยเรื่องปัจจัยที่ส่งผลต่อการบริหารงานด้านวิชาการของครูใน สถานศึกษาในด้านอื่นๆ อีก
2. ควรศึกษาวิจัยเชิงคุณภาพในเรื่องสมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อผลสัมฤทธิ์ในการ
ปฏิบัติงานของครู

บรรณานุกรม

กมล ภู่ประเสริฐ. (2560). **การบริหารงานวิชาการในสถานศึกษา : ชุดการพัฒนาสู่มาตรฐานการศึกษาขั้น
     พื้นฐาน.** พิมพ์ครั้งที่ 2. กรุงเทพมหานคร: เมธีทิปส์

กระทรวงศึกษาธิการ. (2546). **คู่มือการบริหารสถานศึกษาขั้นพื้นฐานที่เป็นนิติบุคคล.** กรุงเทพมหานคร: คุรุสภา
     ลาดพร้าว,

จิตทิวัตถ์ สีพา. (2564). **สมรรถนะของผู้บริหารสถานศึกษาที่ส่งผลต่อการปฏิบัติงานด้านวิชาการ ใน
     สถานศึกษาขั้นพื้นฐาน สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาจันทบุรี.** สารนิพนธ์ศึกษา
     ศาสตรมหาบัณฑิต สาขาวิชาการบริหารการศึกษา มหาวิทยาลัยกรุงเทพธนบุรี.

เจณศจี ไพบูลย์สวัสดิ์. (2556). **การศึกษาขีดความสามารถของหัวหน้าแผนกสังกัดค่ายพัฒนาทรัพยากรมนุษย์.**
     กรุงเทพมหานคร: บัณฑิตวิทยาลัย สถาบันบัณฑิตพัฒนบริหารศาสตร.

เจริญ ขวัญสำราญ. (2556). **สมรรถภาพของผู้บริหารโรงเรียนประถมศึกษา สังกัดสำนักงานการประถมศึกษา
     จังหวัดชัยภูมิ.** วิทยานิพนธ์การศึกษามหาบัณฑิต มหาวิทยาลัยศรีนครินทรวิโรฒประสานมิตร.

ชูศรี วงศ์รัตนะ. (2548). **เทคนิคการใช้สถิติเพื่อการวิจัย.** กรุงเทพมหานคร : ศูนย์หนังสือจุฬาลงกรณ์
มหาวิทยาลัย

ณรงค์วิทย์ แสนทอง. (2558). **การฝึกอบรม: เอกสารการฝึกอบรม, ปว. 671.** กรุงเทพมหานคร: ภาควิชา
หลักสูตรและการสอน คณะศึกษาศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ.

ดุจดาว ดวงเด่น. (2556). **การพัฒนาอาชีพโดยเน้นขีดความสามารถ: กรณีศึกษาพนักงานเงินฝากบัญชี ธ.
ไทยทนุ (มหาชน).** วิทยานิพนธ์พัฒนบริหารศาสตรมหาบัณฑิต สถาบันบัณฑิตพัฒนบริหารศาสตร์.

เตือนใจ อังกูรเกียรติ. (2545). **องค์ประกอบการบริหารของผู้บริหารโรงเรียนที่ส่งผลต่อการปฏิบัติงานวิชาการ
ในโรงเรียน สังกัดเทศบาล เขตการศึกษา 5.** วิทยานิพนธ์ศึกษาศาสตรมหาบัณฑิต สาขาการบริหาร
การศึกษา มหาวิทยาลัยศิลปากร.

ธารินี กิตติกาญจนโสภณ, วีระ วงศ์สรรค์ และเบญจภรณ์ รัญระนา (2563). **การพัฒนาบุคลากรด้านการจัดการ
เรียนรู้ตามหลักปรัชญาเศรษฐกิจพอเพียงของศูนย์เครือข่ายพัฒนาคุณภาพ การศึกษาสังกัดสำนักงาน
เขตพื้นที่การศึกษาประถมศึกษาน่าน เขต 2.** วารสารพุทธมัคค์ ศูนย์วิจัยธรรมศึกษาวัดอาวุธวิกสิตาราม
ปีที่ 5 ฉบับที่ 2 (121-129), กค.-ธค. 2563.

ธารินี กิตติกาญจนโสภณ, วีระ วงศ์สรรค์ (2563). **ภาวะผู้นำของผู้บริหารต่อความท้อแท้ในการปฏิบัติงานของ
ครูปฐมวัย สังกัดศูนย์พัฒนาเด็กเล็กในตำบลอินทขิล อำเภอแม่แตง เชียงใหม่.** วารสารพุทธสังคมวิทยา
ปริทัศน์ ม.มหามกุฏราชวิทยาลัยนครศรีธรรมราช ปีที่ 7 ฉบับที่ 1 (120-130), มค.-มิย. 2564.

นันทพร ศุภะพันธุ์. (2561). **สมรรถนะการบริหารด้านวิชาการของผู้บริหารโรงเรียนเอกชนระดับประถมศึกษา
สังกัดสำนักงานเขตพื้นที่การศึกษากรุงเทพมหานคร เขต 2.** วิทยานิพนธ์การศึกษามหาบัณฑิต
มหาวิทยาลัยศรีนครินทรวิโรฒ.

บุศยมาศ มารยาตร์. (2557). **การประเมินขีดความสามารถในการปฏิบัติงานของนักพัฒนาทรัพยากรมนุษย์
กรณีศึกษาการปิโตรเลียมแห่งประเทศไทย.** วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต (การพัฒนาทรัพยากร
มนุษย์) สถาบันบัณฑิตพัฒนบริหารศาสตร์.

ปริญญ์ พิชญวิจิตร์. (2557). **การออกแบบรายการขีดความสามารถในงานของบางจากปิโตเลียมจำกัด
(มหาชน).** วิทยานิพนธ์พัฒนบริหารศาสตรมหาบัณฑิต สถาบันบัณฑิตพัฒนบริหาร.

เพียรพันธุ์ กิจพาณิชย์เจริญ. (2552). **สมรรถนะการบริหารวิชาการของผู้บริหารสถานศึกษา สังกัดสำนักงาน
เขตหนองแขม กรุงเทพมหานคร.** วิทยานิพนธ์การศึกษามหาบัณฑิต สาขาวิชาการบริหารการศึกษา
มหาวิทยาลัยศรีนครินทรวิโรฒ.

วงศกร ภู่ทอง และอลงกต ศรีเสน. (2560). **แผนพัฒนาเศรษฐกิจและสังคมแห่งชาติ ฉบับที่ 12.**
กรุงเทพมหานคร: เดอะบุ๊คส์

สำนักงานคณะกรรมการข้าราชการพลเรือน. (2558). **การปรับใช้สมรรถนะในการบริหารทรัพยากรมนุษย์.** สืบค้น
เมื่อ ธันวาคม 14, 2564 จาก http://ocsc.go.th/veform/PDF/competency.pdf.

สำนักงานคณะกรรมการข้าราชการครูและบุคลากรทางการศึกษา. (2552). **คู่มือหลักสูตรการพัฒนาข้าราชการ ครูและบุคลากรทางการศึกษา, เลื่อนวิทยฐานะ.** กรุงเทพมหานคร.

สำนักงานเลขาธิการสภาการศึกษา. (2562). **พระราชบัญญัติการศึกษาแห่งชาติ พ.ศ. 2542 และที่แก้ไขเพิ่มเติม (ฉบับที่ 2, 3).** กรุงเทพมหานคร: พริกหวานกราฟฟิค.

สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2. (2565). **แผนกลยุทธ์ และพันธสัญญาปีงบประมาณ 2565 - 2567: สำนักงานเขตพื้นที่การศึกษาประถมศึกษาลพบุรี เขต 2.**

สำนักงานเลขาธิการสภาการศึกษา. (2550). **สมรรถนะการศึกษาไทยในเวทีสากล.** กรุงเทพมหานคร: พริกหวาน กราฟ ฟิค.

ศิริ เจริญวัย. (2555). **สมรรถภาพทางการบริหารของผู้บริหารวิทยาลัยครู.** วิทยานิพนธ์การศึกษามหาบัณฑิต มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร

อลงกรณ์ มีสุทธา และสมิต สัชฌกร. (2554). **การประเมินผลการปฏิบัติงาน.** กรุงเทพมหานคร :สมาคมส่งเสริม เทคโนโลยี (ไทย - ญี่ปุ่น)

อัจฉรา สระวาสี (2559). **การพัฒนารูปแบบสมรรถนะของผู้บริหารสถานศึกษา.** วิทยานิพนธ์ศึกษาศาสตร มหาบัณฑิต สาขาการบริหารการศึกษา มหาวิทยาลัยศรีนครินทรวิโรฒ

Blancero, D. Boroski, L. & Dyer, L. (1996). **Key Competencies, Transformed Human Resource Organization: Field Study.** Human Resource Management. 35 (1): 3-13

Boyatzis, R.E. (1982). **The Competentcies Manager.** NewYork: Wiley & Son.

Cronbach, L. J. (1990). **Essentials of Psychological Testing.** NewYork Harper Collins. Daft. L.R. (2008). Management. 10th Ed. Thomson South-West. Tennesee.

Drucker. F. P. (1999). **Management Challenges for the Century.** NewYorkHarperCollins.

Ivancevich, J.M. (1998). **Competence at Work: The Managerial Perspective Performance.** NewYork: John Matteson.

Krejcie, R. V., & Morgan, D. W. (1970). **Determining Sample Size for Research Activity and Psychological Measurement.** 30(3): .607-610.

McClelland, D.C. (1973). **Testing for Competence rather than Intelligence. American Psychologist.** 28 (1): 1-14

OHagan, K. (1996). **Competence in Social Work Practice: A Practical Guide for Profressional.** London: Prentice Hall.

Parry, Scott B. (1998). **"The Quest for Competencies."** Journal of Training: 48-56.

Spencer Mark. (1993). **Competence at Work: The Model for Superiors Performance.** New York: John Wiley & Sons.

Yamane, T. (1973). **Statistic: Introductory Analysis.** 3rd ed. NewYork: Harper & Row.

Model of Dual VET-System Invocational Colleges
under Liaoning Province

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ABSTRACT

The objectives of this research were: (1) to explore the components of dual VET-system model in vocational colleges under Liaoning Province;(2) to develop the managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning Province; and (3) to verify the model of dual VET-system in vocational colleges under Liaoning Province, the People's Republic of China.

The research methodology was a mixed methodology research, including qualitative and quantitative research. Population of the research consisted of 455 who were manager, professors, instructors, administrators of vocational education institutes. The sample size was determined by Krejcie and Morgan's Table (1970), obtained by a stratified sampling technique, totaling 339 samples. The key informants were consisted of instructors of vocational colleges, managers of enterprise under Liaoning Province, leaders of the vocational colleges under Liaoning Province, who have more than 10 years' experience and have very deep understanding in vocational education field, obtained by purposive sampling method. The instruments used for data collection were semi-structured interview form, five-point rating scale questionnaire, and Focus Group Discussion form. The statistics used for data analysis were frequency, percentage, mean, Standard Deviation, and Exploratory Factor Analysis as well as the content analysis was employed.

The research findings were revealed that: (1) there were five components of dual VET-system in vocational colleges under Liaoning province which were policy for dual VET-system in vocational colleges, vocational teaching method for dual VET system, school-enterprise

cooperation for dual VET system, concept and attitude for dual VET-system, vocational education management method for dual VET system, (2) there are total 19 managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning province which were consisted of five managerial guidelines for component of policy for dual VET-system, four managerial guidelines for component of vocational teaching method for dual VET system, four managerial guidelines for component of school-enterprise cooperation for dual VET system, three managerial guidelines for component of concept and attitude for dual VET system, and three managerial guidelines for component of vocational education management method for dual VET system and (3) the researcher built up the model of dual VET-system in vocational colleges under Liaoning province based on the 17 managerial guidelines which were verified by five key informants with connoisseurship, and four more managerial guidelines connoisseurship open ending comments.

Keywords: Dual VET-system, Vocational Colleges, Liaoning Province

1. Introduction

Dual Vocational Education Training System (Dual VET-System) is a distinctive form of vocational education. It originated in Germany, was borrowed after China's reform and opening, and gradually integrated into China's vocational education system (Ren, 2013, p.34). The development of vocational education has existed for a long time in China's educational history and has been steadily developing today. Dual VET-system has always been the mainstream vocational education in China (Wang, 2017, p78). It is mainly a form of cooperation between enterprises and vocational colleges, which can not only improve the employment rate, but also provide stable talent output for enterprises. The dual VET-system is a vocational training model to achieve a win-win situation.

In this research, researcher focus on the region Liaoning Province in northeast part of China, because of its special geographical location, the industrial structure is single, and the vocational education system is backward development. As a result, the problem of low employment and population loss remains difficult to solve. Researchers indicated that developing a quality model of dual VET-system will promote the development of vocational education and training in vocational colleges under Liaoning Province, and at the same time solving many social problems in this region, such as low employment, population loss, and unbalanced development of talents. The researcher firmly believes that this is the purpose and significance of this research (Su, 2011).

It is necessary to develop a quality model of dual VET-system with Liaoning regional characteristics because vocational education is developing rapidly in China, and Liaoning's vocational education must keep pace. With the development of economy and society, the division of specialization is becoming increasingly sophisticated, and the importance of technical talents to economic and social development is becoming increasingly prominent, and the demand is particularly urgent (Tan, 2015, p.6). Vocational education, as one of the four sub-systems of the modern education system in China, is one of the educational forces for training technical talents, and the relationship with social economy is particularly close. In recent years, the state has committed itself to the development of vocational education and promulgated a large number of documents and policies, with the goal of completing the fundamental transformation from a major country in vocational education to a powerful country in vocational education by the middle of this century.

As a researcher, this research is a beginning focus on dual VET-system under Liaoning province. The researcher is a professional course taught in colleges and universities and has many years of teaching experience in related fields of dual VET-system under Liaoning province. In this research, the researcher focusses on study and construct the model of dual VET-system to investigate the situation about the development of vocational education in Liaoning region. Researcher hopes to take this opportunity to promote the improvement of vocational education policy, the rationality of vocational education curriculum setting, and the scientific of vocational college management methods, to achieve better development of vocational education and increase the employment rate.

2. Research Questions

1. What are the components of dual-VET system in vocational colleges under Liaoning Province?

2. What are the managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning Province?

3. What is the verified model of dual-VET system in vocational colleges under Liaoning Province?

3. Research Objectives

1. To explore the components of dual-VET system model in vocational colleges in vocational colleges under Liaoning Province.

2. To develop the managerial guidelines for developing model of dual-VET system in vocational colleges under Liaoning Province.

3. To verify the model of dual VET-system in vocational colleges under Liaoning Province.

4. Research Instruments

1. Semi-structured interview form, tape record

2. Five - point rating scale questionnaire

3. Focus Group Discussion form

4. Connoisseurship form

5. Research Methodology

The research was mixed methodology design which were comprised of quantitative research and qualitative research. There were four processes of research which were research proposal preparation, research procedures, and research report. The research procedures consisted of four steps:

(1) Studying the variables of dual vet-system in vocational colleges under Liaoning province.

(2) Exploring the components of dual vet-system in vocational colleges under Liaoning province.

(3) Developing the managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning province

(4) Verifying the model of dual VET-system in vocational colleges under Liaoning province.

Study area selection

This research defined the scope of the study mainly focus on Shenyang, Dalian, Anshan three big cities under Liaoning province. These three cities represent the northern, central, and southern regions of Liaoning Province, respectively. The researcher investigated and studied six vocational colleges and four large public state-owned enterprises in this area.

Key informants

In Semi-structured interview form, the key informants are consisted of instructors, supervisors, administrators and managers of vocational colleges and leaders of enterprises, totaling 7, who had more than 10 years' experience from four outstanding vocational colleges and enterprise under Liaoning Province. They are professionals with vocational education

management experience or using relevant management experience to carry out work. They have reasonable experience or certain achievements in vocational colleges and enterprise cooperation, and their success in dual VET-system field has been widely recognized. The key informants without relevant mature ability or experience are from ordinary instructors. Key informants were selected by purposive sampling technique with the above criteria. They are from the outstanding vocational colleges and enterprise under Liaoning Province named Dalian Polytechnic college, Liaoning Petrochemical Vocational Technical College, Liaoning Vocational and Technical College of Architecture. Ansteel group (Steel production corporation).

In managerial guidelines part, the key informants are consisted of 7 key informants who are Shili Zha, Jian Zheng, Changfu Wu, YangYang, Changying Wu and Yanhong Fu from different outstanding in dual VET-system in vocational colleges with more than 10 years' experience under Liaoning Province. They are professionals with vocational education or using relevant management experience to carry out work. They have reasonable experience or certain achievements in dual VET-system, and their success in vocational education field has been widely recognized. The key informants without relevant mature ability or experience are from ordinary instructors. Key informants were selected by purposive sampling technique with the above criteria.

In connoisseurship, the key informants are consisted of 5 key informants who are Jian Zheng, Lang Jiang, Guoqi Yang, Dongyan Hou, and Jun Niu from different outstanding in dual VET-system in vocational colleges with more than 10 years' experience under Liaoning Province. They are professionals with vocational education or using relevant management experience to carry out work. They have reasonable experience or certain achievements in dual VET-system, and their success in vocational education field has been widely recognized. The key informants without relevant mature ability or experience are from ordinary instructors. Key informants were selected by stratified random sampling method with the above criteria.

Population and samples

Population consisted of 455 who were managers, professors, instructors, administrators of dual VET-system in vocation colleges and enterprises under Liaoning Province. They came from 6 colleges and 4 enterprises, which were classified according to the scale and professional skills of vocational education institutes. The researcher determined sample size with Krejcie and Morgan's Table (1970). The sample was managers, professors, instructors, supervisors, administrators, totaling 339, with a stratified random sampling technique.

Data Collection

Data collection was performed by the researcher. Get in touch with key informants and show your identity and willingness. Send the questionnaire by email or other means. Interview was performed by researcher.

The Item Objective Congruent (IOC) and Five Point Rating Scale questionnaires were sent by email and researcher.

By Focus Group Discussion, the researcher was as a facilitator.

(1) Get in touch with key informants and show your identity and willingness, (2) visit or send questions by email or other means, (3) Summarize the discussion and specific content.

By connoisseurship, the researcher was as a facilitator.

(1) Get in touch with key informants and show your identity and willingness, (2) visit or send questions by email or other means, (3) Summarize the discussion and specific content.

Data Analysis

The data from semi-structure interview form was analysis by content analysis.

The data of demographic variables were analysed by descriptive statistics, frequency, and percentage. The variables of dual VET-system model were analysed by descriptive statistics; mean, Standard Deviation (S.D.). The components of dual VET-system model were analysed to reduce irrelevant variables.

EFA was used when a researcher wanted to discover the number of factors influencing variables and to analyze which variables 'go together' (DeCoster, 1998). A basic hypothesis of EFA was that there were m common 'latent' factors to be discovered in the dataset, and the goal was to find the smallest number of common factors that would account for the correlations (McDonald, 1985). Another way to look at factor analysis was to call the dependent variables 'surface attributes and the underlying structures (factors) 'internal attributes' (Tucker & MacCallum, 1997). Common factors were those that affect more than one of the surface attributes and specific factors were those which only affected.

The data from Focus Group Discussion was analyzed by Content Analysis. After the completion of content collection, will be used to analyze the collected content. The Focus Group Discussion was chaired by the researcher, this discussion was about the "managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning province".

Based on the principle of freedom and voluntariness, the experts spoke freely during the discussion, gave the direction of objective 2 (the managerial guidelines of developing dual VET-system in vocational colleges under Liaoning province). According to the research results

of researcher objective 1(to explore the components of the model of dual VET-system in vocational colleges under Liaoning province) and gave more new ideas on the managerial guidelines for each component of dual VET-system in vocational colleges under Liaoning province, for the objective 2 (to develop the managerial guidelines of developing dual VET-system in vocational colleges under Liaoning province).

The data from connoisseurship was analyzed by Content Analysis.

6. Results

the result of data analysis from research instruments were presented in 4 sections as follows:

Section 1: Result of Content Analysis on Variables of Dual VET-system in vocational colleges under Liaoning Province.

Section 2: Result of Data Analysis to explore the components of Dual VET-system in vocational colleges under Liaoning Province.

Section 3: Result of Data Analysis to develop the managerial guidelines for developing model of Dual VET-system in vocational colleges under Liaoning Province.

Section 4: Result of Data Analysis to verify the result of Dual-VET system in vocational colleges under Liaoning Province.

Section 1

From the outline of variables from review of literature and related research, there were five main variables, and 78 sub-variables. Then, the research has prepared semi-structured interview from to conduct interview from 7 key informants who were instructors, directors of vocational colleges, managers of enterprise under Liaoning province, leaders of the vocational colleges under Liaoning province obtained by purposive sampling method.

There were 76 variables from interview of key informants. The researcher has employed content analysis. As result, total 154 variables were found and prepare a research instrument as a five-point rating scale questionnaire. The quality of instruments has been verified by Content Validity and Reliability.

For Content Validity of questionnaire, the researcher has sent questionnaire to five experts for verification. The Item-Objective Congruence (IOC) was used to evaluate the items of the questionnaire based on the score range from -1, 0, +1. The items that had scores lower than 0.6 were revised. On the other hand, the items that had scores higher than or equal to 0.6 were reserved. As a result, it was found that there were 73 items of questionnaire.

For Reliability of questionnaire is a way of assessing the quality of the measurement procedure used to collect data. The researcher has sent out 30 questionnaires to collect data from non-samples in order to consider a result of reliability. Cronbach's alpha coefficient on or above 0.70 means adequate reliability to determine the internal consistency or average correlation of items in a research instrument to measure reliability of the questionnaire. As a result, Cronbach's alpha coefficient was at .977 which can be used to describe the reliability of questionnaire.

Section 2

Part I: From Table 01, it was summarized that there was total 339 responders to the questionnaire: 121 females, 25.6 percent, and 218 males, 64.3 percent. For ages, it was found that majority of respondents were 25 – 30 years old, totaling 5, 1.4 percent. 30 -40 years old, totaling 57, 16.8 percent. 40 – 50 years old, totaling 277, 81.7 percent. For the educational qualification, it was found that the most of respondents were bachelor's degree or equivalent, totaling 212, 62.5 percentage, followed by master's degree or equivalent with 124, 36.5 percent. The lowest number was Doctoral degree or equivalent, with 3, 0.8 percent. From the perspective of working experience in entrepreneurship education and management, 5 – 10 years of personal accounted for 1.4 percent, totaling 5 people. 10 – 20 years of personal accounted for 16.8 percent, totaling 57. More than 20 years of personal accounted for 81.7 percent, totaling 277 people. From the positional level, there were 200 instructors, 44 supervisors, 64 directors, 15, managers and 16 administrators.

Table 1: Frequency and percentage Result of Data Analysis for Questionnaire: Demographic Information

Demographic Information	Frequency	Percentage
1.Gender		
Male	218	64.3%
Female	121	35.7%
2.Age		
25-30	5	1.5%
30-40	57	16.8%
40-50	277	81.7%
3.Educational Degree		
Bachelor	212	62.5%
Master	124	36.6%

Demographic Information	Frequency	Percentage
Doctor	3	0.9%
4.Work Experience		
5-10 years	5	1.5%
10-20 years	57	16.8%
More than 20 years	277	81.7%
5.Positional level		
Instructor	200	59.2%
Director	64	18.8%
Supervisors	44	12.9%
Manager	15	4.4%
Administrator	16	4.7%

Part II:

Data Analysis Result on Questionnaire: Exploratory Factor Analysis

The researcher conducted an Exploratory Factor Analysis of effectiveness for entrepreneurship education management in colleges and universities under Liaoning Province in accordance with the following procedures: Variable analysis of components of effectiveness for entrepreneurship education management in colleges and universities under Liaoning Province. The researcher analyzed the arithmetic mean and standard deviation (S.D.) by comparing the derived arithmetic mean to the criteria based on Best' s concepts.

It was found that overall, 73 questions the arithmetic mean was between 3.23-4.77, indicating that the respondents had an opinion on the level value of the variable by the arithmetic mean ($\bar{X}$) from moderate to high, standard deviation was between 0.65-1.14, indicating that respondents have quite different opinions on the variable.

The variables with the greatest arithmetic values were variable number 25, The policy of vertical integration of vocational education at different levels affects the dual VET system. there was an arithmetic mean 4.77standard deviation 0.68,indicating that the informants have almost the same opinion on the variables; variable 72, Vocational education dual certificate system construction affects the dual VET system, there was an arithmetic mean 4.65 standard deviation 0.65, variable 27 Make innovations in school-enterprise cooperation in running schools affects the dual VET system, there was an arithmetic mean 4.63 standard deviation 0.65 and variable 26 Policies to optimize the supply structure of vocational education affects the dual VET system, 4.51standard deviation 0.71 indicated that the informant has moderately

different opinions, and the variables with the smallest arithmetic values are variable 19, With the future of our country vocational education development trends and trends of policy affects the dual VET system with arithmetic values 3.23 standard deviations. 1.51 indicates that the informant has a very different opinion about with the future of our country vocational education development trends and trends of policy affects the dual VET system. Considering the number of fact levels. It found that 1 moderate fact accounted for 1.3% percent, 72 high facts accounted for 98.6 percent.

Part III: Data Analysis Result on Section III of Questionnaire: Exploratory factor analysis of components of Dual VET system in vocational colleges under Liaoning province.

1. KMO-Meyer-Olkin and Bartlett's Test

Exploratory Factor Analysis using ready-made programs, an important preliminary agreement was to verify the suitability used to analyze the components. Comrey and Lee offered guidelines for determining enough samples to analyze the component, saying that the number of 50 samples was extremely inappropriate. The number of 100 samples was inappropriate. A fair number of 200 samples, the number of 300 samples was good, the number of 500 samples was very good, and the number of more than 1,000 samples was the best, which corresponded to Tabachnik and Fidell, which confirmed that Factor Analysis required at least 300 samples.

In addition, it was reviewed using test statistics, which hereby used variable statistical monitoring to be related based on KMO and Bartlett's Test values, with the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) between 0-1, and Bartlett's Test of Sphericity, test statistics testing variables to see if they were related.

Table 2: Shows KMO-Meyer-Olkin and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.977
Bartlett's Test of Sphericity	Approx. Chi-Square	28639.605
	df	3305
	Sig.	.000

2. Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance of the components of dual VET-system in vocational colleges.

This phase of analysis used factor extraction by Principal Component Analysis (PCA) with orthogonal rotation et.al and varimax rotation. The used criteria for considering factors

were as follows; (1) 0.4 or higher was a practically significant factor loading, (2) eigenvalues greater than 1 according to Kaiser's Criterion, and (3) there were more than 3 variables hatcher. When considering the above criteria, the number of components and the variance of the variables were obtained as shown in Table 3.

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	37.850	45.602	45.602	37.850	45.602	45.602	30.543	36.798	36.798
2	11.851	14.278	59.880	11.851	14.278	59.880	13.709	16.516	53.315
3	12.718	13.274	63.155	12.718	13.274	63.155	15.179	16.240	59.554
4	11.835	12.210	65.365	11.835	12.210	65.365	13.143	13.967	63.521
5	11.639	11.975	67.340	11.639	11.975	67.340	12.443	13.043	66.565

Extraction Method: Principal Component Analysis.

From Table 3 shows the number of components of dual VET-system in vocational colleges. It was found that there were 5 components with an Eigenvalues greater than 1. When rotating the axis, it explained a total variance of 71.598 percent, but considering the selection criteria, components with factor loading at 0.4. There were more than 1 Eigenvalues and more than 3 or more variables that described components.

The components that met all 5 criteria's when the axis was rotated, component 1 had a maximum Eigenvalues of 45.602, it can explain the total variance of 36.798 per component, component 2 had a maximum Eigenvalues of 14.278, it can explain the total variance of 16.516 per component, component 3 had a maximum Eigenvalues of 13.274, the total variance can be explained by 16.240 percent, component 4 had a maximum Eigenvalues of 12.210 , it can explain the total variance of 13.967 percent, component 5 had a maximum Eigenvalues of 11.975, explaining the total variance of 13.043 percent, and other components had an Eigenvalue and the ability to describe it, all variance gradually decreased accordingly, and the components that met certain criteria were components 1-5, it was found to be able to explain a total variance of 66.564.

3. The factor loading, variables described in each of the main components after rotating the axis

As a result, the components of dual VET-system in vocational colleges under Liaoning province were found to be based on the criteria for selecting components. There were 5 components; component 1, 27 variables; component 2, 13 variables; component 3, 10 variables; component 4, 10 variables; component 5, 13 variables.

There were five qualified components as follows; component 1 containing 27 variables that described component, factor loading between 0.649-0.893; component 2 containing 13 variables that described component, factor loading between 0.654-0.862; component 3 containing 10 variables that described component, factor loading between 0.695-0.849; component 4 containing 10 variables that described component, factor loading between 0.796-0.877; component 5 containing 13 variables that described component, factor loading between 0.699-0.899. The total number of variables that described the five components were 37 variables, factor loading between 0.649-0.893.

Order	Components	Number of Variables	Factor Loading
1	Component 1	27	0.649-0.893
2	Component 2	13	0.654-0.862
3	Component 3	10	0.695-0.849
4	Component 4	10	0.796-0.877
5	Component 5	13	0.699-0.899
Total		73	0.649-0.899
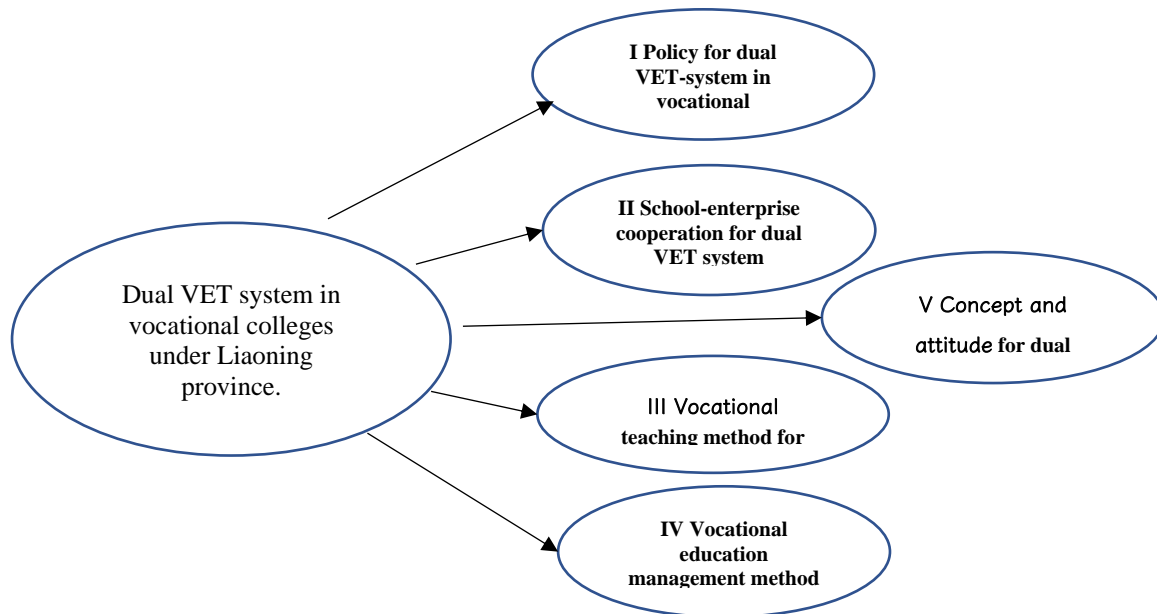
Figure 1: Shows the Components of "The components of dual VET-system in vocational colleges under Liaoning province."

From Figure, it was summarized that: It explained that the components of the components of dual VET-system in vocational colleges under Liaoning province consisted of five parts:

1. Policy for dual VET-system in vocational colleges.

2. Vocational teaching method for dual VET system.

3. School-enterprise cooperation for dual VET system.

4.Concept and attitude for dual VET system.

5. Vocational education management method for dual VET system.

Section 3:

The Focus Group Discussion was provided by the researcher online and offline. This discussion was about the "developing the managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning Province"

As a result, there were total 19 dual VET-system model development guidelines: Consisted of (1) Reform the vocational education system, increase government subsidies for the development of vocational education, and realize socialized schools, (2) Broaden the channels of enrolment, reform the teaching model, and give priority to open teaching, (3) Strengthen school-enterprise cooperation policies and increase government support for school-enterprise cooperation, (4) Pushing forward the innovation of vocational education policy, (5) Accelerate the implementation of higher vocational education "dual certificate"
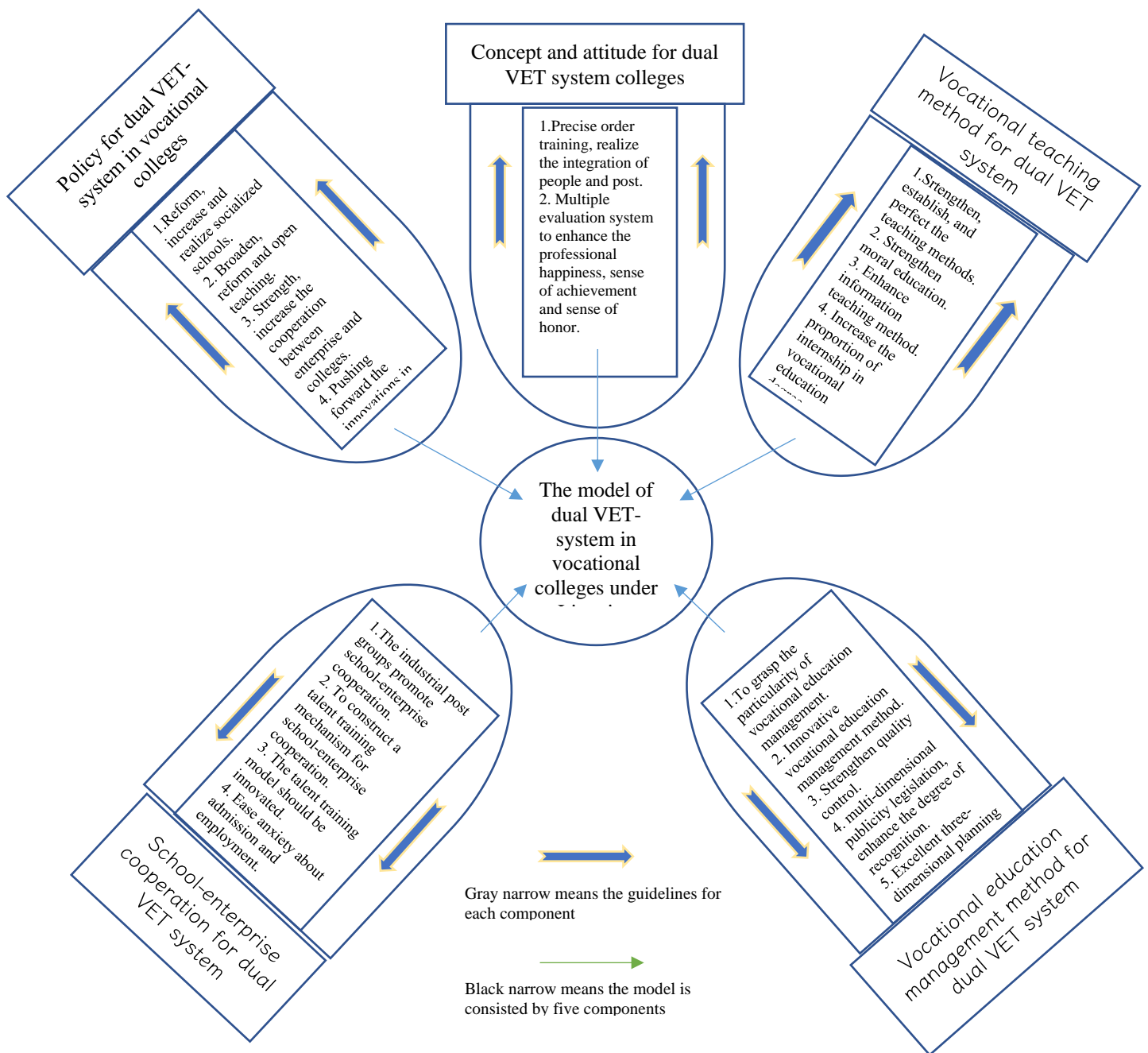
system construction, that is, the bachelor's degree and the college degree are equally important policy, (6) Strengthen theoretical research, establish, and perfect vocational education teaching methods and research system theory, (7) Moral education should be given priority in the process of education, (8) Enhance information teaching, make teaching methods in line with The Times, (9) Increase the proportion of internship in vocational education, (10) The industrial post groups promote school-enterprise cooperation, (11) To construct a talent training mechanism for school-enterprise cooperation, (12) Courses development for school-enterprise cooperation, (13) Bring business masters into the campus, (14) Change the prejudice against vocational education, (15) The talent training model should be innovated, not simply copied, and transplanted, (16) Vocational education should be used to ease anxiety about admission and employment, (17) To grasp the particularity of vocational education management, (18) Innovative vocational education management model, (19) Strengthen quality control.

Section 4:

The Connoisseurship meeting was provided by the researcher online and offline. This discussion was about the verifying the result of model of dual VET-system in vocational colleges under Liaoning Province"

Base on the managerial guidelines from research objective 2 (developing the managerial guidelines for developing model of dual VET-system in vocational colleges under Liaoning province) and the verified direction of objective 3 (to verify the result of the model of dual VET-system in vocational colleges under Liaoning Province), the researcher built up the model of dual VET-system in vocational colleges under Liaoning province.

The model figure shows in next page.

Policy for dual VET-system in vocational colleges

1.Reform, increase and realize socialized schools.
2. Broaden, reform and open teaching.
3. Strength, increase the cooperation between enterprise and colleges.
4. Pushing forward the innovations in

Concept and attitude for dual VET system colleges

1.Precise order training, realize the integration of people and post.
2. Multiple evaluation system to enhance the professional happiness, sense of achievement and sense of honor.

Vocational teaching method for dual VET system

1.Srtengthen, establish, and perfect the teaching methods.
2. Strengthen moral education.
3. Enhance information teaching method.
4. Increase the proportion of internship in vocational education degree

The model of dual VET-system in vocational colleges under Liaoning

School-enterprise cooperation for dual VET system

1. The industrial post groups promote school-enterprise cooperation.
2. To construct a talent training mechanism for school-enterprise cooperation.
3. The talent training model should be innovated.
4. Ease anxiety about admission and employment.

Vocational education management method for dual VET system

1. To grasp the particularity of vocational education management.
2. Innovative vocational education management method.
3. Strengthen quality control.
4. multi-dimensional publicity legislation, enhance the degree of recognition.
5. Excellent three-dimensional planning

Gray narrow means the guidelines for each component

Black narrow means the model is consisted by five components

6. Conclusion:

In the conclusion, this part focus on the study of model of dual VET-system in vocational colleges under Liaoning province. It is included research objectives, research questions, populations, samples, key informants, research methodology, research instruments, statistics, and research findings.

Based on all the above studies, the model of dual VET-system is consisted by five components which are policy for dual VET-system in vocational colleges, Vocational teaching

method for dual VET system, School-enterprise cooperation for dual VET system, Concept and attitude for dual VET system, Vocational education management method for dual VET system.

All the components correspond to the managerial guidelines from the experts. After that, the prototype of the original model of dual VET-system in vocational colleges under Liaoning province was verified and the final model was built up.

7. Discussions

Summarize on discussion about the model of dual VET-system in vocational colleges under Liaoning province:

According to Qingheng Shi (2018, p5-8), Tengfei Ma (2021, p19) which was found that dual VET-system under Liaoning province, more efforts should be made to promote school-enterprise cooperation, and the government should encourage cooperation between enterprises and vocational schools. At the same time, companies need to provide plenty of internship opportunities for vocational school students. To achieve the purpose of two-way income. Also, the findings were in the same direction with Hui Xing (2017, p.19) and Zengyuan Ren (2013, p.34). Moreover, from the research of Song Chen (2021, p.57), Today's vocational education needs to solve the problem is to train the production, construction, management, service in line with the needs of the first line of high-quality skilled professional. Corresponding to the research of Jun Ma (2021, p.20-25) and Ji Liu (2020, p.98)

According to Yimei Lv (2013, p12), Yunhua Zhang (2015, p34) which was found that vocational education should realize the innovation from the idea of running a school to the innovation of student group training, and then to the overall innovation of the content of industry-university cooperation. With the development of vocational education, the concept of vocational education in the future should develop with the development of social education, and constantly innovate, which is suitable for the development of vocational colleges. Also, the findings were in the same direction with Zhengguang Lei (2020, p.57) and Zengyuan Ren (2013, p.34). The change of vocational education development concept and student group will inevitably bring about the change of teaching method and training mode, and the change of school curriculum setting mode. Future vocational colleges should be the leader of curriculum development. Corresponding to the research of Jian Dong (2023, p.20-25) and Hui Xing (2021, p.98) However, the research of Weiping Shi (2019, p.93-97), it was found that the development of vocational education model in our country is the same challenge

and difficulty. The development of vocational education needs the joint efforts of government, colleges, teachers, and students. The government should create a good environment for the development of vocational education, encourage and support the development of vocational education.

8. Recommendations

1. Recommendation for Policies Formulation

At present, the development of dual VET-system in vocational colleges state has aroused the attention of the government. The government is pushing forward the reform of the vocational education system and establishing a set of vocational education system in line with Chinese characteristics.

2. Recommendation for Practical Application

To achieve the future development goals of VET-system in vocational colleges under Liaoning province, the government should formulate relevant policies to reform the current vocational education system, standardize the development of vocational education, and guarantee the quality of vocational education. The medium- and long-term policies of vocational education need to form two levels of development strategies: the environment construction of vocational education to pursue its own ideal and the response to the impact of university ideas; The national system design gives priority to school development planning and considers market demand.

3. Recommendation for Further Research

In the future, the development of VET-system in vocational colleges under Liaoning province should focus on the following aspects:

1. In the aspect of individual researcher, in the research about model of dual VET-system, researcher should invest more time to integrate into the daily study and production of enterprises and colleges. The purpose of this is to obtain more accurate research information and samples. The conclusion of close contact with the subjects for a long time will be more accurate and comprehensive than a simple questionnaire. At the same time, many schools that researchers want to investigate are not authorized for various reasons. This makes it impossible for the research to proceed smoothly. In the future, the researchers hope to have the opportunity to get answers from these unplaced schools in questionnaires or interviews.

2. The dual VET-system not only needs to be optimized in Liaoning area. This system may be needed for education throughout the northeast and even the whole of China.

The researchers hope to have the opportunity to expand the scope of this study and get more and more different conclusions in the future.

   3. Here are the further research recommendations for other researchers in the same direction. Because different regions have different characteristics of vocational education. Of course, this has something to do with the industrial system and industrial tradition of the region. Then according to this point, the research on vocational education must be very diversified. Therefore, the further research recommendations that it must be based on the major of the vocational college and the development direction of the relevant enterprises. The survey results obtained in this way will be more accurate. At the same time, If the vocational colleges surveyed are in the same direction as the relevant enterprises, experts can also give the most pertinent and professional advice in their more familiar areas.

Bibliography

Chen, Song. (2004). **Forecast of development scale of secondary vocational education in different regions of China in the Next few Years.** Vocational and Technical Education, p.31.

Dong, Jian. (2023). **Cultivation of College Students' entrepreneurial ability from the perspective of case teaching.** Jiangsu Higher Education (04), p.20-p.25.

Lei, Guangzheng. (2020). **Marx's theory of human all round development and Its Enlightenment on innovation and entrepreneurship education in Colleges and Universities: a case study of the questionnaire survey of H University.** Innovation and Vocational Education (04), p.1-p.6.

Lv, Yimei. (2003). **Innovation of management and operation mechanism of entrepreneurship education in colleges and universities from the perspective of comparative studies.** China Adult Education (15), p.12-p.15.

Liu, Ji; Butcher, Nail. (2021). **Europe Skills for Competitiveness Leveraging Skills for Competitiveness in Europe.** Washington, D.C.: World Bank Group: p.50-p.51, p.89.

Ma, Tengfei (2021). **Peiyang xuesheng jingzheng yishi zhi wojian, my thoughts about cultivating students' consciousness.** China Academic Journal Full-Text.

Ma, Jun; Zhang, Yufeng; Liu, Ji. (2021). **The typical mode, theory logic and practice of public-private cooperation in vocational education; Vocational and technical education in China.** p.20-p.29.

Ren, Zengyuan. (2013). **Innovation of management and operation mechanism of vocational education in colleges and universities from the perspective of comparative studies.** China Adult Education (15), p.12- p.37

Su, Xiaohuan. (2011). **Education leadership theory literature review.** The world of educations. (11), p. 53.

Shi, Qiuheng. (2019). **Empirical research on the construction of vocational educationteachers in colleges and universities in the new era.** China, Beijing. Social Science Publishing House: p.35.

Shi, Weiping, Hao, Tiancong. (2019). **Deep integration of production and education with school-enterprise dual education: Implementation Plan of National Vocational Education Reform .** China Vocational and Technical Education, p.93-p.97

Tan, Siyan. (2015). **Introduction: Globalization and higher education in the Americas. In R.A. Rhoads & C.A. Torres (Eds.), The university, state, and market: the political economy of globalization in the Americas.** Stanford, California: Stanford University Press. p.3-p8.

Wang, Jiayuan. (2017). **Xuexiao deyu jiaoyu zhong de jingzheng yishi peiyang: Cultivating competition consciousness in school moral education.** Jiaoxue Yu Guanli, 23. China Academic Journal. p.78-p.80.

Xing, Hui. (2021). **Xuexiao ying guangfan kaizhan jingzheng jiaoyu [Schools should widely provide competition education].** Jiaoyu Tansuo, 11, p.54–p.56. China Academic Journal Full-Text.

Zhang, Yunhua. (2015). **Cultivation of College Students' entrepreneurial ability from the perspective of case teaching.** Jiangsu Higher Education (04), p.92-p.94.

การเปรียบเทียบผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่องการระเหยแห้ง ระหว่างการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ ของนักเรียนชั้นมัธยมศึกษาปีที่ 2 โรงเรียนสามัคคีศึกษา

Comparison of Learning Achievements in Physical Science Development on Dry Evaporation between Inquiry-Based Learning Management (5e) and Traditional Learning of Mathayomsuksa 2 Students at Samakkeesuksa School

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บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อ (1) ศึกษาความก้าวหน้าทางการเรียน (2) เปรียบเทียบผลสัมฤทธิ์ทางการเรียนระหว่างการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ และ (3) เปรียบเทียบความพึงพอใจของนักเรียนต่อการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ ซึ่งดำเนินการวิจัยกับนักเรียนชั้นมัธยมศึกษาปีที่ 2/1 กลุ่มแรก จำนวน 32 คน ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) และนักเรียนชั้นมัธยมศึกษาปีที่ 2/2 กลุ่มสอง จำนวน 30 คน ได้รับการจัดการเรียนรู้แบบปกติ เครื่องมือที่ใช้ในการวิจัย ประกอบด้วย (1) บทเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง (2) แผนการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) (3) แผนการจัดการเรียนรู้แบบปกติ (4) แบบทดสอบวัดผลสัมฤทธิ์ทางการเรียน และ (5) แบบสอบถามความพึงพอใจ

ผลการวิจัยพบว่า (1) นักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) มีความก้าวหน้าทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง อยู่ในระดับสูง (High Gain) $<g>$ เท่ากับ 0.77

(2) นักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) เรื่อง การระเหย แห้ง มีผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพสูงกว่านักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติ อย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และ (3) นักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่ได้รับการจัดการเรียนรู้แบบสืบ เสาะหาความรู้ (5E) เรื่อง การระเหยแห้ง มีความพึงพอใจมากกว่านักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติ อย่างมีนัยสำคัญทางสถิติที่ระดับ .01

คำสำคัญ: ผลสัมฤทธิ์ทางการเรียน, สาระวิทยาศาสตร์กายภาพ, การจัดการเรียนรู้แบบสืบเสาะหาความรู้ การจัดการเรียนรู้แบบปกติ

ABSTRACT

This objective of this research were: (1) to study students' learning gains; (2) to compare Learning Achievements between inquiry-based learning (5E) and traditional learning; and (3) to compare students'satisfaction with the Inquiry-Based Learning Management (5E) and the traditional learning management. The first group was an experimental group, consisting of 32 students in Mathayomsuksa 2/1 who received Inquiry-Based Learning Management (5E). The second group was a control group, consisting of 30 students in grade 2/2 who received normal learning management. The research instruments included: (1) Physical Science development lesson on Dry Evaporation; (2) Inquiry-Based Learning Management plan (5E); (3) normal learning plan; (4) Achievement test; and (5) satisfaction questionnaire. Statistics used in data analysis were percentage, mean, and standard deviation. Learning progress Normalized Gain(<g>) and Independent t-test.

The results of research were found: (1) Mathayomsuksa 2 students who received Inquiry-Based Learning Management (5E) had progress in the Physical Science development on evaporation with learning progress scores. Is at a high level (High Gain) <g> equal to 0.77 (<g> ≥ 0.7 = High gain); (2) Mathayomsuksa 2 students who received Inquiry-Based Learning management (5E) on Dry Evaporation had higher learning achievement in Physical Science development than students who received traditional learning management with statistically significant at the .01 level; and (3) Mathayomsuksa 2 students receiving Inquiry-Based Learning management (5E) on Dry Evaporation. They were more satisfied than students who received traditional learning arrangements with statistically significant at the .01 level.

Keywords: Learning Achievements, Physical Science Development, Inquiry-based Learning Management, Traditional Learning Management

1. บทนำ

การเรียนรู้วิทยาศาสตร์ในศตวรรษที่ 21 เป็นการกำหนดแนวทางในการจัดการเรียนรู้ที่เน้นองค์ความรู้ ทักษะ ความเชี่ยวชาญ และสมรรถนะที่เกิดกับตัวผู้เรียน เพื่อใช้ในการดำรงชีวิตในสังคมแห่งความเปลี่ยนแปลงของโลกในปัจจุบัน (วิจารณ์ พานิช, 2556: 14-15) ดังนั้นทุกคนจึงจำเป็นต้องได้รับการพัฒนาความรู้ทางวิทยาศาสตร์ เพื่อให้มีความรู้ความเข้าใจในธรรมชาติและเทคโนโลยีและนำความรู้ไปใช้ในชีวิตประจำวันได้ ทิศนา แขมมณี (2561: 120) ได้กล่าวไว้ว่า การจัดการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญเป็นการจัดการเรียนรู้ที่ยึดผู้เรียนเป็นตัวตั้ง โดยคำนึงถึงความเหมาะสมกับผู้เรียน และประโยชน์ที่ผู้เรียนจะได้รับมีการจัดกิจกรรมการเรียนรู้ที่เปิดโอกาสให้ผู้เรียนได้มีบทบาทสำคัญในการเรียนรู้ มีส่วนร่วมในกิจกรรมการเรียนรู้อย่างตื่นตัว และได้ใช้กระบวนการเรียนรู้ต่าง ๆ จะทำให้ผู้เรียนเกิดการเรียนรู้ที่แท้จริง ซึ่งวิธีการจัดการเรียนรู้มีหลากหลายวิธีสอน เช่น การจัดกิจกรรมการเรียนรู้แบบกาเย่ การจัดกิจกรรมการเรียนรู้แบบใช้คำถาม การจัดกิจกรรมการเรียนรู้แบบสอนเน้นความจำ การจัดกิจกรรมการเรียนรู้แบบโมเดลซิปปา การจัดกิจกรรมการเรียนรู้แบบโครงงาน การจัดกิจกรรมการเรียนรู้ โดยการนำเสนอมโนทัศน์กว้างล่วงหน้า การจัดกิจกรรมการเรียนรู้แบบใช้ปัญหาเป็นฐาน การจัดกิจกรรมการเรียนรู้แบบนิรนัย และการจัดกิจกรรมการเรียนรู้แบบสืบเสาะหาความรู้ การจัดกิจกรรมดังกล่าวข้างต้น เป็นการจัดกิจกรรมที่มุ่งเน้นนักเรียนเป็นสำคัญ การจัดการเรียนรู้แบบสืบเสาะหาความรู้ เป็นการจัดกิจกรรมหนึ่งที่มุ่งเน้นให้นักเรียนเกิดการเรียนรู้ เป็นการจัดการเรียนรู้ที่เน้นนักเรียนเป็นสำคัญ ให้นักเรียนเกิดการค้นคว้าหาความรู้ด้วยตนเอง โดยใช้กระบวนการสืบเสาะหาความรู้ เป็นการพัฒนากระบวนการคิดอย่างเป็นระบบ ให้นักเรียนได้ฝึกปฏิบัติ ได้ฝึกคิด วิเคราะห์ แยกแยะ แก้ปัญหาด้วยตนเอง จนเกิดทักษะกระบวนการทางวิทยาศาสตร์

ในขณะที่มีการเปลี่ยนแปลงของโลกในศตวรรษที่ 21 อย่างรวดเร็ว แต่ผลการจัดการศึกษาของประเทศไทยในทุกระดับยังคงมีปัญหาโดยเฉพาะด้านคุณภาพของผู้เรียนที่มีผลสัมฤทธิ์ทางการเรียนระดับการศึกษาขั้นพื้นฐานมีคะแนนต่ำกว่าค่าเฉลี่ยมาก (สำนักงานเลขาธิการสภาการศึกษา, 2560) ซึ่งตรงกับสภาพปัญหาจากการจัดการเรียนรู้สาระวิทยาศาสตร์กายภาพของโรงเรียนสามัคคีศึกษา ในด้านผลสัมฤทธิ์ทางการเรียนพบว่า ผลการทดสอบทางการศึกษาระดับชาติขั้นพื้นฐาน (O-NET) ชั้นมัธยมศึกษาปีที่ 3 ปีการศึกษา 2563 มีคะแนนเฉลี่ยเท่ากับ 46.28 คะแนน และปีการศึกษา 2564 มีคะแนนเฉลี่ยเท่ากับ 46.71 คะแนน ซึ่งไม่ผ่านคะแนนเฉลี่ยร้อยละ 50 (สำนักปลัดกระทรวงศึกษาธิการ, 2564: 20-22) การประเมินผลการเรียนรู้ดังกล่าวพบว่า นักเรียนส่วนใหญ่ยังไม่เข้าใจเนื้อหาเท่าที่ควร ในการจัดกิจกรรมการเรียนรู้นักเรียนยังขาดการเรียนรู้ด้วยการลงมือปฏิบัติจริง อีกทั้งนักเรียนยังขาดกระบวนการคิด วิเคราะห์ แยกแยะ และแก้ปัญหาด้วยตนเอง จากปัญหาดังกล่าว ส่งผลให้นักเรียนมีผลสัมฤทธิ์ทางการเรียนต่ำ (โรงเรียนสามัคคีศึกษา, 2564)

ด้วยเหตุผลดังกล่าว ผู้วิจัยจึงสนใจศึกษาเปรียบเทียบผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ระหว่างการจัดการเรียนรู้แบบสืบเสาะหาความรู้(5E) กับการจัดการเรียนรู้แบบปกติเพื่อนำผลการวิจัยไปใช้ในการพัฒนาผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพต่อไปให้มีประสิทธิภาพยิ่งขึ้น

2. วัตถุประสงค์ของการวิจัย

1. เพื่อศึกษาความก้าวหน้าทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้งของนักเรียน
ชั้นมัธยมศึกษาปีที่ 2 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E)

2. เพื่อเปรียบเทียบผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ระหว่าง
การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

3. เพื่อเปรียบเทียบความพึงพอใจของนักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่มีต่อการจัดการเรียนรู้แบบสืบ
เสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ เรื่อง การระเหยแห้ง

3. กรอบแนวคิดในการวิจัย

การวิจัย เรื่อง "การเปรียบเทียบผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง
ระหว่างการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ ของนักเรียน
ชั้นมัธยมศึกษาปีที่ 2 โรงเรียนสามัคคีศึกษา" ผู้วิจัยได้กำหนดกรอบแนวคิด ดังนี้

ตัวแปรต้น	ตัวแปรตาม
1. การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) 2. การจัดการเรียนรู้แบบปกติ	- ความก้าวหน้าทางการเรียนสาระวิทยาศาสตร์กายภาพ - ผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ - ความพึงพอใจของนักเรียนทางการเรียนสาระวิทยาศาสตร์กายภาพ
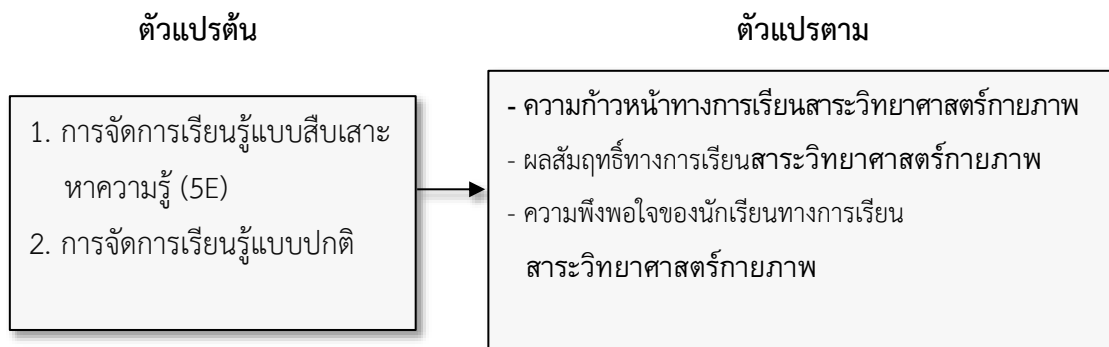
4. วิธีดำเนินการวิจัย

ขอบเขตการดำเนินงาน

1. ขอบเขตด้านเนื้อหา เนื้อหาที่ใช้ในการศึกษาค้นคว้าครั้งนี้ คือ สาระวิทยาศาสตร์กายภาพมาตรฐาน
ว 2.1 เข้าใจสมบัติของสาร องค์ประกอบของสสาร ความสัมพันธ์ระหว่างสมบัติของสสารกับโครงสร้างและแรง
ยึดเหนี่ยวระหว่างอนุภาค หลักและธรรมชาติของการเปลี่ยนแปลงสถานะของสสาร การเกิดสารละลาย และการ
เกิดปฏิกิริยาเคมี หน่วยที่ 6 การแยกสาร เรื่อง การระเหยแห้ง ชั้นมัธยมศึกษาปีที่ 2 ซึ่งได้จากการศึกษา
มาตรฐานการเรียนรู้ ตัวชี้วัดและสาระการเรียนรู้แกนกลางกลุ่มสาระการเรียนรู้วิทยาศาสตร์และเทคโนโลยี
ตามหลักสูตรแกนกลางการศึกษาขั้นพื้นฐาน พุทธศักราช 2560

2. ขอบเขตด้านประชากร ประชากรที่ใช้ในการวิจัยนี้ คือ นักเรียนชั้นมัธยมศึกษาปีที่ 2 โรงเรียน
สามัคคีศึกษา อำเภอห้วยยอด จังหวัดตรัง สังกัดสำนักงานเขตพื้นที่การศึกษามัธยมศึกษาตรัง กระบี่ ที่กำลัง
ศึกษาในภาคเรียนที่ 1 ปีการศึกษา 2566 จำนวน 4 ห้องเรียน รวม 115 คน กลุ่มตัวอย่าง คือ นักเรียนชั้น
มัธยมศึกษาปีที่ 2 จำนวน 2 ห้องเรียน โดยการสุ่มแบบกลุ่ม แล้วจับสลากได้กลุ่มทดลอง จำนวน 32 คน ที่
ได้รับวิธีการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) และกลุ่มควบคุมจำนวน 30 คน ที่ได้รับวิธีการจัดการ
เรียนรู้แบบปกติ

3. ขอบเขตด้านตัวแปร

1) ตัวแปรต้น ได้แก่ การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ สาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

2) ตัวแปรตาม ได้แก่

(1) ความก้าวหน้าทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

(2) ผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

(3) ความพึงพอใจทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

5. ประโยชน์ที่ได้รับการวิจัย

1. ได้แผนการจัดการเรียนรู้ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2 โดยใช้การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) ที่มีคุณภาพและพัฒนาผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ให้ดียิ่งขึ้นต่อไป

2. เป็นแนวทางในการพัฒนาการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) และเป็นข้อมูลสารสนเทศสำหรับครูผู้สอนกลุ่มสาระการเรียนรู้วิทยาศาสตร์และเทคโนโลยี และครูกลุ่มสาระการเรียนรู้อื่น ๆ รวมทั้งผู้บริหารและผู้ที่เกี่ยวข้องนำไปพัฒนาการเรียนการสอนต่อไป

3. นักเรียนเห็นความสำคัญในการเรียนสาระวิทยาศาสตร์กายภาพและสามารถนำความรู้ที่ได้ไปประยุกต์ใช้ในสาระวิทยาศาสตร์กายภาพในเรื่องอื่น ๆ ได้

6. เครื่องมือที่ใช้ในการวิจัย

เครื่องมือที่ใช้ในการวิจัยครั้งนี้ประกอบด้วย: 1. บทเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2; 2. แผนการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2 จำนวน 1 แผน รวม 3 ชั่วโมง; 3. แผนการจัดการเรียนรู้แบบปกติ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2 จำนวน 1 แผน รวม 3 ชั่วโมง; 4. แบบทดสอบวัดผลสัมฤทธิ์ทางการเรียน เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2 เป็นแบบทดสอบปรนัยชนิดเลือกคำตอบ 4 ตัวเลือก จำนวน 10 ข้อ และ 5. แบบสอบถามความความพึงพอใจ เรื่อง การระเหยแห้ง ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

7. การสร้างและการตรวจสอบคุณภาพเครื่องมือที่ใช้ในการวิจัย

1. ศึกษาเนื้อหาที่ใช้ในการวิจัย รวบรวมเนื้อหาและกิจกรรมที่เป็นความรู้ คำถามเพื่อทบทวนความรู้ความเข้าใจในบทเรียน และออกแบบการเรียนรู้เพื่อพัฒนาเป็นบทเรียน โดยการวิเคราะห์เนื้อหาสาระสำคัญ จุดประสงค์การเรียนรู้

2. นำบทเรียน เสนอให้ผู้เชี่ยวชาญด้านหลักสูตรและการสอน 1 คน ด้านเนื้อหา 1 คน และด้าน การวัดและประเมินผล 1 คน เพื่อตรวจสอบและแก้ไขปรับปรุงเมื่อมีข้อบกพร่อง และพิจารณาคุณภาพของ บทเรียน และแผนการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E)

3. ศึกษาเอกสารหลักสูตรแกนกลางการศึกษาขั้นพื้นฐาน พุทธศักราช 2560 กลุ่มสาระการเรียนรู้ วิทยาศาสตร์และเทคโนโลยีศึกษาเป้าหมายการพัฒนาคุณภาพนักเรียน สาระและมาตรฐานการเรียนรู้/ตัวชี้วัด และสาระการเรียนรู้ แล้ววิเคราะห์สาระการเรียนรู้ กำหนดจุดประสงค์การเรียนรู้ และสร้างแผนการจัดการ จัดเรียนรู้ เรื่อง การระเหยแห้ง จำนวน 1 แผน ใช้เวลาในการจัดกิจกรรม 3 ชั่วโมง

4. นำแผนการจัดการเรียนรู้แบบสืบเสาะหาความรู้ที่ปรับปรุง เสนอผู้เชี่ยวชาญด้านหลักสูตรและ การสอน 1 คน ด้านเนื้อหา 1 คน และด้านการวัดและประเมินผล 1 คน เพื่อตรวจสอบความถูกต้องด้านความ เที่ยงตรงของเนื้อหา ด้านภาษา และด้านกระบวนการจัดการเรียนรู้ แล้วนำมาหาค่าดัชนีความสอดคล้อง และ นำแผนการจัดการเรียนรู้ที่ได้ปรับปรุงแก้ไขแล้วไปทดลองใช้ กับนักเรียนชั้นมัธยมศึกษาปีที่ 2 ซึ่งไม่ใช่กลุ่ม ตัวอย่างจำนวน 30 คน เพื่อตรวจสอบความเชื่อมั่นของเนื้อหากับกระบวนการจัดการเรียนการสอนสื่อการ เรียนการสอนการวัดผลประเมินผลตลอดจนเวลาที่ใช้ในการทำกิจกรรมตรวจสอบหาข้อบกพร่องและนำมา ปรับปรุง แก้ไขให้มีความสมบูรณ์มากยิ่งขึ้นจากนั้นปรับปรุงแก้ไขแผนการจัดการเรียนรู้ให้สมบูรณ์ก่อนนำไปใช้ กับกลุ่มตัวอย่าง (กลุ่มทดลอง) ได้แก่ นักเรียนชั้นมัธยมศึกษาปีที่ 2/1 โรงเรียนสามัคคีศึกษา จำนวน 32 คน

5. แผนการจัดการเรียนรู้แบบปกติ ได้ศึกษารายละเอียดเกี่ยวกับหลักการและวิธีการเขียนแผนการ จัดการเรียนรู้ศึกษาหลักการ แนวคิด ทฤษฎีที่เกี่ยวข้องกับชุดกิจกรรมเพื่อเป็นแนวทางในการสร้างแผนการ จัดการเรียนรู้แบบปกติ รวมทั้งศึกษาคู่มือการวัดและประเมินผลกลุ่มสาระการเรียนรู้วิทยาศาสตร์และ เทคโนโลยีและมาตรฐานการเรียนรู้/ตัวชี้วัดและสาระการเรียนรู้ แล้ววิเคราะห์สาระการเรียนรู้ เพื่อกำหนด จุดประสงค์การเรียนรู้ โดยวิเคราะห์ความสัมพันธ์ระหว่างมาตรฐานการเรียนรู้ตัวชี้วัด สาระการเรียนรู้ สาระสำคัญ และจุดประสงค์การเรียนรู้แบบปกติ เรื่อง การระเหยแห้ง จำนวน 1 แผน ใช้เวลาในการจัด กิจกรรม 3 ชั่วโมง นำไปใช้กับกลุ่มตัวอย่าง (กลุ่มควบคุม) ได้แก่ นักเรียนชั้นมัธยมศึกษาปีที่ 2/2 ภาคเรียนที่ 1 ปีการศึกษา 2566 โรงเรียนสามัคคีศึกษา จำนวน 30 คน ต่อไป

6. นำแบบทดสอบวัดผลสัมฤทธิ์ทางการเรียน เรื่อง การระเหยแห้ง ไปให้ผู้เชี่ยวชาญด้านหลักสูตร และการสอน 1 คน ด้านเนื้อหา 1 คน และด้านการวัดและประเมินผล 1 คน ประเมินคุณภาพของแบบทดสอบ วัดผลสัมฤทธิ์ทางการเรียนรู้ เพื่อตรวจสอบความถูกต้องและความเหมาะสมชัดเจนของคำถาม แล้วประเมิน ความสอดคล้องระหว่างข้อสอบกับจุดประสงค์การเรียนรู้ โดยวิเคราะห์ข้อมูลดัชนีความสอดคล้องระหว่างข้อ คำถามของแบบทดสอบกับพฤติกรรมที่ต้องการวัดเลือกข้อสอบที่มีค่า IOC ตั้งแต่ 0.50 ขึ้นไป แล้วนำผลการ ทดลองที่ได้มาวิเคราะห์หาค่าค่าความยากง่าย (p) และค่าอำนาจจำแนก ที่นำมาคัดเลือกไปใช้ได้ คือค่าความ ยากง่าย (p) มีค่าตั้งแต่ 0.20-0.80 และค่าอำนาจจำแนก (r) มีค่าตั้งแต่ 0.20-1.00 (พิชิต ฤทธิ์จรูญ, 2557) ส่วนแบบสอบถามความพึงพอใจของนักเรียน ที่มีต่อสาระวิทยาศาสตร์กายภาพเพื่อใช้ในการกำหนดแนวทาง ในการสร้างแบบสอบถามความพึงพอใจต่อสาระวิทยาศาสตร์กายภาพ เรื่องการระเหยแห้ง

       7. นำแบบสอบถามความพึงพอใจ นำไปสอบถามกับของนักเรียนชั้นมัธยมศึกษาปีที่ 3 โรงเรียน
สามัคคีศึกษา ภาคเรียนที่ 1 ปีการศึกษา 2566 ที่เคยเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้งมาแล้ว
ซึ่งเป็นนักเรียนในห้องที่ไม่ใช่กลุ่มตัวอย่างในการศึกษาค้นคว้า จำนวน 30 คน

       วิธีดำเนินการทดลองและเก็บรวบรวมข้อมูล: 1. ขอหนังสือเพื่อขออนุญาตทำการทดลอง 2. แนะนำ
ขั้นตอนการทำกิจกรรมและบทบาทของนักเรียนในการจัดการเรียนการสอน 3. ทดสอบก่อนเรียน (Pretest)
กับกลุ่มทดลองและกลุ่มควบคุม โดยใช้แบบทดสอบ 4. ดำเนินการสอนตามแผนโดยใช้การจัดการเรียนรู้แบบ
สืบเสาะหาความรู้ (5E) กับกลุ่มทดลอง และดำเนินการสอนโดยใช้การจัดการเรียนรู้แบบปกติกับกลุ่มควบคุม;
5. ทดสอบหลังเรียน (Posttest) กับนักเรียนกลุ่มทดลองและกลุ่มควบคุมโดยใช้แบบทดสอบวัดผลสัมฤทธิ์
ทางการเรียน (ฉบับเดิม) และทำแบบสอบถามความพึงพอใจ 6. นำผลคะแนนที่ได้จากการตรวจ โดยวิธีการทาง
สถิติด้วยโปรแกรมสำเร็จรูปเพื่อทดสอบสมมติฐานต่อไป

8. ผลการวิจัย

ตารางที่ 1 ค่าความก้าวหน้าทางการเรียนแบบรายชั้นเรียนของนักเรียนชั้นมัธยมศึกษาปีที่ 2/1 ที่ได้รับการ
จัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E)

การทดสอบ	n	$\bar{x}$	ร้อยละ	S.D.	ค่าความก้าวหน้า <g>	ผลการประเมิน
ก่อนเรียน	32	6.66	66.56	1.60	0.77	ระดับสูง (High Gain)
หลังเรียน	32	8.97	89.69	1.06		

       จากตารางที่ 1 จากผลการทำทดสอบก่อนเรียนและหลังเรียนของนักเรียนชั้นมัธยมศึกษาปีที่ 2/1 ที่
ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) พบว่า มีคะแนนเฉลี่ย 6.66 และ 8.97 ตามลำดับ และเมื่อ
วิเคราะห์ผลการทดสอบพบว่านักเรียนมีคะแนนความก้าวหน้าทางการเรียนแบบทั้งชั้นเรียน (<g>) อยู่ใน
ระดับสูง (High Gain) มีค่าความก้าวหน้าทางการเรียน เท่ากับ 0.77 สรุปได้ว่าวิธีการจัดการเรียนรู้แบบสืบ
เสาะหาความรู้ (5E) ที่พัฒนาขึ้นทำให้นักเรียนมีความเข้าใจในเนื้อหาเรื่อง การระเหยแห้ง เพิ่มมากขึ้น
ในระดับสูง

ตารางที่ 2 ค่าความก้าวหน้าทางการเรียนแบบรายบุคคลของนักเรียนชั้นมัธยมศึกษาปีที่ 2/1 ที่ได้รับ

       การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E)

เลขที่	ก่อนเรียน		หลังเรียน		ความก้าวหน้า <g>	ผลการประเมิน
	คะแนน (10)	คะแนน (ร้อยละ)	คะแนน (10)	คะแนน (ร้อยละ)		
1	5	50.00	7	70.00	0.40	Medium Gain
2	4	40.00	7	70.00	0.50	Medium Gain

เลขที่	ก่อนเรียน		หลังเรียน		ความก้าวหน้า <g>	ผลการประเมิน
	คะแนน (10)	คะแนน (ร้อยละ)	คะแนน (10)	คะแนน (ร้อยละ)		
3	6	60.00	8	80.00	0.50	Medium Gain
4	5	50.00	8	80.00	0.60	Medium Gain
5	7	70.00	9	90.00	0.67	Medium Gain
6	9	90.00	10	100.00	1.00	High Gain
7	8	80.00	10	100.00	1.00	High Gain
8	6	60.00	9	90.00	0.75	High Gain
9	5	50.00	9	90.00	0.80	High Gain
10	5	50.00	8	80.00	0.60	Medium Gain
11	4	40.00	7	70.00	0.50	Medium Gain
12	7	70.00	9	90.00	0.67	Medium Gain
13	7	70.00	10	100.00	1.00	High Gain
14	8	80.00	10	100.00	1.00	High Gain
15	8	80.00	10	100.00	1.00	High Gain
16	7	70.00	9	90.00	0.67	Medium Gain
17	6	60.00	9	90.00	0.75	High Gain
18	6	60.00	8	80.00	0.50	Medium Gain
19	6	60.00	9	90.00	0.75	High Gain
20	5	50.00	8	80.00	0.60	Medium Gain
21	4	40.00	7	70.00	0.50	Medium Gain
22	5	50.00	9	90.00	0.80	High Gain
23	6	60.00	8	80.00	0.50	Medium Gain
24	7	70.00	10	100.00	1.00	High Gain
25	7	70.00	9	90.00	0.67	Medium Gain
26	8	80.00	10	100.00	1.00	High Gain
27	9	90.00	10	100.00	1.00	High Gain
28	9	90.00	10	100.00	1.00	High Gain
29	8	80.00	10	100.00	1.00	High Gain
30	8	80.00	10	100.00	1.00	High Gain
31	9	90.00	10	100.00	1.00	High Gain
32	9	90.00	10	100.00	1.00	High Gain
รวม	213	2130	287	2870	24.72	**High Gain**

เลขที่	ก่อนเรียน		หลังเรียน		ความก้าวหน้า <g>	ผลการประเมิน
	คะแนน (10)	คะแนน (ร้อยละ)	คะแนน (10)	คะแนน (ร้อยละ)		
$\bar{x}$	6.66	66.56	8.97	89.69	0.77	
S.D.	1.60	15.99	1.06	10.62	0.21	

จากตารางที่ 2 ผลการทำทดสอบก่อนเรียนและหลังเรียนของนักเรียนชั้นมัธยมศึกษาปีที่ 2/1 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) พบว่า นักเรียนมีความก้าวหน้าทางการเรียนอยู่ในระดับสูงสุด เท่ากับ 1.00 จำนวน 13 คน ผลการประเมินมีความก้าวหน้าระดับสูง (High Gain) และความก้าวหน้าทางการเรียนระดับต่ำสุด เท่ากับ 0.40 จำนวน 1 คน ผลการประเมินมีความก้าวหน้าระดับปานกลาง (Medium Gain)

ตารางที่ 3 เปรียบเทียบผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ระหว่างการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ ของนักเรียนชั้นมัธยมศึกษาปีที่ 2

กลุ่มตัวอย่าง	n	$\bar{x}$	S.D.	t	Sig.
กลุ่มทดลอง	32	8.97	1.06	2.930	.005*
กลุ่มควบคุม	30	8.10	1.27		

* p < .01

จากตารางที่ 3 พบว่า ผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง หลังเรียนของนักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่เรียนโดยการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับนักเรียนที่เรียนโดยการจัดการเรียนรู้แบบปกติ กลุ่มทดลองได้คะแนนเฉลี่ย ($\bar{x}$) = 8.97 ส่วนเบี่ยงเบนมาตรฐาน (S.D.) = 1.06 และกลุ่มควบคุมได้คะแนนเฉลี่ย ($\bar{x}$) = 8.10 ส่วนเบี่ยงเบนมาตรฐาน (S.D.) = 1.27 ค่า t = 2.930 (Sig = .005) สรุปได้ว่านักเรียนกลุ่มทดลองที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) มีผลสัมฤทธิ์ทางการเรียนวิทยาศาสตร์สูงกว่ากลุ่มควบคุมที่ได้รับการจัดการเรียนรู้ตามปกติอย่างมีนัยสำคัญทางสถิติที่ระดับ .01

ตารางที่ 4 เปรียบเทียบความพึงพอใจของนักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่มีต่อการจัดการเรียนรู้ แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติ

รายการประเมิน	กลุ่มทดลอง (n = 32)		กลุ่มควบคุม (n = 30)		t	Sig.
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
ด้านเนื้อหา						
1 เนื้อหามีความสอดคล้องกับวัตถุประสงค์	4.06	0.72	3.77	0.73	4.942	.000*
2 รูปแบบการนำเสนอเนื้อหาสาระเหมาะสม	4.19	0.74	3.83	0.79		

รายการประเมิน	กลุ่มทดลอง (n = 32)		กลุ่มควบคุม (n = 30)		t	Sig.
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
3 เนื้อหาสาระการเรียนรู้ที่เรียนเป็นเรื่องที่น่าสนใจ	4.34	0.65	3.70	0.75		
4 เนื้อหาสาระสามารถนำไปปรับใช้ในชีวิตประจำวันได้	4.28	0.58	3.77	0.57		
5 เนื้อหาสาระไม่ชับซ้อน ยุ่งยาก เข้าใจได้ง่าย	4.16	0.63	3.83	0.65		
6 เมื่อเรียนจบในแต่ละเนื้อหาแล้วเข้าใจและชอบวิชาวิทยาศาสตร์มากขึ้น	4.31	0.54	3.70	0.70		
เฉลี่ยด้านเนื้อหา	**4.22**	**0.41**	**3.77**	**0.31**		
ด้านการจัดการเรียนรู้						
7 การจัดการเรียนรู้ใช้ภาษาสื่อความหมายได้ชัดเจน	4.41	0.61	3.70	0.65		
8 การจัดการเรียนรู้มีเทคนิคในการถ่ายทอดน่าสนใจ	4.28	0.73	3.60	0.62		
9 การจัดการเรียนรู้เหมาะสมกับเวลาที่ใช้ในการเรียนรู้	4.22	0.49	3.90	0.61	6.081	.000*
10 การจัดการเรียนรู้ส่งเสริมให้ผู้เรียนมีส่วนร่วมในการเรียนรู้	4.63	0.61	4.10	0.71		
11 การจัดการเรียนส่งเสริมให้ผู้เรียนเกิดการคิดวิเคราะห์สรุปความรู้	4.28	0.52	3.83	0.65		
เฉลี่ยด้านการจัดการเรียนรู้	**4.36**	**0.59**	**3.83**	**0.65**		
ด้านสื่อประกอบการเรียนรู้						
12 สามารถเข้าถึงได้ง่าย สะดวกต่อการเรียนรู้	4.75	0.30	4.17	0.53		
13 ช่วยให้ผู้เรียนเข้าใจบทเรียนได้ดียิ่งขึ้น	4.50	0.57	4.00	0.79	4.188	.000*
เฉลี่ยด้านสื่อประกอบการเรียนรู้	**4.78**	**0.72**	**4.08**	**0.66**		
ด้านบทบาทครู						
14 ครูมีการประเมินก่อนเรียนและหลังเรียน	4.25	0.51	3.53	0.73		
15 ครูคอยให้คำแนะนำตอบคำถามและเอาใจใส่ดูแลนักเรียนอย่างใกล้ชิด	4.16	0.57	3.87	0.51	4.576	.000*
เฉลี่ยด้านบทบาทครู	**4.46**	**0.83**	**3.70**	**0.62**		
เฉลี่ยรวมทั้งหมด	**4.32**	**0.33**	**3.82**	**0.22**	**6.907**	**.000***

* p < .01

จากตารางที่ 4 พบว่า ผลการวิเคราะห์เปรียบเทียบความพึงพอใจโดยภาพรวม กลุ่มทดลองที่ได้รับ
การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) เรื่อง การระเหยแห้ง มีคะแนนเฉลี่ยความพึงพอใจมากกว่ากลุ่ม
ควบคุมที่ได้รับการจัดการเรียนรู้แบบปกติ โดยกลุ่มทดลองได้คะแนนเฉลี่ย ($\bar{x}$) = 4.32 ส่วนเบี่ยงเบนมาตรฐาน
(S.D.) = 0.33 และกลุ่มควบคุมได้คะแนนเฉลี่ย ($\bar{x}$) = 3.82 ส่วนเบี่ยงเบนมาตรฐาน (S.D.) = 0.22 ค่า t =
6.907 (Sig = .000) สรุปได้ว่านักเรียนกลุ่มทดลองที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) มีความ
พึงพอใจมากกว่ากลุ่มควบคุมที่ได้รับการจัดการเรียนรู้ตามปกติอย่างมีนัยสำคัญทางสถิติที่ระดับ .01

เมื่อพิจารณาเป็นรายด้าน พบว่า ระดับความพึงพอใจของนักเรียนกลุ่มทดลองสูงกว่ากลุ่มควบคุม อย่าง
มีนัยสำคัญทางสถิติที่ระดับ .01 ทั้ง 4 ด้าน ได้แก่ ด้านเนื้อหา ด้านการจัดการเรียนรู้ ด้านสื่อประกอบการเรียนรู้
และด้านบทบาทครู โดยที่ข้อรายการที่ค่าเฉลี่ยมากที่สุด คือ สามารถเข้าถึงได้ง่าย สะดวกต่อการเรียนรู้
รองลงมาคือ การจัดการเรียนรู้ส่งเสริมให้ผู้เรียนมีส่วนร่วมในการเรียนรู้ และช่วยให้ผู้เรียนเข้าใจบทเรียนได้ดี
ยิ่งขึ้น

8. อภิปรายผลการวิจัย

เพื่อการเปรียบเทียบผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง ระหว่าง
การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) กับการจัดการเรียนรู้แบบปกติของนักเรียนชั้นมัธยมศึกษาปีที่ 2
จากการวิเคราะห์ข้อมูล ผู้วิจัยสามารถอภิปรายผลได้ดังนี้

1. นักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) มีความก้าวหน้า
ทางการเรียนสาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง อยู่ในระดับสูง ซึ่งเป็นไปตามสมมติฐานที่ตั้งไว้
ทั้งนี้เนื่องจากนักเรียนที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) เรื่อง การระเหยแห้ง มีความ
กระตือรือร้นในการเรียน สนุกสนานกับการทำกิจกรรม เกิดทักษะกระบวนการในการทำงานเป็นกลุ่ม มีส่วน
ร่วมในการเรียนรู้ ส่งเสริมให้เกิดการคิดวิเคราะห์สรุปความรู้ จึงส่งผลให้มีความก้าวหน้าทางการเรียนเพิ่ม
สูงขึ้น ซึ่งสอดคล้องกับ วรรณภา วังคะฮาต (2560) ที่ศึกษาการพัฒนาผลสัมฤทธิ์ทางการเรียนเรื่องยีนและ
โครโมโซม ด้วยชุดกิจกรรมการเรียนรู้แบบสืบเสาะ 5 ขั้น ผลการวิจัยพบว่า ความก้าวหน้าทางการเรียนอยู่ใน
ระดับสูง (<g> = 0.70) นักเรียนมีความก้าวหน้า ทางการเรียนอยู่ในระดับสูง เนื่องจากนักเรียนได้รับการ
พัฒนารูปแบบความคิดให้เป็นรูปธรรมมากขึ้น เพราะการเรียนด้วยชุดกิจกรรมการเรียนรู้แบบสืบเสาะ 5 ขั้น
ทำให้นักเรียนมีความกระตือรือร้นในการเรียน สนุกสนานกับการทำกิจกรรม เกิดทักษะกระบวนการในการ
ทำงานเป็นกลุ่ม กล้าแสดงความคิดเห็นอย่างมีเหตุผลและรู้จักรับฟังความคิดเห็นของผู้อื่น มีการแลกเปลี่ยน
เรียนรู้ข้อมูลซึ่งกันและกันได้เชื่อมโยงความรู้ที่มีอยู่เดิมกับความรู้ให้ นักเรียนจึงมีความก้าวหน้าทางการเรียน
เพิ่มสูงขึ้น สอดคล้องกับ Salyani, Nurmaliah and Mahidin (2020) ศึกษาการประยุกต์ใช้แบบจำลองวัฏจักร
การเรียนรู้ 5E เพื่อลดความเข้าใจผิดและเพิ่มกิจกรรมการเรียนรู้ของนักเรียนในการเรียนรู้ เรื่อง พันธะเคมี พบว่า
โมเดล LC 5E สามารถลดความเข้าใจผิดและเพิ่มกิจกรรมการเรียนรู้ของนักเรียนได้ เนื่องจากแต่ละขั้นตอนใน
กระบวนการเรียนรู้จะชี้นำนักเรียนอย่างกระตือรือร้นและสร้างสรรค์ และผลการศึกษาของ อาทิตยา นิลพัฒน์
(2565) ที่ศึกษาผลการจัดการเรียนรู้แบบสืบเสาะหาความรู้ 5 ขั้น ร่วมกับเทคนิค 5W1H และแอปพลิเคชัน

Wooclap ที่มีต่อผลสัมฤทธิ์ทางการเรียนและความสามารถในการคิดวิเคราะห์ของนักเรียนชั้นมัธยมศึกษาปีที่ 1 ได้วิเคราะห์หาค่าความก้าวหน้าทางการเรียนที่เพิ่มขึ้น (normalized gain) พบว่า มีค่าเท่ากับ 0.40 ซึ่งถือว่า ผู้เรียนมีผลความก้าวหน้าทางการเรียนรู้อยู่ในระดับปานกลาง (medium gain)

      2. นักเรียนชั้นมัธยมศึกษาปีที่ 2 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) เรื่อง การระเหยแห้ง มีผลสัมฤทธิ์ทางการเรียนสาระวิทยาศาสตร์กายภาพสูงกว่านักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 ซึ่งเป็นไปตามสมมติฐานที่ตั้งไว้ ทั้งนี้อาจเป็นเพราะว่า การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) เป็นกิจกรรมที่เน้นผู้เรียนเป็นสำคัญ เน้นให้นักเรียนได้สร้างความรู้ด้วยตนเอง มีขั้นตอนในการจัดการเรียนรู้ที่ชัดเจนช่วยให้นักเรียนเกิดการเรียนรู้อย่างมีประสิทธิภาพ การที่ผู้วิจัยได้ออกแบบให้ผู้เรียนได้ใช้กระบวนการที่หลากหลาย โดยการเรียนรู้ทั้งเนื้อหาวิชาและการแสวงหาความรู้ผ่านการลงมือปฏิบัติจริงโดยการทดลองเพื่อให้นักเรียนได้สัมผัสได้สังเกต ในขณะที่ลงมือทำกิจกรรม พบว่า นักเรียนมีความสนใจต่อกิจกรรม สามารถคาดคะเนสิ่งที่จะเกิดขึ้นโดยใช้ความรู้จากสิ่งที่ครูอธิบาย หรือจากกิจกรรมที่เคยลงมือทำแล้ว และมีการจดบันทึกสิ่งที่เกิดขึ้นโดยการสังเกต สมาชิกในกลุ่มมีการถามคำถามที่ตนเองสงสัยและแลกเปลี่ยนความคิดเห็นกัน จนสามารถตอบจุดประสงค์ในการแก้ปัญหานั้นได้ สอดคล้องกับการศึกษาของ จารุวรรณ จันทมัติตุการ (2560) ศึกษาการเปรียบเทียบผลสัมฤทธิ์ทางการเรียนและความสามารถในการแก้โจทย์ปัญหาวิชาเคมี เรื่อง ของแข็ง ของเหลว แก๊ส ของนักเรียนชั้นมัธยมศึกษาปีที่ 4 ระหว่างการจัดการเรียนรู้แบบวัฏจักรการเรียนรู้ 5 ขั้น (5E) ร่วมกับกระบวนการแก้ปัญหาของโพลยา และการจัดการเรียนรู้แบบปกติ ผลการวิจัยพบว่า 1)ผลสัมฤทธิ์ทางการเรียนวิชาเคมี เรื่อง ของแข็ง ของเหลว แก๊ส ของนักเรียนกลุ่มทดลองสูงกว่ากลุ่มควบคุม อย่างมีนัยสำคัญทางสถิติที่ระดับ .05 และจากการศึกษาของ มณฑกานต์ ยืนนาน (2561) ได้ศึกษาผลการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) ร่วมกับเทคนิคผังกราฟิก เรื่อง การรักษาดุลยภาพในร่างกายที่มีต่อผลสัมฤทธิ์ทางการเรียนและทักษะกระบวนการทางวิทยาศาสตร์ขั้นบูรณาการของนักเรียนชั้นมัธยมศึกษาปีที่ 5 จังหวัดบุรีรัมย์ พบว่า (1)นักเรียนที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) ร่วมกับเทคนิคผังกราฟิก มีผลสัมฤทธิ์ทางการเรียนหลังเรียนสูงกว่าของนักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 นอกจากนี้ยังสอดคล้องกับผลการศึกษาของ Subiantoro and Mutiarani (2021) ศึกษาการส่งเสริมสุขศึกษาด้วยชีววิทยา: ประสิทธิผลของสถานการณ์การเรียนรู้ 5E เรื่อง โภชนาการและระบบย่อยอาหาร หัวข้อความรู้ด้านสุขภาพของนักเรียนระดับมัธยมศึกษาตอนปลาย ผลการวิจัยพบว่า ทักษะความรู้ด้านสุขภาพของกลุ่มทดลองดีกว่ากลุ่มควบคุมอย่างมีนัยสำคัญที่ระดับ .05 ดังนั้นจึงสรุปได้ว่ารูปแบบการเรียนรู้ 5E ที่นำมาใช้ในงานวิจัยนี้มีประสิทธิภาพมากกว่าในการส่งเสริมความรอบรู้ด้านสุขภาพของนักเรียน

      3. นักเรียน มีความพึงพอใจมากกว่านักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 ซึ่งเป็นไปตามสมมติฐานที่ตั้งไว้ ระดับความพึงพอใจของนักเรียนที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) สูงกว่านักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 ทั้ง 4 ด้าน ได้แก่ ด้านเนื้อหา ด้านการจัดการเรียนรู้ ด้านสื่อประกอบการเรียนรู้ และด้านบทบาทครู การจัดการเรียนรู้ส่งเสริมให้ผู้เรียนมีส่วนร่วมในการเรียนรู้ และช่วยให้ผู้เรียนเข้าใจบทเรียนได้ดียิ่งขึ้น สอดคล้องกับ ทีปกา พูลทวี (2564) การพัฒนาผลสัมฤทธิ์ทางการเรียนและความพึงพอใจต่อการจัดการเรียนรู้แบบสืบเสาะหา

ความรู้ (5E) ร่วมกับการใช้สถานการณ์จำลอง (Simulation) เรื่อง การหักเหของแสง ของนักเรียนชั้น
มัธยมศึกษาปีที่ 3 ผลการวิจัยพบว่า นักเรียนมีความพึงพอใจต่อการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E)
ร่วมกับการใช้สถานการณ์จำลอง เรื่องการหักเหของแสง อยู่ในระดับพึงพอใจอยู่ในระดับมาก โดยด้านวิธีการ
สอนและกิจกรรม เปิดโอกาสให้นักเรียนได้แสดงความคิดเห็นในการเรียน นักเรียนมีส่วนร่วมในการทำกิจกรรม
ด้านสื่อการสอน นักเรียนสามารถเข้าถึงและใช้สื่อสถานการณ์จำลองสามารถปฏิบัติตามได้ และผลการศึกษา
ของ ชาญ ชาลี (2561) ที่ศึกษาการเปรียบเทียบผลสัมฤทธิ์ทางการเรียน ความคงทนในการเรียนรู้และเจตคติ
ทางวิทยาศาสตร์ของนักเรียนชั้นประถมศึกษาปีที่ 6 ที่ได้รับการจัดการเรียนรู้แบบสืบเสาะหาความรู้ร่วมกับสื่อ
วีดิทัศน์ออนไลน์กับการจัดการเรียนรู้แบบปกติ ผลการวิจัยพบว่า นักเรียนชั้นประถมศึกษาปีที่ 6 ที่ได้รับการ
จัดการเรียนรู้แบบสืบเสาะหาความรู้ร่วมกับสื่อวีดิทัศน์ออนไลน์ เรื่อง ชีวิตกับสิ่งแวดล้อม มีเจตคติทาง
วิทยาศาสตร์ สูงกว่านักเรียนที่ได้รับการจัดการเรียนรู้แบบปกติ อย่างมีนัยสำคัญทางสถิติที่ระดับ .05
นอกจากนี้ยังสอดคล้องกับผลการศึกษาของ Wiriani and Ardana (2022) ที่ศึกษาผลของแบบจำลองวัฏจักร
การเรียนรู้ 5E ตามแนวทาง STEM ที่มีต่อเจตคติทางวิทยาศาสตร์และผลการเรียนรู้วิทยาศาสตร์ โดยตรงอย่างมี
นัยสำคัญทางสถิติที่ระดับ 0.05

9. ข้อเสนอแนะ

ข้อเสนอแนะจากผลการวิจัย ผู้วิจัยขอนำเสนอแนวปฏิบัติ ดังนี้

1. การจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) สาระวิทยาศาสตร์กายภาพ เรื่อง การระเหยแห้ง
ของนักเรียนชั้นมัธยมศึกษาปีที่ 2 ทำให้ผลสัมฤทธิ์ทางการเรียน ความก้าวหน้าทางการเรียนสาระวิทยาศาสตร์
กายภาพเพิ่มสูงขึ้น ส่งผลให้นักเรียนมีความพึงพอใจในอยู่ในระดับมากต่อการจัดการเรียนรู้สาระวิทยาศาสตร์
กายภาพแบบสืบเสาะหาความรู้ (5E) ดังนั้น จึงควรนำการจัดกิจกรรมการจัดการเรียนรู้แบบสืบเสาะหาความรู้
(5E) ไปใช้กับนักเรียนระดับชั้นอื่น ๆ ต่อไป

2. การจัดกิจกรรมการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) มีกระบวนการที่ให้นักเรียนได้ลงมือ
ปฏิบัติจริง ในแต่ละขั้นจะมีกิจกรรมที่หลากหลาย จึงจำเป็นต้องใช้เวลามากในบางกิจกรรม ผู้สอนควรยืดหยุ่น
ได้ตามความเหมาะสม ควรชี้แจงให้นักเรียนเกิดความรู้ความเข้าใจในขั้นตอนการจัดกิจกรรมการเรียนการสอน
เพื่อปฏิบัติได้อย่างถูกต้องและไม่เกิดปัญหา

ข้อเสนอแนะเพื่อการวิจัยในครั้งต่อไป ผู้วิจัยขอนำเสนอแนววิจัย ดังนี้

1. ควรศึกษาวิจัยผลของการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) ต่อทักษะด้านอื่น ๆ เช่น การ
คิดวิเคราะห์ การคิดอย่างมีวิจารณญาณ ความคิดสร้างสรรค์ เป็นต้น

2. ควรศึกษาวิจัยการจัดกิจกรรมการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) ร่วมกับวิธีการสอน
แบบอื่น ๆ เช่น เทคนิค KWDL การเรียนรู้แบบร่วมมือ เทคนิคผังกราฟิก กระบวนการแก้ปัญหาของโพลยา
เป็นต้น

3. ควรศึกษาวิจัยการจัดกิจกรรมการจัดการเรียนรู้แบบสืบเสาะหาความรู้ (5E) ที่ส่งผลต่อตัวแปรอื่น ๆ
เช่น ความสามารถในการแก้ปัญหาวิทยาศาสตร์ ความสามารถการให้เหตุผลเชิงวิทยาศาสตร์ เป็นต้น

บรรณานุกรม

จารุวรรณ จันทมัตตุการ. (2560). **การเปรียบเทียบผลสัมฤทธิ์ทางการเรียนและความสามารถในการแก้**
โจทย์ปัญหาวิชาเคมี เรื่อง ของแข็ง ของเหลว แก๊ส ของนักเรียนชั้นมัธยมศึกษาปีที่ 4 ระหว่างการ
จัดการเรียนรู้ แบบวัฏจักรการเรียนรู้ 5 ขั้น (5E) ร่วมกับกระบวนการแก้ปัญหาของโพลยา และ
การจัดการเรียนรู้แบบปกติ. วิทยานิพนธ์หลักสูตรการศึกษามหาบัณฑิต สาขาวิชาการสอน
วิทยาศาสตร์ คณะศึกษาศาสตร์ มหาวิทยาลัยบูรพา.

ชาญ ชาลี. (2561). **การเปรียบเทียบผลสัมฤทธิ์ทางการเรียน ความคงทนในการเรียนรู้และเจตคติทาง**
วิทยาศาสตร์ของนักเรียนชั้นประถมศึกษาปีที่ 6 เรื่อง ชีวิตกับสิ่งแวดล้อม ที่ได้รับการจัดการ
เรียนรู้แบบสืบเสาะหาความรู้ร่วมกับสื่อวีดิทัศน์ออนไลน์ กับการจัดการเรียนรู้แบบปกติ.
วิทยานิพนธ์หลักสูตรครุศาสตรมหาบัณฑิต สาขาวิชาวิทยาศาสตร์ศึกษามหาวิทยาลัยราชภัฏเทพสตรี.

ทิศนา แขมมณี. (2561). **ศาสตร์การสอน องค์ความรู้เพื่อการจัดกระบวนการเรียนรู้ที่มีประสิทธิภาพ** (พิมพ์
ครั้งที่ 22). กรุงเทพฯ: จุฬาลงกรณ์มหาวิทยาลัย.

ทีปกา พูลทวี. (2564). **การพัฒนาผลสัมฤทธิ์ทางการเรียนและความพึงพอใจต่อการจัดการเรียนรู้แบบสืบ**
เสาะหาความรู้ (5E) ร่วมกับการใช้สถานการณ์จำลอง (Simulation) เรื่อง การหักเหของแสง
ของนักเรียนชั้นมัธยมศึกษาปีที่ 3. คณะศึกษาศาสตร์และพัฒนศาสตร์มหาวิทยาลัยเกษตรศาสตร์
วิทยาเขตกำแพงแสน จังหวัดนครปฐม. วารสารศาสตร์การศึกษาและการพัฒนามนุษย์. ปีที่ 5 ฉบับที่
2 เดือนกรกฎาคม - ธันวาคม 2564.

วรรณภา วังคะฮาต. (2560). **การพัฒนาผลสัมฤทธิ์ทางการเรียนเรื่องยีนและโครโมโซม ด้วยชุดกิจกรรมการ**
เรียนรู้แบบสืบเสาะ 5 ขั้น. วิทยานิพนธ์หลักสูตรวิทยาศาสตรมหาบัณฑิต คณะวิทยาศาสตร์
มหาวิทยาลัยอุบลราชธานี.

วิจารณ์ พานิช. (2556). **วิถีสร้างการเรียนรู้เพื่อศิษย์** (พิมพ์ครั้งที่ 3). กรุงเทพมหานคร. ฝ่ายโรงพิมพ์ บริษัท
ตถาตา พับลิเคชั่น.

สำนักปลัดกระทรวงศึกษาธิการ. (2564). **ดัชนีทางการศึกษา ระดับภาค 1-18 ประจำปีงบประมาณ พ.ศ.**
2564. กระทรวงศึกษาธิการ.

อนุวัติ คูณแก้ว. (2558). **การวัดผลและประเมินผลการศึกษาแนวใหม่.** กรุงเทพฯ : สำนักพิมพ์แห่ง
จุฬาลงกรณ์มหาวิทยาลัย.

อาทิติยา นิลพัฒน์. (2565). **ผลการจัดการเรียนรู้แบบสืบเสาะหาความรู้ 5 ขั้น ร่วมกับเทคนิค 5W1H และแอป**
พลิเคชัน Wooclap ที่มีต่อผลสัมฤทธิ์ทางการเรียนและความสามารถในการคิดวิเคราะห์ของนักเรียน
ชั้นมัธยมศึกษาปีที่ 1. วารสารวิชาการ ครุศาสตร์สวนสุนันทา. ปีที่ 6 ฉบับที่ 2 เดือน กรกฎาคม –
ธันวาคม พ.ศ. 2565.

A W Subiantoro and Y P Mutiarani. (2021). **Promoting health education through biology:**
The effectivity of a 5E-learning scenario on nutrition and digestive system topic
towards high school students' health literacy. Journal of Physics: Conference Series,
Volume 1806, International Conference on Mathematics and Science Education

(ICMScE) 2020 14-15 July 2020, Jawa Barat, Indonesia. IOP Publishing. Retrieved March 26, 2023, from https://iopscience.iop.org/article/10.1088/1742-6596/1806/1/012156/pdf

Ni Made Adi Wiriani, I Made Ardana. （2022）. **The Impact of the 5E Learning Cycle Model Based on the STEM Approach on Scientific Attitudes and Science Learning Outcomes.** Mimbar PGSD Undiksha Volume 10, Number 2, Tahun 2022, 300-307.

R Salyani, C Nurmaliah and M Mahidin. (2020). **Application of the 5E learning cycle model to overcome misconception and increase student learning activities inlearning chemical bondin.** Journal of Physics: Conference Series, Volume 1460, The 1st Annual International Conference on Mathematics, Science and Technology Education 14th–15th September 2019, Kota Banda Aceh, Indonesia.IOP Publishing. Retrieved March 18, 2023,

การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย
The Performance of Duties of the Village Committee
in Pha Khao District, Loei Province

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บทคัดย่อ

        การวิจัยครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย เพื่อเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน ในเขตอำเภอผาขาว จังหวัดเลย ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ และเพื่อเสนอแนวทางพัฒนาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอผาขาว จังหวัดเลย กลุ่มตัวอย่างที่ใช้ในการศึกษาวิจัยครั้งนี้ คือประชาชนที่มีอายุ 18 ปีขึ้นไป เป็นผู้มีสิทธิ์เลือกตั้ง ที่อาศัยอยู่ในเขตพื้นที่อำเภอผาขาว จังหวัดเลย จำนวน 395 คน เครื่องมือที่ใช้ในการเก็บรวบรวมเป็นแบบสอบถาม สถิติที่ใช้ในการวิเคราะห์ คือ ค่าร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน และวิเคราะห์ข้อมูล ทดสอบสมมติฐาน โดยใช้สถิติค่า (T-Test) และใช้สถิติเอฟ (F-Test)

        ผลการวิจัยพบว่า

        1. การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย โดยภาพรวมอยู่ในระดับปานกลาง ($\overline{X}$ = 3.50, S.D.= 0.42) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการศึกษา ศาสนาและวัฒนธรรม ($\overline{X}$ = 3.91, S.D.= 0.63) รองลงมาคือด้านส่งเสริมเศรษฐกิจ ($\overline{X}$ = 3.79, S.D.= 0.41) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านสังคม สิ่งแวดล้อมและด้านสาธารณสุข ($\overline{X}$ = 3.04, S.D.= 0.42)

        2. ผลการเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน ในเขตอำเภอผาขาว จังหวัดเลย ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ โดยภาพรวมประชาชนที่มีเพศ อายุ ระดับการศึกษา และอาชีพต่างกัน มีความคิดเห็นต่อการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ไม่แตกต่างกัน ซึ่งไม่เป็นไปตามสมมติฐานที่ตั้งไว้ และเมื่อพิจารณารายด้าน พบว่าทุกด้านก็ไม่แตกต่างกัน

        3. ข้อเสนอแนวทางพัฒนาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอผาขาว จังหวัดเลย ได้แก่ ส่งเสริมทางด้านเกษตรกรรมโดยหมอดินควรมีบทบาทในการส่งเสริมและแนะนำต่อภาคการเกษตร

คำสำคัญ : คณะกรรมการหมู่บ้าน, การปฏิบัติหน้าที่, ประชาชน

ABSTRACT

The purpose of this research is to study the performance of the village committees in Pha Khao District, Loei Province, to compare the performance of the village committees. in Pha Khao District, Loei Province classified by gender, age, education level and occupation, and to propose guidelines for developing the performance of village committees in Pha Khao District, Loei Province. The sample group used in this research was People aged 18 years and over are eligible to vote. The samples were 395 people who lived in Pha Khao District, Loei Province. The instrument used for collection was a questionnaire. The statistics used in the analysis were percentage, mean, and standard deviation. and analyze the data hypothesis test by using the value statistics (T-Test) and using the F-Statistics (F-Test).

The results showed that:

1. The performance of the village committees in Pha Khao District, Loei Province were generally at a moderate level ($\overline{X}$ = 3.50, S.D. = 0.42). And when considering each aspect, it was found that the aspect with the highest average was education. Religion and culture ($\overline{X}$ = 3.91, S.D.= 0.63), followed by economic promotion ($\overline{X}$ = 3.79, S.D.= 0.41), and the social aspect with the least average value. Environment and Public Health ($\overline{X}$ = 3.04, S.D.= 0.42).

2. Comparison of the performance of village committees in Pha Khao District, Loei Province classified by gender, age, education level and occupation. and different professions Their opinions on the performance of the village committees in Pha Khao District, Loei Province were not different. which is not in accordance with the assumptions set and when considering the side Found that all aspects were not different.

3. Proposals for the development of the village committee's duties in Pha Khao District, Loei Province, namely, to promote agriculture, where the earth doctor should play a role in promoting and advising the agricultural sector.

Keywords: village committee, performing duties, people

1. ความเป็นมาและความสำคัญของปัญหา

ตามพระราชบัญญัติลักษณะปกครองท้องที่ พระพุทธศักราช 2457 แก้ไขเพิ่มเติมมาตรา 28 ตรีได้บัญญัติว่า ในหมู่บ้านหนึ่งให้มีคณะกรรมการหมู่บ้าน ประกอบด้วย ผู้ใหญ่บ้านเป็นประธาน ผู้ช่วยผู้ใหญ่บ้าน สมาชิกสภาองค์กรปกครองส่วนท้องถิ่นที่มีภูมิลำเนาในหมู่บ้าน ผู้นำหรือผู้แทนกลุ่มหรือองค์กรในหมู่บ้านเป็นกรรมการหมู่บ้านโดยตำแหน่ง และกรรมการหมู่บ้านผู้ทรงคุณวุฒิจำนวนไม่น้อยกว่าสองคนแต่ไม่เกินสิบคน โดยคณะกรรมการหมู่บ้านมีหน้าที่ช่วยเหลือ แนะนำ และให้คำปรึกษาแก่ผู้ใหญ่บ้านเกี่ยวกับกิจการอันเป็นอำนาจหน้าที่ของผู้ใหญ่บ้าน และปฏิบัติหน้าที่อื่นตามกฎหมายหรือระเบียบแบบแผนของทางราชการ หรือที่นายอำเภอมอบหมาย หรือที่ผู้ใหญ่บ้านร้องขอ

ทั้งนี้ ในการปฏิบัติตามภารกิจตามพระราชบัญญัติลักษณะปกครองท้องที่พระพุทธศักราช 2457 แก้ไขเพิ่มเติม (ฉบับที่ 11) พ.ศ. 2551 ของคณะกรรมการหมู่บ้าน (กม.) และการดำเนินการในภารกิจของส่วนราชการ หน่วยงานของรัฐ ตามคณะรัฐมนตรีได้มีมติเมื่อวันอังคารที่ 21 กรกฎาคม 2552 ยังมีความสัมพันธ์เชิงซ้อนกับกลุ่มหรือองค์กรสาธารณะภายในหมู่บ้าน ชุมชน กับคณะกรรมการหมู่บ้าน หรือมีความซ้ำซ้อนกันในด้านสถานภาพตัวบุคคล ทั้งด้านอาชีพหลักของคณะกรรมการหมู่บ้าน และการได้รับค่าตอบแทนจากหน่วยงานภาครัฐต่าง ๆ ส่งผลทำให้การปฏิบัติภารกิจของคณะกรรมการหมู่บ้านไม่ประสบผลสำเร็จเท่าที่ควร รวมทั้ง อำนาจหน้าที่ของคณะกรรมการหมู่บ้านสอดคล้องกับอำนาจหน้าที่ของเทศบาลตำบลที่กำหนดไว้ในพระราชบัญญัติเทศบาล พ.ศ. 2496 และแก้ไขเพิ่มเติมมาตรา 50 และ 51 และอำนาจหน้าที่ขององค์การบริหารส่วนตำบลที่กำหนดไว้ ในพระราชบัญญัติสภาตำบลและองค์การบริหารส่วนตำบล พ.ศ. 2537 และแก้ไขเพิ่มเติม มาตรา 66, 67 และมาตรา 68 หลายประการ รวมทั้งตามมติคณะรัฐมนตรีข้างต้น ยังได้กำหนดให้องค์กรปกครองส่วนท้องถิ่นพิจารณากำหนดกรอบแนวทางแผนงาน หรือโครงการที่สนับสนุนการพัฒนาศักยภาพของคณะกรรมการหมู่บ้าน

การปฏิบัติหน้าที่และการประชุมของคณะกรรมการหมู่บ้าน พ.ศ.2551 บางนโยบายก็ไม่สามารถทำได้ การประชาสัมพันธ์บทบาทหน้าที่ของคณะกรรมการหมู่บ้านยังไม่ทั่วถึง คณะกรรมการหมู่บ้านบางคนก็ยังไม่มีความรู้และความเข้าใจถึงบทบาทหน้าที่ของตน ส่งผลให้ขาดประสิทธิภาพในการปฏิบัติหน้าที่ การพัฒนาประสิทธิภาพของคณะกรรมการหมู่บ้าน ที่ผ่านมาได้ดำเนินการไปหลากหลายวิธี เช่น การฝึกอบรมให้ความรู้ การศึกษาดูงาน การให้เงินรางวัลเพื่อเป็นแรงจูงใจ การจัดตั้งชุดปฏิบัติการประจำตำบล ประกอบด้วยข้าราชการจากหน่วยงานต่างๆ เป็นที่ปรึกษาและพี่เลี้ยงในการทำงานของคณะกรรมการหมู่บ้าน หรือ การปฏิบัติตามหน้าที่อย่างเป็นธรรม ปราศจากการครอบงำจากนักการเมือง เป็นต้น (Lumtal, 2014) ซึ่งผู้วิจัยเห็นว่า การพัฒนาบทบาทคณะกรรมการหมู่บ้านโดยใช้แนวทางดังกล่าวอาจจะยังไม่สามารถพัฒนาประสิทธิภาพของคณะกรรมการหมู่บ้านได้อย่างเพียงพอ กล่าวคือไม่สามารถสร้างการรับรู้ในบทบาท หน้าที่ของตนได้อย่างต่อเนื่องและยั่งยืน การพัฒนาประสิทธิภาพของคณะกรรมการหมู่บ้านจึงถือเป็นงานสำคัญที่ทุกฝ่ายที่เกี่ยวข้องจะต้องร่วมกันพัฒนา ซึ่งจากการติดตามและประเมินผลการปฏิบัติงานของคณะกรรมการหมู่บ้านในปี พ.ศ.2556 และงานวิจัยที่เกี่ยวข้องกับการดำเนินงานของคณะกรรมการหมู่บ้าน พบว่ามีประเด็นปัญหาดังนี้ (สำนักบริหารการปกครองท้องที่ กรมการปกครอง, 2556) ประเด็นแรกคณะกรรมการหมู่บ้านยังไม่เข้าใจในบทบาทหน้าที่ของตนเองที่มีตามกฎหมายและหน้าที่ตามภารกิจอื่นๆ ที่ได้รับมอบหมายจากรัฐบาลหรือส่วนราชการ หรือหน่วยงานอื่นๆ ประเด็นที่สอง คณะกรรมการหมู่บ้านจัดทำแผนพัฒนาหมู่บ้านที่ขาดความเป็นเอกภาพและยังไม่มีประสิทธิภาพเพราะคณะกรรมการหมู่บ้านไม่เข้าใจหลักคิดของกระบวนการจัดทำแผน

ดังนั้น จะเห็นได้ว่า ขอบเขตหน้าที่ของคณะกรรมการหมู่บ้าน ซึ่งรัฐบาลได้ให้ความสำคัญกับคณะกรรมการหมู่บ้านให้เป็นองค์กรหลักมีความครอบคลุมดูแลชีวิตความเป็นอยู่ของประชาชนในหมู่บ้าน ชุมชนในทุกๆ ด้าน อย่างไรก็ตามในปัจจุบันมีหน่วยงานต่าง ๆ ได้จัดตั้งกลุ่ม หรือองค์กรของตนเอง ทั้งที่เป็นการจัดตั้งตามกฎหมายและจัดตั้งตามแนวทางปฏิบัติหลากหลายเป็นการเฉพาะ ซึ่งกลุ่มหรือองค์กรที่จัดตั้งขึ้น

ของหน่วยงานเหล่านั้น มีความหลากหลายและแตกต่างกันเช่นการประนีประนอมข้อพิพาท การป้องกันและ
ปราบปราม ยาเสพติด ภายในหมู่บ้าน การรักษาสาธารณสมบัติของหมู่บ้าน การป้องกันและบรรเทาสาธารณ
ภัย การจัดทำแผนพัฒนาหมู่บ้านการพัฒนาสตรี เด็ก เยาวชน ผู้สูงอายุและผู้พิการ การสงเคราะห์ผู้ยากจน
การอนุรักษ์ทรัพยากรธรรมชาติและสิ่งแวดล้อมการสาธารณสุข การส่งเสริมการศึกษา ศาสนา และวัฒนธรรม
ทำให้คณะกรรมการหมู่บ้านไม่สามารถบูรณาการในการปฏิบัติงานได้อย่างมีประสิทธิภาพจึงจำเป็นอย่างยิ่งที่
ต้องมีการศึกษาการปรับปรุงและพัฒนาบทบาทคณะกรรมการหมู่บ้าน (กม.) ในการปฏิบัติงานให้มี
ประสิทธิภาพ

ผู้วิจัยปฏิบัติหน้าที่ ตำแหน่งปลัดอำเภอในอำเภอผาขาว จังหวัดเลย จึงมีความสนใจที่จะทำการวิจัย
เรื่อง "การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย" ในครั้งนี้เพื่อจะนำไปพัฒนา
ศักยภาพและใช้เป็นแนวทางในการปรับปรุงการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในพื้นที่ ทั้งในเชิง
นโยบายและการปฏิบัติเพื่อสร้างความเจริญในหมู่บ้านชุมชนต่อไป

2. วัตถุประสงค์ของการวิจัย

1. เพื่อศึกษาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย

2. เพื่อเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอผาขาว จังหวัดเลย ที่
จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ

3. เพื่อเสนอแนวทางพัฒนาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอ ผาขาวจังหวัด
เลย

3. ขอบเขตของการวิจัย

1. ขอบเขตด้านเนื้อหา

ในการวิจัยเรื่องการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ผู้วิจัยได้
ศึกษาแนวคิดและทฤษฎีของการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านตามพระราชบัญญัติลักษณะปกครอง
ท้องที่พระพุทธศักราช 2457 ซึ่งประกอบไปด้วย 6 ด้าน ดังนี้ 1. ด้านอำนวยการ 2. ด้านการปกครองและ
รักษาความสงบเรียบร้อย 3. ด้านแผนพัฒนาหมู่บ้าน 4. ด้านส่งเสริมเศรษฐกิจ 5. ด้านสังคม สิ่งแวดล้อม
และด้านสาธารณสุข และ 6. ด้านการศึกษา ศาสนาและวัฒนธรรม

2. ขอบเขตด้านประชากร

ประชากรที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ประชาชนที่มีอายุ 18 ปีขึ้นไป ที่อาศัยอยู่ในเขตพื้นที่อำเภอ ผาขาว จังหวัดเลย จำนวน 5 ตำบล 64 หมู่บ้าน มีจำนวนทั้งหมด 32,934 คน การปกครองส่วนท้องถิ่นท้องที่ อำเภอผาขาวประกอบด้วยองค์กรปกครองส่วนท้องถิ่น 5 แห่ง ได้แก่ 1. เทศบาลตำบลโนนปอแดง ครอบคลุม พื้นที่ของตำบลโนนปอแดงทั้งตำบล 2. เทศบาลตำบล ท่าช้างคล้อง ครอบคลุมพื้นที่ตำบลท่าช้างคล้องทั้ง ตำบล 3. องค์การบริหารส่วนตำบลโนนป่าซาง ครอบคลุมพื้นที่ตำบลโนนป่าซางทั้งตำบล (นอกเขตเทศบาล) 4. องค์การบริหารส่วนตำบลผาขาว ครอบคลุมพื้นที่ตำบลผาขาวทั้งตำบล (นอกเขตเทศบาล) 5. องค์การ บริหารส่วนตำบลบ้านเพิ่ม ครอบคลุมพื้นที่ตำบลบ้านเพิ่มทั้งตำบล (นอกเขตเทศบาล) (ข้อมูลทั่วไปของอำเภอ ผาขาว จังหวัดเลย , 2565)

3. ขอบเขตด้านตัวแปรที่ใช้ในการวิจัย

3.1 ตัวแปรอิสระ ได้แก่ ข้อมูลทั่วไปของผู้ตอบแบบสอบถามซึ่งประกอบไปด้วยเพศ อายุ ระดับ การศึกษา และอาชีพ

3.2 ตัวแปรตาม ได้แก่ การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอ ผาขาว จังหวัด เลย ประกอบไปด้วย 6 ด้านคือ 1. ด้านอำนวยการ 2. ด้านการปกครองและรักษาความสงบเรียบร้อย 3. ด้าน แผนพัฒนาหมู่บ้าน 4. ด้านส่งเสริมเศรษฐกิจ 5. ด้านสังคม สิ่งแวดล้อมและด้านสาธารณสุข และ 6. ด้าน การศึกษา ศาสนาและวัฒนธรรม

4. ขอบเขตด้านพื้นที่

ในการวิจัยเรื่องการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ผู้วิจัยได้ ศึกษาข้อมูลจากประชากรที่อาศัยอยู่ในเขตพื้นที่อำเภอผาขาว จังหวัดเลย เท่านั้น

5. ขอบเขตด้านระยะเวลา

ในการทำการวิจัยครั้งนี้ ผู้วิจัยได้ทำการศึกษา เก็บรวบรวมข้อมูลการวิจัย และสรุปผลการวิจัย ระหว่างเดือนกรกฎาคม จนถึงเดือนธันวาคม พ.ศ. 2565

4. ประโยชน์ของการวิจัย

1. ทำให้ทราบถึงระดับการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอผาขาว จังหวัดเลย

2. ทำให้ทราบปัญหาและอุปสรรคในการปฏิบัติงานในหน้าที่ของคณะกรรมการหมู่บ้านเพื่อนำมา ปรับปรุงแก้ไข

3. เพื่อเป็นข้อมูลสารสนเทศให้อำเภอต่าง ๆ นำไปปรับใช้เกี่ยวกับการปฏิบัติหน้าที่ของ คณะกรรมการหมู่บ้านต่อไป

กรอบแนวคิดในการวิจัย

ตัวแปรอิสระ   ตัวแปรตาม

ข้อมูลส่วนบุคคล
- เพศ
- อายุ
- ระดับการศึกษา
- อาชีพ

การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน 6 ด้าน
1. ด้านอำนวยการ
2. ด้านการปกครองและรักษาความสงบเรียบร้อย
3. ด้านแผนพัฒนาหมู่บ้าน
4. ด้านส่งเสริมเศรษฐกิจ

5. ประชากรและกลุ่มตัวอย่าง

    1. ประชากร

        ประชากรที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ประชาชนที่มีอายุ 18 ปีขึ้นไป เป็นผู้มีสิทธิ์เลือกตั้ง ที่อาศัยอยู่ใน เขตพื้นที่อำเภอผาขาว จังหวัดเลย จำนวน 5 ตำบล 64 หมู่บ้าน มีจำนวนทั้งหมด 32,934 คน การปกครอง ส่วนท้องถิ่นท้องที่อำเภอผาขาวประกอบด้วยองค์กรปกครองส่วนท้องถิ่น 5 แห่ง ได้แก่ 1. เทศบาลตำบลโนน ปอแดง ครอบคลุมพื้นที่ของตำบลโนนปอแดงทั้งตำบล 2. เทศบาลตำบลท่าช้างคล้อง ครอบคลุมพื้นที่ตำบลท่า ช้างคล้องทั้งตำบล 3. องค์การบริหารส่วนตำบลโนนป่าซาง ครอบคลุมพื้นที่ตำบลโนนป่าซางทั้งตำบล (นอก เขตเทศบาล) 4. องค์การบริหารส่วนตำบลผาขาว ครอบคลุมพื้นที่ตำบลผาขาวทั้งตำบล (นอกเขตเทศบาล) 5. องค์การบริหารส่วนตำบลบ้านเพิ่ม ครอบคลุมพื้นที่ตำบลบ้านเพิ่มทั้งตำบล (นอกเขตเทศบาล) (ข้อมูลทั่วไป ของอำเภอผาขาว จังหวัดเลย , 2565)

    2. กลุ่มตัวอย่าง

        กลุ่มตัวอย่างที่ใช้สำหรับการวิจัยครั้งนี้ได้แก่ผู้มีสิทธิ์เลือกตั้งจาก 5 ตำบล 64 หมู่บ้าน ในพื้นที่อำเภอ ผาขาว จังหวัดเลย จำนวน 395 คน โดยวิธีการคัดเลือกกลุ่มตัวอย่างโดยใช้แนวคิดการกำหนดขนาดกลุ่ม ตัวอย่างของ ทาโร่ ยามาเน่ (Taro Yamane,1967 : 886 -887) กำหนดความคลาดเคลื่อนในการประมาณ สัดส่วนไม่เกิน 0.05 %

6. เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล

        ในการศึกษาครั้งนี้ใช้แบบสอบถามเป็นเครื่องมือในการเก็บรวบรวมข้อมูล แบบสอบถามสร้างขึ้นจาก แนวคิด ทฤษฎี เอกสารงานวิจัยที่เกี่ยวข้องกับการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน และแบบสอบถาม ครอบคลุมตามวัตถุประสงค์ของการศึกษาโดยแบบสอบถามแบ่งออกเป็น 3 ส่วน ดังนี้

    ตอนที่ 1 ข้อมูลทั่วไปลักษณะบุคคล เพื่อสอบถามข้อมูลทั่วไป เพศ อายุ ระดับการศึกษา และอาชีพ เป็นแบบสำรวจรายการ

    ตอนที่ 2 แบบสอบถามระดับการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ลักษณะแบบสอบถามเป็นแบบมาตราส่วนประมาณค่าตามแบบของลิเคิร์ท (Likert) ผู้วิจัยได้ศึกษาแนวคิดและ

ทฤษฎีของการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านตามพระราชบัญญัติลักษณะปกครองท้องที่พระพุทธศักราช 2457

ตอนที่ 3 แบบข้อเสนอแนะเพิ่มเติม เป็นแบบสอบถามปลายเปิดเพื่อสอบถามแนวทางพัฒนาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย

7. การสร้างและการทดสอบเครื่องมือ

การวิจัยครั้งนี้ผู้ศึกษาได้ใช้แบบสอบถามเป็นเครื่องมือในการเก็บรวบรวมข้อมูล ผู้ศึกษาได้ดำเนินการสร้างแบบสอบถาม ดังนี้

1. ศึกษาข้อมูลจากเอกสาร ผลงานวิจัยที่เกี่ยวข้องกับการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านเพื่อกำหนดกรอบเนื้อหาในการสร้างแบบสอบถาม

2. จัดทำแบบสอบถามที่ประกอบด้วยคำถามที่ต้องการเพื่อตอบวัตถุประสงค์ของการวิจัย ให้ครบถ้วนและครอบคลุมเนื้อหา

3. ผู้ศึกษาทำการตรวจสอบเครื่องมืออีกครั้งหนึ่งในขั้นตอนนี้ตรวจสอบความ ครอบคลุมของเนื้อหา ความเข้าใจของภาษา ความเข้าใจตรงกันของคำถาม

4. นำแบบสอบถามให้ผู้เชี่ยวชาญจำนวน 3 ท่าน ตรวจสอบ

5. นำแบบสอบถามที่ปรับปรุงแก้ไขแล้วเสนอต่อผู้เชี่ยวชาญประเมินความสอดคล้องของข้อคำถาม โดยผู้เชี่ยวชาญมีจำนวน 3 ท่าน และนำเครื่องมือที่ได้จากผู้เชี่ยวชาญมาหาค่าความเที่ยงตรงของแบบสอบถาม โดยคำนวณหาค่า IOC โดยคัดเลือกข้อที่มีค่า IOC ตั้งแต่ 0.67 เป็นต้นไป เป็นข้อที่นำไปใช้ได้

6. นำแบบสอบถามที่ได้จากการปรับปรุงแก้ไขของผู้เชี่ยวชาญ ไปทดลองใช้ (Try out) กับประชาชนในเขตพื้นที่อำเภอหนองหิน จังหวัดเลย จำนวน 30 คน ซึ่งเป็นประชากรที่มีลักษณะคล้ายคลึงกันกับกลุ่มตัวอย่างในการวิจัย

7. วิเคราะห์แบบสอบถาม โดยวิเคราะห์หาค่าความเชื่อมั่นของแบบสอบถามทั้งฉบับ ด้วยวิธีหาค่าสัมประสิทธิ์แอลฟาของครอนบัค (ทองใบ สุดชารี, 2549 : 131) ซึ่งได้ค่าความเชื่อมั่นเท่ากับ 0.769

8. นำเครื่องมือที่ปรับปรุงแก้ไขสมบูรณ์แล้วไปเก็บรวบรวมข้อมูลกับกลุ่มตัวอย่างต่อไป

8. การเก็บรวบรวมข้อมูล

ผู้วิจัยดำเนินการเก็บและรวบรวมข้อมูล ดังนี้

1. ทำหนังสือถึงผู้บริหารองค์กรปกครองส่วนท้องถิ่นในอำเภอผาขาว จังหวัดเลยซึ่งประกอบด้วยประกอบด้วยองค์กรปกครองส่วนท้องถิ่น 5 แห่ง ได้แก่ 1. เทศบาลตำบลโนนปอแดง ครอบคลุมพื้นที่ของตำบลโนนปอแดงทั้งตำบล 2. เทศบาลตำบลท่าช้างคล้อง ครอบคลุมพื้นที่ตำบลท่าช้างคล้องทั้งตำบล 3. องค์การบริหารส่วนตำบลโนนป่าซาง ครอบคลุมพื้นที่ตำบลโนนป่าซางทั้งตำบล (นอกเขตเทศบาล) 4. องค์การบริหารส่วนตำบลผาขาว ครอบคลุมพื้นที่ตำบลผาขาวทั้งตำบล (นอกเขตเทศบาล) 5. องค์การบริหาร

ส่วนตำบลบ้านเพิ่ม ครอบคลุมพื้นที่ตำบลบ้านเพิ่มทั้งตำบล (นอกเขตเทศบาล) (ข้อมูลทั่วไปของอำเภอผาขาว จังหวัดเลย , 2565)เพื่อขอความอนุเคราะห์ประชาสัมพันธ์ตอบแบบสอบถาม ตามวันและเวลาที่นัดหมาย

2. ผู้วิจัยนำแบบสอบถามซึ่งได้จัดเตรียมไว้แล้วนำไปส่งให้กับกลุ่มตัวอย่างด้วยตนเองตามที่ได้นัดหมายไว้แล้ว เพื่อแนะนำตัวพร้อมชี้แจงวัตถุประสงค์และประโยชน์ของการวิจัย ขออนุญาตเก็บข้อมูล แจกแบบสอบถามการวิจัยและขอรับกลับในวันเดียวกันด้วยตนเอง

3. นำแบบสอบถามที่ได้รับมาตรวจสอบความสมบูรณ์ ความถูกต้อง และลงรหัสเพื่อการวิเคราะห์ข้อมูลต่อไป

9. การวิเคราะห์ข้อมูลและสถิติที่ใช้ในการศึกษา

การวิจัยในครั้งนี้ผู้ศึกษาได้นำข้อมูลที่ได้มาวิเคราะห์ โดยใช้โปรแกรมสำเร็จรูปการวิเคราะห์ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม โดยการแจกแจงความถี่ (Frequency) และค่าร้อยละ (Percentage) เสนอข้อมูลเป็นตาราง วิเคราะห์ข้อมูลเกี่ยวกับระดับการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย โดยการหาค่าเฉลี่ย $\bar{\text{X}}$ และส่วนเบี่ยงเบนมาตรฐาน (standard Deviatiion : S.D) ทดสอบสมมุติฐานการเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน จำแนกตามเพศ โดยทดสอบค่าทีแบบอิสระ (T-test For Independent Samples) โดยกำหนดระดับนัยสำคัญทางสถิติที่ 0.05 และทดสอบสมมุติฐานเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านจำแนกตามอายุ ระดับการศึกษา และอาชีพ โดยใช้สถิติ F-test (One – way Anova) โดยการทดสอบความแตกต่างหรือเปรียบเทียบค่าเฉลี่ยของกลุ่มตัวอย่างตั้งแต่ 3 กลุ่มขึ้นไป และหากพบว่ามีความแตกต่างเกิดขึ้น ผู้วิจัยต้องทำการทดสอบความแตกต่างรายคู่ตามวิธีของเชฟเฟ่ (Scheffe's method) ต่อไป

10. สถิติที่ใช้ในการวิเคราะห์ข้อมูล

1. สถิติพื้นฐาน ได้แก่

   1.1 ค่าร้อยละ (Percentage)

   1.2 ค่าเฉลี่ย ($\bar{\text{X}}$)

   1.3 ส่วนเบี่ยงเบนมาตรฐาน (S.D)

2. สถิติเชิงอนุมาน ได้แก่

   2.1 สถิติ t-test ได้ทดสอบความแตกต่างหรือเปรียบเทียบค่าเฉลี่ยของตัวแปร 2 ตัวแปร

   2.2 สถิติ F- test โดยการทดสอบความแตกต่างหรือเปรียบเทียบค่าเฉลี่ยของตัวแปรตั้งแต่ 3 ตัวแปรขึ้นไป และหากพบว่ามีความแตกต่างรายคู่เกิดขึ้น ผู้วิจัยต้องทำการทดสอบต่อไปว่าค่าเฉลี่ยคู่ใดที่แตกต่างกัน และแตกต่างกันอย่างไรตามวิธีของเชฟเฟ่ (Scheffe's method)

11. ผลการวิจัย

สรุปผลการวิจัย เรื่องการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลยสามารถสรุปออกเป็น 4 ส่วน ได้ดังนี้

1. ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม พบว่า ผู้ตอบแบบสอบถามส่วนใหญ่เป็นเพศชาย จำนวน 220 คน คิดเป็นร้อยละ 55.70 และเป็นเพศหญิง จำนวน 175 คน คิดเป็นร้อยละ 44.30 อายุอยู่ระหว่าง 18 – 40 ปี จำนวน 206คน คิดเป็นร้อยละ 52.15 มีระดับการศึกษามัธยมศึกษา จำนวน 194คน คิดเป็นร้อยละ 49.11 และประกอบอาชีพเกษตรกร/ทำสวน/ทำไร่/ทำนา จำนวน 200 คน คิดเป็นร้อยละ 50.63

2. การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย โดยภาพรวมอยู่ในระดับปานกลาง ($\overline{X}$ = 3.50, S.D.= 0.42) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการศึกษาศาสนาและวัฒนธรรม ($\overline{X}$ = 3.91, S.D.= 0.63) รองลงมาคือด้านส่งเสริมเศรษฐกิจ ($\overline{X}$ = 3.79, S.D.= 0.41) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านสังคม สิ่งแวดล้อมและด้านสาธารณสุข ($\overline{X}$ = 3.04, S.D.= 0.42) และวิเคราะห์ข้อมูลออกเป็นแต่ละด้านได้ดังนี้

2.1 ด้านอำนวยการ โดยภาพรวมอยู่ในระดับปานกลาง ($\overline{X}$ = 3.50, S.D.= 0.42) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 4. มีการประชาสัมพันธ์ข้อมูลข่าวสารให้ประชาชนเข้าใจอย่างสม่ำเสมอ ($\overline{X}$ = 3.49, S.D.= 0.98) รองลงมาคือ ข้อ 5. มีการประสานงานและติดตามการทำงานของคณะทำงานอย่างสม่ำเสมอ ($\overline{X}$ = 3.42, S.D.= 0.99) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 3. มีการจัดประชุมอย่างสม่ำเสมอ ($\overline{X}$ = 3.38, S.D.= 0.99)

2.2 ด้านการปกครองและรักษาความสงบเรียบร้อย โดยภาพรวมอยู่ในระดับปานกลาง ($\overline{X}$ = 3.32, S.D.= 0.88) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 6. ส่งเสริมให้ประชาชนมีส่วนร่วมในการปกครองระบอบประชาธิปไตย ($\overline{X}$ = 3.43, S.D.= 1.14) รองลงมาคือ ข้อ 10. ดูแล คุ้มครองสาธารณะสมบัติของหมู่บ้าน ($\overline{X}$ = 3.40, S.D.= 1.05) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ8. สร้างความเป็นธรรมและประนีประนอมข้อพิพาท ($\overline{X}$ = 3.21, S.D.= 1.02)

2.3 ด้านแผนพัฒนาหมู่บ้าน โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.57, S.D.= 0.73) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 15. มีการเสนอปัญหาพร้อมแนวทางแก้ไขปัญหาต่อที่ประชุม กม. ($\overline{X}$ = 4.31, S.D.= 0.75) รองลงมาคือ ข้อ 13. มีการจัดทำ ตรวจสอบข้อมูลพื้นฐานของหมู่บ้าน ($\overline{X}$ = 3.44, S.D.= 0.97) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 11. มีการปรับปรุงแผนพัฒนาหมู่บ้านให้เป็นปัจจุบันอยู่เสมอ ($\overline{X}$ = 3.34, S.D.= 1.11)

2.4 ด้านส่งเสริมเศรษฐกิจ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.79, S.D.= 0.41) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 17. มีการพัฒนาและส่งเสริมการประกอบอาชีพเพื่อสร้างรายได้ให้คนในหมู่บ้าน ($\overline{X}$ = 4.11, S.D.= 0.88) รองลงมาคือ ข้อ 16. มีการส่งเสริมการดำเนินงานตามแนวทางปรัชญาของเศรษฐกิจพอเพียง ($\overline{X}$ = 4.06, S.D.= 0.66) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 20. มีการตั้งร้านค้าชุมชนในหมู่บ้าน ($\overline{X}$ = 2.86, S.D.= 0.68)

2.5 ด้านสังคม สิ่งแวดล้อมและด้านสาธารณสุข โดยภาพรวมอยู่ในระดับปานกลาง ($\overline{X}$ = 3.04, S.D.= 0.42) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 22. มีการสงเคราะห์ผู้ยากไร้ไม่

สามารถช่วยตัวเองได้ ($\overline{X}$ = 3.35, S.D.= 0.75) รองลงมาคือ ข้อ 25. มีการสร้างเครือข่ายและแสวงหาความ ร่วมมือทุกภาคส่วน ($\overline{X}$ = 3.28, S.D.= 0.79) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 23. มีการส่งเสริมอนุรักษ์ สิ่งแวดล้อม ($\overline{X}$ = 2.77, S.D.= 0.59)

        2.6 ด้านการศึกษา ศาสนาและวัฒนธรรม โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.91, S.D.= 0.63) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 26. มีการส่งเสริมการดำเนินกิจกรรมด้าน ศาสนา ($\overline{X}$ = 4.10, S.D.= 0.95) รองลงมาคือ ข้อ 28. มีการบำรุงรักษา ศิลปะ วัฒนธรรม จารีต ประเพณีของ หมู่บ้าน ($\overline{X}$ = 3.90, S.D.= 0.88) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 30. มีการประชาสัมพันธ์การดำเนิน กิจกรรมด้านการศึกษา ศาสนา วัฒนธรรม ($\overline{X}$ = 3.77, S.D.= 0.76)

        3. ผลการเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน ในเขตอำเภอผาขาว จังหวัดเลย ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ โดยภาพรวมประชาชนที่มีเพศ อายุ ระดับการศึกษา และ อาชีพต่างกัน มีความคิดเห็นต่อการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ไม่ แตกต่างกัน ซึ่งไม่เป็นไปตามสมมุติฐานที่ตั้งไว้ และเมื่อพิจารณารายด้าน พบว่าทุกด้านก็ไม่แตกต่างกัน

        4. ข้อเสนอแนวทางพัฒนาการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอผาขาว จังหวัด เลย ได้แก่

        1. จัดทำสวนสาธารณะที่เป็นประโยชน์ในหมู่บ้านเพื่อไว้ออกกำลังกายทำกิจกรรมร่วมกัน

        2. ควบคุมปัญหาวัยรุ่นขับรถเสียงดังตอนกลางคืน และควรมีการจัดเวรยามเพื่อตรวจความ สงบเรียบร้อยภายในหมู่บ้านในช่วงกลางคืน

        3. การจัดทำแผนพัฒนาชุมชน ควรได้รับการทบทวนกระบวนการในการทำงาน เพื่อให้ สอดคล้องกับสถานการณ์ ในปัจจุบันที่มีการเปลี่ยนแปลงตลอดเวลา โดยเน้นย้ำแนวความคิดพื้นฐานการจัดทำ แผนชุมชนอย่างมีส่วนร่วม ที่ต้องการให้ ได้แผนชุมชนสำหรับพึ่งตนเอง

        4. ส่งเสริมทางด้านเกษตรกรรมโดยหมอดินควรมีบทบาทในการส่งเสริมและแนะนำต่อภาค การเกษตร

        5. รณรงค์ลดเผาขยะมูลฝอย ลดการเผาอ้อยหรือซังข้าว เพื่อลดปัญหาฝุ่นละอองในอากาศ

        6. ส่งเสริมและให้ความสำคัญต่อประเพณีที่สำคัญในหมู่บ้าน เพื่อยึดเหนี่ยวจิตใจ

12. อภิปรายผลการวิจัย

        การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย โดยภาพรวมอยู่ในระดับ ปานกลาง ($\overline{X}$ = 3.50, S.D.= 0.42) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการศึกษา ศาสนาและวัฒนธรรม ($\overline{X}$ = 3.91, S.D.= 0.63) รองลงมาคือด้านส่งเสริมเศรษฐกิจ ($\overline{X}$ = 3.79, S.D.= 0.41) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านสังคม สิ่งแวดล้อมและด้านสาธารณสุข ($\overline{X}$ = 3.04, S.D.= 0.42) ที่เป็น เช่นนี้อาจเป็นเพราะว่า การปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ทั้ง 6 ด้าน 1. ด้านอำนวยการ 2. ด้านการปกครองและรักษาความสงบเรียบร้อย 3. ด้านแผนพัฒนาหมู่บ้าน 4. ด้านส่งเสริม เศรษฐกิจ 5. ด้านสังคม สิ่งแวดล้อมและด้านสาธารณสุข 6. ด้านการศึกษา ศาสนาและวัฒนธรรม พบว่ามีบาง

ด้านยังอยู่ในระดับปานกลาง ดั้งนั้นคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลยควรมีการปรับปรุงเช่น เจ้าหน้าที่หรือผู้มีส่วนเกี่ยวข้องควรชี้แจงรายละเอียดในที่ประชุมประจำเดือนเพื่อสร้างความเข้าใจให้แก่ ประชาชนในหมู่บ้าน มีการควรเข้มงวดในการปฏิบัติตามกฎของหมู่บ้าน และขุดลอกคลองที่ตื้นเขิน กำจัด วัชพืช ตัดแต่งต้นไม้ กิ่งไม้ เพื่อให้สภาพแวดล้อมในชุมชนน่าอยู่ และไม่เป็นที่อยู่อาศัยของสัตว์มีพิษ กำจัด วัชพืชในแหล่งน้ำ ซึ่งสอดคล้องกับงานวิจัยของรัฐติพร ศิริศรี และสัญญา เคณาภูมิ (2560) วิจัยเรื่องการปฏิบัติ หน้าที่ตามบทบาทหน้าที่ของ คณะกรรมการหมู่บ้านในเขตอำเภอเมืองหนองคาย จังหวัดหนองคาย ผลการวิจัยพบว่า การปฏิบัติหน้าที่ตามบทบาทหน้าที่ของคณะกรรมการหมู่บ้านในเขตอำเภอเมืองหนองคาย จังหวัด หนองคาย อยู่ในระดับปานกลาง ผลการวิจัย พบว่า การปฏิบัติหน้าที่ตามบทบาทหน้าที่ของ คณะกรรมการ หมู่บ้านในเขตอำเภอเมืองหนองคาย จังหวัดหนองคาย โดยรวมอยู่ในระดับปานกลาง ซึ่งเป็นไป ตาม สมมติฐานที่กำหนดไว้ทั้งนี้อาจเป็นเพราะว่า คณะกรรมการหมู่บ้าน ปฏิบัติหน้าที่ภายใต้ระเบียบเดียวกัน คือ ตามระเบียบกระทรวงมหาดไทยว่าด้วยหลักเกณฑ์การเป็นกรรมการหมู่บ้านการปฏิบัติหน้าที่และการ ประชุม ของคณะกรรมการหมู่บ้าน พ.ศ. 2551 สอดคล้องกับภารกิจที่ได้รับมอบหมายจากกระทรวงมหาดไทย ว่า ภารกิจเฉพาะตามลักษณะพื้นที่ คณะกรรมการหมู่บ้านเป็นองค์กรหรือผู้แทนของประชาชน ซึ่งแต่ละพื้นที่ จะมี ความแตกต่างของลักษณะโครงสร้างทางสังคม เศรษฐกิจ วัฒนธรรม ประเพณี และสภาพปัญหาความ เดือด ร้อนของประชาชนตาม ภูมิประเทศ เพื่อให้การปฏิบัติหน้าที่มีประสิทธิภาพ ส่วนผลการเปรียบเทียบการ ปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้าน ในเขตอำเภอผาขาว จังหวัดเลย ที่จำแนกตามเพศ อายุ ระดับ การศึกษา และอาชีพ โดยภาพรวมประชาชนที่มีเพศ อายุ ระดับการศึกษา และอาชีพต่างกัน มีความคิดเห็น ต่อการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ไม่แตกต่างกัน ซึ่งสอดคล้องกับ งานวิจัยของรัฐติพร ศิริศรี และสัญญา เคณาภูมิ (2560) ที่พบว่าคณะกรรมการหมู่บ้าน ที่มีเพศ แตกต่างกันมี บทบาทไม่แตกต่างกัน ซึ่งไม่ตรงกับสมมุติฐานทั้งนี้อาจเป็นเพราะว่า การปฏิบัติหน้าที่ใช้มาตรฐานเดียวกัน คือ ต้องปฏิบัติหน้าที่ตามระเบียบกระทรวงมหาดไทยว่าด้วยหลักเกณฑ์การเป็นกรรมการหมู่บ้าน การปฏิบัติหน้าที่ และการประชุมของคณะกรรมการหมู่บ้าน พ.ศ. 2551 ซึ่งบทบาทไม่ได้เน้นหรือเจาะจงเป็นเพศหญิงหรือเพศ ชาย คณะกรรมการหมู่บ้าน ที่มีระดับการศึกษาแตกต่างกัน มีบทบาทไม่แตกต่างกัน ซึ่งไม่ตรงกับสมมุติฐาน ทั้งนี้อาจเป็นเพราะว่า การปฏิบัติหน้าที่ใช้มาตรฐานเดียวกันถึงแม้ว่าระดับการศึกษาจะแตกต่างกันแต่ต้อง ปฏิบัติหน้าที่ตามระเบียบกระทรวงมหาดไทยว่าด้วยหลักเกณฑ์การเป็นกรรมการหมู่บ้าน การปฏิบัติหน้าที่และ การประชุมของคณะกรรมการหมู่บ้าน พ.ศ. 2551

13. ข้อเสนอแนะ

1. ข้อเสนอแนะในการนำผลการวิจัยในครั้งนี้ไปใช้

จากผลการวิจัยการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย โดยภาพรวม อยู่ในระดับปานกลาง และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านสังคม สิ่งแวดล้อม และด้านสาธารณสุข ($\overline{X}$ = 3.04) ทางคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ควรมีการดำเนินการ ดังนี้

1. หน่วยงานที่เกี่ยวข้องควรดำเนินการ ดังนี้ ควรมีการประสานงานและติดตาม การทำงานของคณะทำงานด้านต่าง ๆ และควรมีการรับจ่ายและเก็บรักษาเงิน ทรัพย์สินของหมู่บ้าน

2. หน่วยงานที่เกี่ยวข้องควรดำเนินการ ดังนี้ ควรมีการดูแลให้ราษฎรปฏิบัติตามกฎหมายและกฎระเบียบข้อบังคับของหมู่บ้าน

3. หน่วยงานที่เกี่ยวข้องควรดำเนินการ ดังนี้ ควรมีการส่งเสริมให้การสงเคราะห์ผู้ยากจนและควรมีการส่งเสริมการจัดสวัสดิการต่าง ๆ ของหมู่บ้าน

4. หน่วยงานที่เกี่ยวข้องควรดำเนินการ ดังนี้ ควรรณรงค์ลดเผาขยะมูลฝอย ลดการเผาอ้อยหรือซังข้าว เพื่อลดปัญหาฝุ่นละอองในอากาศ

2. ข้อเสนอแนะในการวิจัยครั้งต่อไป

2.1 ควรศึกษาปัจจัยที่มีผลต่อการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย

2.2 ควรศึกษาเปรียบเทียบการปฏิบัติหน้าที่ของคณะกรรมการหมู่บ้านในอำเภอผาขาว จังหวัดเลย ในแต่ละตำบล เพื่อดูความแตกต่างและหาแนวทางการแก้ไข

บรรณานุกรม

กรมการปกครอง. (2539). **คู่มือพนักงานส่วนตำบล.** กรุงเทพฯ: กรมการปกครองกระทรวงมหาดไทย. กระทรวงมหาดไทย. **ระเบียบกระทรวงมหาดไทยว่าด้วยเกณฑ์การเป็นกรรมการหมู่บ้านการปฏิบัติหน้าที่และการประชุมของ คณะกรรมการ พ.ศ. 2551**. กรุงเทพฯ : สำนักปลัดกระทรวงมหาดไทย. 2551.

มหาวิทยาลัยสุโขทัยธรรมาธิราช. (2542). **เอกสารการสอนชุดวิชาปรัชญาการเมือง หน่วยที่ 1-7 (หน้า 124-125)**. กรุงเทพมหานคร : สำนักพิม มหาวิทยาลัยสุโขทัยธรรมาธิราช.

วาสนา ปินตา. (2549). **ปัจจัยที่มีอิทธิพลต่อประสิทธิภาพการบริหารจัดการกองทุนหมู่บ้านและชุมชนเมือง: ศึกษาเฉพาะกรณีกองทุนหมู่บ้านในเขตอำเภอหางดง จังหวัดเชียงใหม่**. วิทยานิพนธ์ศิลปศาสตรมหาบัณฑิต, มหาวิทยาลัยเชียงใหม่

สุนทร ปัญญะพงษ์. (2555). ความขัดแย้งระหว่างชุมชนท้องถิ่นกับหน่วยงานภาครัฐในการจัดการทรัพยากรน้ำจาก เขื่อนลำปะทาว อำเภอแก้งคร้อ จังหวัดชัยภูมิ. **วารสารสังคมลุ่มน้ำโขง, 8**(1),115-135.

สำนักงานคณะกรรมการพัฒนาการเศรษฐกิจและสังคมแห่งชาติ. **แผนพัฒนาเศรษฐกิจและสังคมแห่งชาติ ฉบับที่ 10 (พ.ศ.2550-2554)**. กรุงเทพฯ, 2556.

อภัย โพธิ์ศรี. (2550). **ผลกระทบของการกระจายอำนาจต่อการดำเนินงานของกำนัน ผู้ใหญ่บ้าน : กรณีศึกษาตำบลบ้านโนน กิ่งอำเภอซาสูง จังหวัดขอนแก่น.** การศึกษาค้นคว้าอิสระการศึกษาปริญญามหาบัณฑิต. สาขานโยบายสาธารณะ. มหาวิทยาลัยมหาสารคาม.

Cronbach, L.J. (1990). **Essentials of psychological testing.** (5th ed.). New York: Harper & Row.

Kaplan, R. S. and Norton, D. P. (1996). **The Balanced Scorecard : translating strategy in action.** Boston : Harvard Business School Publishing Corporation.

Taro Yamane(1973). **Statistics: An Introductory Analysis.** 3rdEd. New York. Harper and Row Publications.

การมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่
องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ
Public Participation in Resolving Drug Problems in the Phak Pang Subdistrict
Administrative Organization Area, Phu Khiao District, Chaiyaphum Province

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บทคัดย่อ

　　　　การวิจัยครั้งนี้มีวัตถุประสงค์หลักเพื่อศึกษาการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายา
เสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ กลุ่มตัวอย่างที่ใช้ในการศึกษาวิจัย
ครั้งนี้ คือประชาชนที่อาศัยอยู่ในพื้นที่ตำบลผักปัง จำนวน 387 คน เครื่องมือที่ใช้ในการวิจัยเป็นแบบสอบถาม
และแบบสัมภาษณ์ สถิติที่ใช้ในการวิเคราะห์ คือ ค่าร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน และวิเคราะห์
ข้อมูลทดสอบสมมติฐาน โดยใช้สถิติค่า (T-Test) และใช้สถิติเอฟ (F-Test)

　　　　ผลการวิจัยพบว่า

　　　　1. การมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง
อำเภอภูเขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.89) และเมื่อพิจารณารายด้าน พบว่าด้านที่
มีค่าเฉลี่ยสูงสุดคือด้านการมีส่วนร่วมในการปฏิบัติการ ($\overline{X}$ = 4.01) รองลงมาคือการมีส่วนร่วมในการ
ประเมินผล ($\overline{X}$ = 3.89) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือการมีส่วนร่วมในการตัดสินใจ ($\overline{X}$ = 3.83)

　　　　2. ผลการเปรียบเทียบการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การ
บริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ อาชีพและระดับการศึกษา โดย
ภาพรวมประชาชนที่มีเพศ อายุ อาชีพ และระดับการศึกษา ต่างกัน มีส่วนร่วมในการแก้ไขปัญหายาเสพติดใน
พื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ไม่แตกต่างกัน ซึ่งไม่เป็นไปตามสมมุติฐาน
ที่ตั้งไว้ และเมื่อพิจารณารายด้าน พบว่าทุกด้านก็ไม่แตกต่างกัน

3. ผลการศึกษาการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติด ในพื้นที่องค์การบริหารส่วนตำบลผักปัง ได้แก่ ส่งเสริมให้ประชาชนได้มีส่วนร่วมให้ข้อเสนอแนะในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในชุมชน ขององค์การบริหารส่วนตำบลผักปัง

คำสำคัญ : การมีส่วนร่วม, ยาเสพติด, องค์การบริหารส่วนตำบล

ABSTRACT

The main objective of this research is to study public participation in solving drug problems in the organization's area. Phak Pang Subdistrict Administration, Phu Khiao District, Chaiyaphum Province Sample group used in this research study There were 387 people living in Phak Pang Subdistrict. The research instrument was a questionnaire. and interview form Statistics used in the analysis are percentage, mean, standard deviation. and analyze data to test hypotheses using value statistics (T-Test) and using F statistics (F-Test).

The research results found that :

1. Public participation in solving the drug problem in the area of Phak Pang Subdistrict Administrative Organization, Phu Khiao District, Chaiyaphum Province. Overall, it is at a high level ($\overline{X}$ = 3.89) and when considering each aspect. It was found that the aspect with the highest average was participation in operations ($\overline{X}$ = 4.01), followed by participation in evaluation ($\overline{X}$ = 3.89), and the aspect with the least average was participation. in decision making ($\overline{X}$ = 3.83).

2. Comparative results of public participation in solving drug problems in the area of Phak Pang Subdistrict Administrative Organization, Phu Khieo District, Chaiyaphum Province. classified by gender, age, occupation and educational level Overall, people of different genders, ages, occupations, and educational levels are involved in solving the drug problem in the Phak Pang Subdistrict Administrative Organization area, Phu Khiao District, Chaiyaphum Province. no different which is not in accordance with the set assumptions And when considering each aspect It was found that every aspect was not different.

3. Results of the study of public participation in solving drug problems In the area of Phak Pang Subdistrict Administrative Organization, including encouraging people to participate in giving suggestions in carrying out activities to prevent and solve drug problems in the community. of Phak Pang Subdistrict Administrative Organization

Keywords: Participation, drugs, Subdistrict Administrative Organization

1. ความเป็นมาและความสำคัญของปัญหา

สถานการณ์ยาเสพติดในประเทศไทยนับแต่ปี 2563 พบว่าในหนึ่งปี มีผู้ใช้สารเสพติดสูง
ถึง 1,800,000 คน แบ่งเป็นผู้ติดยาเสพติดประมาณ 600,000 คน และเป็นผู้ใช้สารเสพติดประเภทใดประเภท
หนึ่ง 140,000 คน และมีแนวโน้มเพิ่มมากขึ้น จากประมาณการผู้ติดยาเสพติดเมื่อปี 2562 ประมาณ 510,000
คน และเพิ่มเป็น 530,000 คน ในปี 2564 และ ประมาณ 550,000 คนในปี 2565 กลุ่มประชากร ที่เกี่ยวข้อง
กับยาเสพติดส่วนใหญ่เป็นเด็กและเยาวชน อายุ 15-24 ปี โดยเป็นผู้เข้ารับการบำบัดรักษา ร้อยละ 38 เป็น
ผู้กระทำความผิดเกี่ยวกับยาเสพติด ร้อยละ 35 และพบว่ากลุ่มผู้เคยใช้สารเสพติดใน 1 ปี ประมาณ 1.96 ล้าน
คน เป็นกลุ่มผู้ใช้สารเสพติดใน 1 เดือน ประมาณ 1.13 ล้านคน และเป็นกลุ่มผู้ติด (ใช้สารเสพติด 20 วัน ใน
30) ประมาณ 450,000 คน โดยมียาบ้าเป็นปัญหาหลัก มีผู้ต้องหาถูกจับกุมในคดียาบ้า ร้อยละ 69 และเป็น
ผู้เข้ารับการบำบัดรักษา ยาบ้า ร้อยละ 79 และยาเสพติดที่ต้องเฝ้าระวัง ได้แก่ ไอซ์ เฮโรอีน คีตามีน และ
เอ็กซ์ตราซี ที่พบแนวโน้มแพร่ระบาดเพิ่มขึ้น (ศูนย์อำนวยการป้องกันและปราบปรามยาเสพติด กระทรวง
สาธารณสุข 17 มกราคม 2564)

ในช่วงหลายปีที่ผ่านมาสังคมของประเทศไทยตกอยู่ในสภาพที่อ่อนหล้า ชุมชนที่เคยเข้มแข็งพึ่งพา
ตัวเองได้มีสัดส่วนลดน้อยลง ภูมิคุ้มกันในชุมชนโดยเฉพาะสถาบันครอบครัวมีความอ่อนแอ สมาชิกใน
ครอบครัวมีความสับสนในบทบาทของตนเองไม่สามารถสร้างความสมดุลระหว่างสิ่งเก่าที่คุ้นเคยกับสิ่งใหม่ที่
เข้ามาในวิถีชีวิต ไม่สามารถก้าวทันเทคโนโลยีที่จำเป็นต่อการเรียนรู้เพื่อดำรงชีวิต ขาดทักษะในการปรับตัวให้
ทันกับสภาพสังคมที่มีความสลับซับซ้อนและเปลี่ยนแปรงไปจากอดีตที่เคยเป็นมา การต่อสู้ดิ้นรนในสังคมเต็ม
ไปด้วยความเร่งรีบ แข่งขัน ขาดความเอื้ออาทรให้แก่กันและกัน ปฏิสัมพันธ์ของคนในชุมชนนับวันห่างหายไป
การพึ่งพิงกันในชุมชนเป็นสิ่งที่เริ่มหาได้ยากยิ่ง ผู้คนในชุมชนต่อสู้เพื่อผลประโยชน์ตนเองและคนใกล้ชิด
สภาพการณ์เช่นนี้จึงทำให้เห็นภาพทั้งผู้ประสบผลสำเร็จ ผู้ขาดโอกาส ผู้ล้มเหลว และผู้ที่รู้สึกว่าตัวเองถูก
ทอดทิ้งจากสังคม ช่องว่างระหว่างคนในชุมชนนับวันยิ่งห่างออกไปเรื่อย ๆ ผู้ขาดโอกาสและผู้ล้มเหลวมักถูกทิ้ง
ไว้ข้างหลังขาดการเหลียวแลจากสังคม กลายเป็นกลุ่มเสี่ยงที่อ่อนแอและมีแนวโน้มที่จะนำตัวเองเข้าใกล้กับสิ่ง
เสพติดโดยเริ่มจากผู้เสพ พัฒนาตัวเองเป็นผู้ค้า และลงท้ายด้วยการก่ออาชญากรรมในที่สุด

จากปัญหาที่กล่าวมาทำให้รัฐบาลเริ่มตั้งแต่ ดร.ทักษิณ ชินวัตร นายกรัฐมนตรีคนที่ 23 ของไทยได้
ให้ความสำคัญและได้ประกาศสงครามกับขบวนการค้ายาเสพติด โดยได้กำหนดให้ปัญหายาเสพติดเป็น
ยุทธศาสตร์หลักของชาติ ซึ่งรัฐบาลในสมัยต่อ ๆ มาจนถึงปัจจุบันได้ประกาศให้ปัญหายาเสพติดเป็นวาระ
แห่งชาติ มีแนวทางปฏิบัติที่ชัดเจนในการสนับสนุนให้ภาคประชาสังคมเข้ามามีส่วนร่วม และภาคชุมชนในการ
แก้ไขปัญหาสังคมในด้านต่าง ๆ โดยสร้างความเข้มแข็งให้ภาคประชาสังคมและชุมชนให้เพิ่มมากขึ้น ซึ่งจะเป็น
ส่วนสำคัญที่จะทำให้ปัญหายาเสพติดและปัญหาสังคมอื่น ๆ ได้รับการแก้ไขอย่างแท้จริง โดยการเสริมปัจจัย
ความเข้มแข็งให้กับหมู่บ้านชุมชน

องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ เป็นหน่วยงานบริหารราชการส่วน
ท้องถิ่น มีพื้นที่ครอบคลุม 61.67 ตารางกิโลเมตร แบ่งเขตปกครองออกเป็น 17 หมู่บ้าน มีจำนวนประชากร
16,992 คน แยกเป็นชาย 8,393 หญิง 8,599 คน จำนวนครัวเรือน 3,056 หลัง (อ้างอิง ข้อมูลจากทะเบียน
ราษฎรที่ว่าการอำเภอภูเขียว ณ วันที่ 20 เมษายน 2562)

องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ มีหน้าที่ที่ต้องปฏิบัติตาม พระราชบัญญัติเทศบาล พ.ศ. 2496 และแก้ไขเพิ่มเติม ฉบับที่ 12 พ.ศ. 2546 โดยต้องเป็นไปเพื่อประโยชน์สุข ของประชาชน โดยใช้ วิธีการบริหารกิจการบ้านเมืองที่ดี และคำนึงถึงการมีส่วนร่วมของประชาชนเป็นหลัก โดยมีแนวทางการปฏิบัติงานตามยุทธศาสตร์การพัฒนา ไม่ว่าจะเป็นในด้านโครงสร้างพื้นฐานด้านเศรษฐกิจ ด้านสังคม ด้านสิ่งแวดล้อม ด้านการศึกษา ด้านการท่องเที่ยว และด้านการบริหารและในส่วนของการมีการ ดำเนินงานในด้านสังคม มีการดำเนินงานในการป้องกันและแก้ไขปัญหายาเสพติดด้วย ถึงแม้พื้นที่ของเทศบาล ตำบลภูเขียวจะไม่ใช่พื้นที่แพร่ระบาดหลักของยาเสพติด แต่ด้วยสภาพแวดล้อมในปัจจุบันที่มีประชากรแฝงเข้า มาอาศัยอยู่ในพื้นที่เป็นจำนวนมาก ก็เป็นปัจจัยเสี่ยงที่อาจจะก่อให้เกิดการแพร่ระบาดของยาเสพติดเพิ่มขึ้นได้ ประกอบกับรัฐบาลได้มีนโยบายใน

การเอาชนะยาเสพติดเป็นวาระแห่งชาติ ที่ทุกภาคส่วนในสังคมจะต้องร่วมกันดำเนินการในการแก้ไข ปัญหายาเสพติดอย่างจริงจังและต่อเนื่อง โดยได้มีมาตรการการปฏิบัติในการเสริมสร้างพลังแผ่นดิน เอาชนะยา เสพติด ซึ่งมุ่งเน้นการดำเนินงานระดับชุมชนและหมู่บ้านให้ตระหนักถึงภัยของยาเสพติด ซึ่งเป็นปัญหาของทุก คนในประเทศที่ต้องช่วยกันแก้ไข มีความสามัคคีร่วมแรงร่วมใจ ช่วยกันสร้างชุมชนและหมู่บ้านของตนให้ เข้มแข็ง โดยให้องค์กรปกครองส่วนท้องถิ่นเป็นแกนหลักร่วมกับกลุ่มพลังมวลชน อาสาสมัคร กำนัน ผู้ใหญ่บ้าน ผู้นำธรรมชาติ และองค์กรภาคประชาชน ในการเฝ้าระวังตรวจตราความสงบเรียบร้อย และป้องกัน การนำยาเสพติดเข้ามาในพื้นที่

ผู้วิจัยในฐานะเป็นผู้ปฏิบัติหน้าที่ที่รับผิดชอบในหน่วยงานของกรมราชทัณฑ์ คือเรือนจำอำเภอภู เขียว จังหวัดชัยภูมิ และมีหน้าที่ต้องเข้าไปมีส่วนร่วมในการระดมสมองและหาแนวทางแก้ไขปัญหาดังกล่าว โดยเรือนจำอำเภอภูเขียว ตั้งอยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จึงมีความสนใจที่จะศึกษาการ มีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ว่า ประชาชนในพื้นที่ได้เข้ามามีส่วนร่วมในการแก้ไขปัญหายาเสพติดอย่างไรบ้าง ใน 4 ด้าน คือ 1) ด้านการมีส่วน ร่วมในการตัดสินใจ 2) ด้านการมีส่วนร่วมในการปฏิบัติการ 3) ด้านการมีส่วนร่วมในผลประโยชน์ และ 3) ด้าน การมีส่วนร่วมในการประเมินผล

เพื่อนำผลที่ได้จากการศึกษาไปเป็นแนวทางในการจัดทำแผนงาน/ โครงการ ในการป้องกันและ แก้ไขปัญหายาเสพติดของเรือนจำอำเภอภูเขียว กับชุมชนที่อยู่ในเขตองค์การบริหารส่วนตำบลผักปัง อำเภอภู เขียว จังหวัดชัยภูมิ ต่อไป

2. วัตถุประสงค์ของการวิจัย

1. เพื่อศึกษาการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วน ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

2. เพื่อเปรียบเทียบการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหาร ส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จำแนกตามเพศ อายุ อาชีพ และระดับการศึกษา

3. ขอบเขตของการวิจัย

    1. ขอบเขตด้านเนื้อหา

        ในการวิจัยครั้งนี้มุ่งศึกษาเกี่ยวกับการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ เนื้อหาที่เกี่ยวข้องจึงประกอบด้วยแนวคิด หรือทฤษฎีการมีส่วนร่วมโดยเฉพาะ ประกอบด้วยการมีส่วนร่วมในการตัดสินใจ การมีส่วนร่วมในการปฏิบัติการ การมีส่วนร่วมในผลประโยชน์ และการมีส่วนร่วมในการประเมินผล

    2. ขอบเขตด้านประชากรและกลุ่มตัวอย่าง

        ประชากรที่ใช้ในการวิจัยครั้งนี้ คือ ประชาชนที่อาศัยอยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 11,284 คน (อ้างอิงข้อมูลจากทะเบียนราษฎรที่ว่าการอำเภอภูเขียว ณ วันที่ 20 เมษายน 2563)

        กลุ่มตัวอย่างที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ประชาชนที่อาศัยอยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 387 คน กำหนดกลุ่มตัวอย่างจากสูตรของยามาเน่ (Yamane, 1967: 886 - 887)โดยกำหนดระดับค่าความเชื่อมั่นที่ 95%

    3. ขอบเขตด้านตัวแปร

        ตัวแปรที่ใช้ในการวิจัยครั้งนี้ ประกอบด้วย

        3.1 ตัวแปรอิสระ ได้แก่ เพศ อายุ อาชีพ และระดับการศึกษา

        3.2 ตัวแปรตาม ได้แก่

            การมีส่วนร่วมในการตัดสินใจ

            การมีส่วนร่วมในการปฏิบัติการ

            การมีส่วนร่วมในผลประโยชน์

            การมีส่วนร่วมในการประเมินผล

4. ประโยชน์ของการวิจัย

    1. ทราบการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

    2. ทราบผลเปรียบเทียบการมีส่วนร่วมในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จำแนกตามเพศ อายุ อาชีพ และระดับการศึกษา

    3. สามารถนำผลการวิจัยมาเป็นแนวทางร่วมกันในการจัดทำแผนงาน/ โครงการ ในการป้องกันและแก้ไขปัญหายาเสพติดของเรือนจำอำเภอภูเขียว กับชุมชนที่อยู่ในเขตองค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ และนำไปสู่การแก้ไขปัญหายาเสพติดที่มีประสิทธิภาพสูงมากขึ้น

5. ประชากรและกลุ่มตัวอย่าง

        ประชากรที่ใช้ในการวิจัยครั้งนี้ คือ ประชาชนที่อาศัยอยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัด ชัยภูมิ ที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 11,284 คน จาก11 หมู่บ้าน (อ้างอิงข้อมูลจากทะเบียนราษฎรที่ว่า การอำเภอภูเขียว ณ วันที่ 20 เมษายน 2563)

        กลุ่มตัวอย่างที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ประชาชนที่อาศัยอยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 387 คน ซึ่งกำหนดขนาดกลุ่มตัวอย่างที่ใช้ในการศึกษาวิจัย ด้วยการใช้สูตรของยามาเน่ (Yamane, 1967) โดยกำหนดระดับค่าความเชื่อมั่นที่ 95% และได้ทำการสุ่ม ตัวอย่างแบบแบ่งชั้นภูมิ (Stratified Random Sampling) แบบเป็นสัดส่วนโดยแบ่งกลุ่มตัวอย่างออกเป็น 17 กลุ่ม กลุ่มจาก 17 หมู่บ้าน ตามสัดส่วนแต่ละหมู่บ้าน ซึ่งมีกลุ่มตัวอย่างที่มีลักษณะต่างกัน จากนั้นคำนวณหา ขนาดตัวอย่างจาก 17 หมู่บ้าน เพื่อให้ได้สัดส่วนของประชากรให้ได้กลุ่มตัวอย่างครบตามเกณฑ์ที่กำหนด

6. เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล

        แบบสอบถาม โดยแบบสอบถามมี 3 ตอน ดังนี้

        ตอนที่ 1 แบบสอบถามเกี่ยวกับข้อมูลทั่วไปของผู้ตอบแบบสอบถาม ลักษณะแบบสอบถามเป็นแบบ ตรวจสอบรายการ (check-list) ประกอบด้วยเพศ อายุ อาชีพ และระดับการศึกษา

        ตอนที่ 2 การมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติด ในพื้นที่องค์การบริหารส่วนตำบล ผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ประกอบด้วย 4 ด้าน ได้แก่ การมีส่วนร่วมในการตัดสินใจ การมีส่วนร่วม ในการปฏิบัติการ การมีส่วนร่วมในการรับผลประโยชน์ และการมีส่วนร่วมในการประเมินผล ลักษณะของ คำถามเป็นแบบมาตราส่วนประมาณค่า แบ่งเป็น 5

        ตอนที่ 3 ข้อเสนอแนะเกี่ยวกับแนวการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติด ในพื้นที่ องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ลักษณะแบบสอบถามเป็นแบบปลายเปิด

        แบบสัมภาษณ์แบบกึ่งโครงสร้าง (Semi-structured Interview)

        เป็นแบบสัมภาษณ์ผู้วิจัยพัฒนาขึ้น ซึ่งเป็นแบบสัมภาษณ์แบบกึ่งโครงสร้าง ประกอบด้วยคำถามที่ให้ ผู้ตอบแสดงความคิดเห็น (Open–ended Question) เกี่ยวกับข้อเสนอแนะแนวการมีส่วนร่วมของประชาชน ในการแก้ไขปัญหายาเสพติด ในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จำนวน 4 ด้าน ได้แก่ การมีส่วนร่วมในการตัดสินใจ การมีส่วนร่วมในการปฏิบัติการ การมีส่วนร่วมในการรับผลประโยชน์ และการมีส่วนร่วมในการประเมินผล

7. การสร้างและการทดสอบเครื่องมือ

        1. ศึกษาข้อมูลจากเอกสาร ผลงานวิจัย และสัมภาษณ์ผู้นำชุมชน ผู้ใหญ่บ้าน ผู้ช่วยผู้ใหญ่บ้าน กำนัน เพื่อกำหนดกรอบเนื้อหาในการสร้างแบบสอบถาม และแบบสัมภาษณ์

        2. จัดทำแบบสอบถามและแบบสัมภาษณ์ที่ประกอบด้วยคำถามที่ต้องการเพื่อตอบวัตถุประสงค์ ของการวิจัย ให้ครบถ้วนและครอบคลุมเนื้อหา

3. ผู้ศึกษาทำการตรวจสอบเครื่องมืออีกครั้งหนึ่งในขั้นตอนนี้ตรวจสอบความ ครอบคลุมของเนื้อหา ความเข้าใจของภาษา ความเข้าใจตรงกันของคำถาม

4. นำแบบสอบถามและแบบสัมภาษณ์ให้ผู้เชี่ยวชาญจำนวน 3 ท่าน ตรวจสอบ

5. นำแบบสอบถามและแบบสัมภาษณ์ที่ปรับปรุงแก้ไขแล้วเสนอต่อผู้เชี่ยวชาญประเมินความสอดคล้องของข้อคำถาม (IOC) โดยผู้เชี่ยวชาญมีจำนวน 3 ท่าน และนำเครื่องมือที่ได้จากผู้เชี่ยวชาญมาหาค่าความเที่ยงตรงของแบบสอบถาม (Content Validity) โดยคำนวณหาค่า IOC โดยคัดเลือกข้อที่มีค่า IOC ตั้งแต่ 0.67 เป็นต้นไป เป็นข้อที่นำไปใช้ได้

6. นำแบบสอบถามและแบบสัมภาษณ์ที่ได้จากการปรับปรุงแก้ไขของผู้เชี่ยวชาญเสนอคณะกรรมการควบคุมการค้นคว้าอิสระตรวจสอบแล้ว ไปทดลองใช้ (Try out) กับประชาชนที่อาศัยอยู่ในองค์การบริหารส่วนตำบลบ้านแก้ง อำเภอภูเขียว จังหวัดชัยภูมิ จำนวน 30 คน

7. วิเคราะห์แบบสอบถามและแบบสัมภาษณ์ โดยวิเคราะห์หาค่าความเชื่อมั่นของแบบสอบถามทั้งฉบับ ด้วยวิธีหาค่าสัมประสิทธิ์แอลฟาของครอนบัค (Cronbach's Alpha Coefficient) (ทองใบ สุดชารี, 2549 : 131) ซึ่งจากการวิเคราะห์ผลได้ค่าเท่ากับ 0.851

8. นำเครื่องมือที่ปรับปรุงแก้ไขสมบูรณ์แล้วไปเก็บรวบรวมกับกลุ่มตัวอย่างต่อไป

8. การเก็บรวบรวมข้อมูล

1. ผู้ศึกษาการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติด ในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

2. ผู้ศึกษาดำเนินการเก็บข้อมูลโดยใช้แบบสอบถามกับกลุ่มตัวอย่างและรวบรวมข้อมูลด้วยตนเอง ซึ่งได้ทำการแจกแบบสอบถามจำนวน 387 ฉบับ

3. นำแบบสอบถามมาตรวจสอบความครบถ้วนสมบูรณ์ และเก็บรวบรวมเพื่อนำมาวิเคราะห์ข้อมูลต่อไป

9. สถิติที่ใช้ในการวิเคราะห์ข้อมูล

การวิเคราะห์ข้อมูลในการศึกษาครั้งนี้ใช้การวิเคราะห์ด้วยสถิติ ดังนี้

1. การวิเคราะห์สถิติพรรณนา (Descriptive Statistics) หรือค่าสถิติพื้นฐาน ได้แก่

1.1 ร้อยละ (Percentage) (บุญชม ศรีสะอาด, 2542: 101)

1.2 ค่าเฉลี่ย ($\overline{\text{X}}$) (บุญชม ศรีสะอาด, 2542: 102)

1.3 ส่วนเบี่ยงเบนมาตรฐาน (Standard Deviation) (บุญชม ศรีสะอาด, 2542: 106)

2. สถิติเชิงอนุมาน (Inferential Statistic) ได้แก่

2.1 t-test (Independent Sample)

2.2 F-test (หรือ One Way ANOVA) และเปรียบเทียบความแตกต่างรายคู่ด้วยวิธีของเชฟเฟ่ (Sheffe's Method)

10. ผลการวิจัย

    1. ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม พบว่า ผู้ตอบแบบสอบถามส่วนใหญ่เป็นเพศชาย คิดเป็นร้อยละ 51.42 อายุอยู่ระหว่าง 36 - 60 ปี คิดเป็นร้อยละ 36.18 มีระดับการศึกษาประถมศึกษา คิดเป็นร้อยละ 26.36 และส่วนใหญ่ประกอบอาชีพเกษตรกรรม คิดเป็นร้อยละ 41.60

    2. การมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.89) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการมีส่วนร่วมในการปฏิบัติการ ($\overline{X}$ = 4.01) รองลงมาคือการมีส่วนร่วมในการประเมินผล ($\overline{X}$ = 3.89) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือการมีส่วนร่วมในการตัดสินใจ ($\overline{X}$ = 3.83) และวิเคราะห์ข้อมูลออกเป็นแต่ละด้านได้ดังนี้

    2.1 ด้านการมีส่วนร่วมในการตัดสินใจ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.83) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 3. ท่านมีส่วนร่วมในการแสดงความคิดเห็นในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในที่ประชุมระดับหมู่บ้าน/ ชุมชน ($\overline{X}$ = 4.03) รองลงมาคือ ข้อ 4. ท่านมีส่วนร่วมในการจัดลำดับความสำคัญของการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในที่ประชุมระดับหมู่บ้าน/ ชุมชน ($\overline{X}$ = 3.87) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 5. ท่านมีส่วนร่วมกำหนดแนวทางในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในที่ประชุมระดับหมู่บ้าน/ ชุมชน ($\overline{X}$ = 3.68)

    2.2 ด้านการมีส่วนร่วมในการปฏิบัติการ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.01) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 7. ท่านมีส่วนร่วมในการสำรวจหรือให้ข้อมูลผู้เกี่ยวข้องกับยาเสพติดในหมู่บ้าน/ ชุมชน แก่ผู้นำหมู่บ้าน/ ชุมชน หรือหน่วยงานที่เกี่ยวข้อง เช่น ฝ่ายปกครอง กำนัน ผู้ใหญ่บ้าน ตำรวจ ทหาร ฯลฯ ($\overline{X}$ = 4.17) รองลงมาคือ ข้อ 9. ท่านร่วมมือกับหน่วยงานต่าง ๆ ที่เกี่ยวข้องในการดำเนินการรณรงค์ ประชาสัมพันธ์เกี่ยวกับภัยของยาเสพติดให้สมาชิกในหมู่บ้าน/ ชุมชน ($\overline{X}$ = 4.07) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 8. ท่านร่วมมือกับหน่วยงานต่าง ๆ ที่เกี่ยวข้องในการสอดส่องดูแลความเรียบร้อย และการกระทำผิดเกี่ยวกับยาเสพติดในหมู่บ้าน/ ชุมชน ($\overline{X}$ = 3.88)

    2.3 ด้านการมีส่วนร่วมในผลประโยชน์ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.85) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 11. ท่านมีส่วนร่วมในการเรียนรู้วิธีการป้องกันและแก้ไขปัญหายาเสพติด เพื่อทำให้สมาชิกในครอบครัวของท่านห่างไกลยาเสพติด ($\overline{X}$ = 4.03) รองลงมาคือ ข้อ 12. การร่วมมือกันในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติด ทำให้ปัญหายาเสพติดในหมู่บ้าน/ ชุมชนลดลง ($\overline{X}$ = 3.91) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 14. ท่านภาคภูมิใจที่ได้มีส่วนร่วมในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในหมู่บ้าน/ ชุมชน ($\overline{X}$ = 3.67)

    2.4 ด้านการมีส่วนร่วมในการประเมินผล โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.85) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 17. ท่านได้ติดตามข้อมูลการปฏิบัติงานของเจ้าหน้าที่ เช่น ฝ่ายปกครอง กำนัน ผู้ใหญ่บ้านตำรวจ ทหาร ฯลฯ ในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในหมู่บ้าน/ ชุมชน ($\overline{X}$ = 4.02) รองลงมาคือ ข้อ 20. ท่านมีส่วนร่วมในการสรุปผลและให้ข้อเสนอแนะในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในหมู่บ้าน/ ชุมชน ในปีต่อไป ($\overline{X}$ = 3.97) และข้อที่มี

ค่าเฉลี่ยน้อยที่สุดคือ ข้อ 16. ท่านมีส่วนร่วมให้ข้อเสนอแนะในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหา ยาเสพติดในหมู่บ้าน/ ชุมชน ($\overline{X}$ = 3.79)

   3. ผลการวิเคราะห์ความแปรปรวนทางเดียวของการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายา เสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ อาชีพ และ ระดับการศึกษา โดยภาพรวมประชาชนที่มีเพศ อายุ อาชีพ และระดับการศึกษา ต่างกัน มีส่วนร่วมในการ แก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ไม่แตกต่างกัน ซึ่งไม่ เป็นไปตามสมมุติฐานที่ตั้งไว้ และเมื่อพิจารณารายด้าน พบว่าทุกด้านก็ไม่แตกต่างกัน

   4. ผลการศึกษาการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติด ในพื้นที่องค์การบริหาร ส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่ได้จากการสัมภาษณ์ และการจัดเวทีประชาคม ดังนี้

    1. ควรให้ประชาชนมีส่วนร่วมในการจัดลำดับความสำคัญของโครงการ เพื่อแก้ปัญหาที่เกิด จากการกำหนดนโยบายด้านการและแนวทางการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผัก ปัง อำเภอภูเขียว จังหวัดชัยภูมิ

    2. ควรให้ประชาชนมีส่วนร่วมปฏิบัติกิจกรรมที่เกี่ยวกับยาเสพติดขององค์การบริหารส่วน ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

    3. การมีส่วนร่วมในการเรียนรู้วิธีการป้องกันและแก้ไขปัญหายาเสพติด ทำให้สมาชิก ในครอบครัวของชุมชนในองค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ห่างไกลยาเสพติด

    4. ให้ประชาชนมีส่วนร่วมให้ข้อเสนอแนะในการดำเนินกิจกรรมการป้องกันและแก้ไขปัญหา ยาเสพติดในหมู่บ้าน/ ชุมชน ขององค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

11. อภิปรายผลการวิจัย

    การมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.89) และเมื่อพิจารณารายด้าน พบว่า ด้านที่ มีค่าเฉลี่ยสูงสุดคือด้านการมีส่วนร่วมในการปฏิบัติการ ($\overline{X}$ = 4.01) รองลงมาคือการมีส่วนร่วมในการ ประเมินผล ($\overline{X}$ = 3.89) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือการมีส่วนร่วมในการตัดสินใจ ($\overline{X}$ = 3.83) ที่เป็น เช่นนี้อาจเป็นเพราะว่า ทางองค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ มีการประชุมในระดับ หมู่บ้านเพื่อดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติด มีการวิเคราะห์ปัญหาในการดำเนินกิจกรรม การป้องกันและแก้ไขปัญหายาเสพติด สนับสนุน เงิน และวัสดุอุปกรณ์เพื่อใช้สนับสนุนการดำเนินกิจกรรมการ ป้องกันและแก้ไขปัญหา ยาเสพติดในหมู่บ้าน รวมถึงฝ่ายปกครอง กำนัน ผู้ใหญ่บ้าน ตำรวจ ทหาร ฯลฯ ใน การดำเนินกิจกรรมการป้องกันและแก้ไขปัญหายาเสพติดในหมู่บ้าน ซึ่งสอดคล้องกับงานวิจัยของกิตติคุณ เชื้อ แถว (2557) วิจัยเรื่องการมีส่วนร่วมของผู้นำชุมชนในการแก้ไขปัญหายาเสพติดกรณีศึกษา อำเภอพานทอง จังหวัดชลบุรี พบว่าการมีส่วนร่วมในการแก้ไขปัญหายาเสพติดของผู้นำชุมชนในภาพรวมอยู่ในระดับมาก โดย ที่มีส่วนร่วมในการแก้ไขปัญหายาเสพติดมากที่สุดในด้านการดำเนินการ รองลงมาคือ ด้านการวาง แผน และ ด้านการติดตามและประเมินผล ตามลำดับ ในด้านการดำเนินการจะมีส่วนร่วมที่เห็นได้ชัดเจนในเรื่องของการ ดูแลสอดส่องพฤติกรรมของประชาชนที่อาจเกี่ยวข้องกับยาเสพติดในพื้นที่ และการส่งเสริมสนับสนุนการจัด

กิจกรรมเพื่อมิให้เกิดการแพร่ระบาดของยาเสพติด ขณะที่บทบาทการมีส่วนร่วมในการส่งตัวผู้เสพยาเสพติด
เข้าสู่กระบวนการบำบัด และการปิดล้อม ตรวจค้น ยาเสพติดในเขตพื้นที่ อยู่ในระดับที่ไม่สูงมากนักซึ่งอาจจะ
สะท้อนให้เห็นถึงปัญหายาเสพติดในพื้นที่ชมที่ดูแลยังอยู่ในระดับที่ไม่สูงมากนักทางด้านการวางแผนมีส่วนร่วม
ที่ชัดเจนในเรื่องของการเข้าร่วมประชุมเพื่อดำเนินการในการแก้ไขปัญหายาเสพติดในชุมชน และการนำเสนอ
ปัญหาและแนวทางแก้ไขปัญหายาเสพติดนับว่าอยู่ในเกณฑ์ค่อนข้างดี แต่ก็อาจจะมีส่วนร่วมที่ยังไม่สูงมากนัก
ในเรื่องของการพิจารณางบประมาณโครงการที่เกี่ยวข้องกับยาเสพติด และการแก้ไขอุปสรรคที่เกิดขึ้นเกี่ยวกับ
การซึ่งสอดคล้องกับแนวคิดของ ประทีป จันทรสิงห์ (2549) ที่ได้กล่าวถึงการมีส่วนร่วมจะมีความสำคัญอย่าง
ยิ่งในการพัฒนาคุณภาพองค์กรเพราะเมื่อบุคคลได้เข้ามามีส่วนร่วมแล้วจะไม่ค่อยเกิดการต่อต้านเกี่ยวกับ
แนวคิดและการดำเนินงาน รวมทั้งช่วยลดความขัดแย้งและความเครียดจากการทำงานทำให้บุคคลได้ร่วมกัน
พิจารณาแก้ไขปัญหาที่เกิดขึ้นจากการทำงาน เพื่อมุ่งไปสู่การบรรลุเป้าหมายขององค์กรได้อย่างเหมาะสม และ
สอดคล้องกับแนวคิดของ จุฬาภรณ์ โสตะ (2543) ที่ได้กล่าวถึงการมีส่วนร่วมว่าในกระบวนการตัดสินใจหรือ
กระบวนการบริหารประสิทธิผลในการบริหารงานขององค์กรขึ้นอยู่กับการรวมพลังของบุคคลที่เกี่ยวข้องกับ
องค์กรนั้นในการปฏิบัติภารกิจให้บรรลุเป้าหมาย นอกจากนี้ยังสอดคล้องกับ Davis & Newstrom (1989) ที่
ได้อธิบายถึงการมีส่วนร่วมว่าเป็นเรื่องของความเกี่ยวข้องทางด้านจิตใจ และความรู้สึกนึกคิดของแต่ละคน ที่มี
ต่อกิจกรรมใดกิจกรรมหนึ่งของกลุ่ม หรือเป็นแรงกระตุ้นที่ช่วยทำให้การปฏิบัติงานใด ๆ เกิดความสำเร็จ ซึ่ง
เป็นเป้าหมายของกลุ่ม

      ผลการวิเคราะห์ความแปรปรวนทางเดียวของการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพ
ติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ อาชีพ และ
ระดับการศึกษา โดยภาพรวมประชาชนที่มีเพศ อายุ อาชีพ และระดับการศึกษา ต่างกัน มีส่วนร่วมในการ
แก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ไม่แตกต่างกัน ซึ่งไม่
เป็นไปตามสมมุติฐานที่ตั้งไว้ และเมื่อพิจารณารายด้าน พบว่าทุกด้านก็ไม่แตกต่างกัน ซึ่งสอดคล้องกับงานวิจัย
ของอภิญญา ก้อเด็ม และอิกบาร์น ราชีด (2566) วิจัยเรื่องการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายา
เสพติดในจังหวัดนราธิวาส พบว่า เพศ อายุ ระดับการศึกษา และระยะเวลาที่อาศัยอยู่ในหมู่บ้าน/ชุมชนพบว่า
ไม่แตกต่างกัน เนื่องจาก ยุคสมัยในปัจจุบันทุกเพศ ทุกวัยทุกระดับการศึกษา รวมทั้งทุกช่วงเวลาของการอาศัย
อยู่ในหมู่บ้าน/ชุมชนอยู่กับเทคโนโลยีและความทันสมัยของเหตุการณ์ปัจจุบันทำให้ได้รับรู้ถึงข่าวสารและการ
รณรงค์ของหน่วยงานภาครัฐที่เข้าถึงทุกหมู่บ้านทำให้ประชานเข้ามามีส่วนร่วมในการแก้ไขปัญหายาเสพติดไม่
แตกต่างกัน และยังสอดคล้องกับงานวิจัยของกิตติคุณ เชื้อแถว (2557) วิจัยเรื่องการมีส่วนร่วมของผู้นำชุมชน
ในการแก้ไขปัญหายาเสพติดกรณีศึกษา อำเภอพานทอง จังหวัดชลบุรี พบว่าผู้นำชุมชนที่มีอายุต่างกัน จะมี
ระดับการมีส่วนร่วมในการแก้ไขปัญหายาเสพติดไม่แตกต่างกันมากนัก กล่าวคือ ผู้นำในทุกระดับอายุมีระดับ
การมีส่วนร่วมในการป้องกันละแก้ไขปัญหายาเสพติด ซึ่งสอดคล้องกับผลการศึกษาของ อัญญารัตน สุวรรณ
โณ (2545) ที่ได้ทำการศึกษาบทบาทของผู้นำทองถิ่นกับแนวทางป้องกันยาเสพติด : กรณีศึกษาจังหวัดสงขลา
พบว่า อายุของผู้นำท้องถิ่นไม่มีความสัมพันธ์กับการมีส่วนร่วมของผู้นำต่อแนวทางในการป้องกันยาเสพติด

12. ข้อเสนอแนะ

1. ข้อเสนอแนะในการนำผลการวิจัยในครั้งนี้ไปใช้

จากผลการวิจัยการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.89) และเมื่อพิจารณารายด้านพบว่า ด้านที่มีค่าเฉลี่ยน้อยที่สุดคือการมีส่วนร่วมในการตัดสินใจ ($\overline{X}$ = 3.83) ทางองค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ควรมีการดำเนินการดังนี้

1. สนับสนุนให้ประชาชนมีส่วนร่วมมากขึ้นในเรื่องของการพิจารณางบประมาณโครงการที่เกี่ยวข้องกับยาเสพติด และการแก้ไขอุปสรรคที่เกิดขึ้นเกี่ยวกับการแก้ไขปัญหายาเสพติด

2. ควรสนับสนุนให้ประชาชนมีส่วนร่วมมากขึ้นในเรื่องของการติดตามความก้าวหน้าในการแก้ไขปัญหายาเสพติด และการประเมินผลสำเร็จของการแก้ไขปัญหายาเสพติด

3. เจ้าหน้าที่ของรัฐและหน่วยงานที่เกี่ยวข้องจะต้องให้การสนับสนุนด้านการฝึกอบรมการป้องกันยาเสพติดให้แก่ผู้นำชุมชนอย่างทั่วถึง และต่อเนื่อง

4. ควรสนับสนุนให้ผู้นำชุมชนมีส่วนร่วมมากขึ้นในเรื่องของการส่งตัวผู้เสพยาเสพติดเข้าสู่กระบวนการบำบัด และการปิดล้อม ตรวจค้น ยาเสพติดในเขตพื้นที่

2. ข้อเสนอแนะในการวิจัยครั้งต่อไป

2.1 ควรศึกษาปัจจัยต่าง ๆ ที่มีผลต่อการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในพื้นที่องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

2.2 ควรศึกษาเปรียบเทียบการมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดในแต่ละตำบล เพื่อดูความแตกต่างและหาแนวทางการแก้ไข

บรรณานุกรม

กษมา วรรณโร. (2561). **ปัจจัยที่ส่งผลต่อความสำเร็จในการดำเนินงานป้องกันและแก้ไขปัญหายาเสพติดของหมู่บ้านกองทุนแม่ของแผ่นดิน บ้านคลองทราย อำเภอแม่สาน จังหวัดปัตตานี.** (สารนิพนธ์รัฐประศาสนศาสตรมหาบัณฑิต). มหาวิทยาลัยสงขลานครินทร์, สงขลา.

กรมส่งเสริมการปกครองท้องถิ่น. (2546). **แนวคิดคู่มือปฏิบัติงานสภาตำบลและอบต.** กรุงเทพมหานคร.

สันต์ชัย รัตนะขวัญ. (2555). **การทำแผนพัฒนาท้องถิ่นขององค์กรปกครองส่วนท้องถิ่นในรูปแบบเทศบาล: ศึกษากรณีเทศบาลเมืองไร่ขิง.**กรุงเทพมหานคร : มหาวิทยาลัยราชภัฏสวนสุนันทาสถาบันวิจัยและพัฒนา

ปธาน สุวรรณมงคล.(2558). **การบริหารงานภาครัฐกับการสร้างธรรมาภิบาล: สถาบันพระปกเกล้า,** กรุงเทพมหานคร : สำนักงานบริหารเทคโนโลยีสารสนเทศเพื่อพัฒนาการศึกษา กระทรวงการอุดมศึกษา วิทยาศาสตร์ วิจัยและนวัตกรรม

รณกฤต จิตต์ธรรม (2563). **การป้องกนและแก้ไขปัญหายาเสพติดโดยการมีส่วนร่วมของประชาชนในชุมชน ปู่ เย็นย่าคำยังอยู่ แขวงหลักสอง เขตบางแค กรุงเทพมหานคร.**

จิรเดช กมลเพ็ชร (2561) **การมีส่วนร่วมของประชาชนในการแก้ไขปัญหายาเสพติดของหมู่บ้านตามแนว ชายแดน ด้านจังหวัดเชียงใหม่และจังหวัดเชียงราย (ศึกษาเฉพาะพื้นที่ชายแดนติดป ร ะ เ ท ศ เมียนมา).**

WHO & UNICEF. (1978). **Report of the international Conference on primary health care.** New York : NP. Press.

การบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม
อำเภอไชยวาน จังหวัดอุดรธานี
Management According to the Principles of Good Governance of Nong Waeng
Cheem Hom Subdistrict Municipality Chai Wan Udon Thani Province

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์หลักเพื่อศึกษาการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี กลุ่มตัวอย่างที่ใช้ในการศึกษาวิจัยครั้งนี้ คือประชาชนที่มีอายุ 18 ปีขึ้นไป ที่อาศัยอยู่ในเขตเทศบาลตำบลหนองแวงแก้มหอม จำนวน 373 คน เครื่องมือที่ใช้ในการเก็บรวบรวมเป็นแบบสอบถาม สถิติที่ใช้ในการวิเคราะห์ คือ ค่าร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน และวิเคราะห์ข้อมูล ทดสอบสมมติฐาน โดยใช้สถิติค่า (T-Test) และใช้สถิติเอฟ (F-Test)

ผลการวิจัยพบว่า

1. การบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยภาพรวมอยู่ในระดับมาก ($\overline{\mathbf{X}}$ =4.26,S.D.=0.58) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านหลักความรับผิดชอบ ($\overline{\mathbf{X}}$ = 4.30, S.D.= 0.54) รองลงมาคือด้านหลักการมีส่วนร่วม ($\overline{\mathbf{X}}$ = 4.29, S.D. = 0.54) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านหลักนิติธรรม ($\overline{\mathbf{X}}$ = 4.23, S.D.= 0.63)

2. ผลการเปรียบเทียบการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยจำแนกตามปัจจัยส่วนบุคคล โดยภาพรวมพบว่า เพศไม่แตกต่างกัน ส่วนอายุ ระดับการศึกษา และอาชีพแตกต่างกัน พบว่าแตกต่างกันอย่างมีระดับนัยสำคัญทางสถิติที่ระดับ 0.05

3. ข้อเสนอแนวทางพัฒนาการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี ได้แก่ ควรมีมาตรการในการส่งเสริมจริยธรรมให้แก่เจ้าหน้าที่ผู้ปฏิบัติงาน เช่น การอบรมด้านจริยธรรม การให้รางวัลแก่ผู้ประพฤติดีและลงโทษผู้ที่กระทำการทุจริต เป็นต้น

คำสำคัญ : การบริหารจัดการ, หลักธรรมาภิบาล, เทศบาลตำบล

ABSTRACT

The main objective of this research is to study the management according to the principles of good governance of Nong Waeng Kaem Hom Subdistrict Municipality, Chaiwan District. Udon Thani Province Sample group used in this research study There were 373 people aged 18 years and over who lived in the Nong Waeng Kaem Hom Subdistrict Municipality. The instrument used for collection was a questionnaire. Statistics used in the analysis are percentage, mean, standard deviation. and analyze data Test the hypothesis using value statistics (T-Test) and using F statistics (F-Test).

The research results found that :

1. Management according to good governance principles of Nong Waeng Kaem Hom Subdistrict Municipality, Chaiwan District, Udon Thani Province. Overall, it was at a high level ($\overline{\mathbf{X}}$ = 4.26, S.D.=0.58), and when considering each aspect, it was found that the aspect with the highest average was the aspect of responsibility ($\overline{\mathbf{X}}$ = 4.30, S.D.= 0.54), followed by the aspect The principle of participation ($\overline{\mathbf{X}}$ = 4.29, S.D. = 0.54) and the aspect with the least average value was the rule of law ($\overline{\mathbf{X}}$ = 4.23, S.D.= 0.63).

2. Comparative results of management according to good governance principles of Nong Waeng Kaem Hom Subdistrict Municipality, Chaiwan District, Udon Thani Province. Classified according to personal factors Overall, it was found that Gender did not differ, as for age and education level. and different careers It was found to be significantly different at the 0.05 level.

3. Suggestions for development of management according to the principles of good governance of Nong Waeng Kaem Hom Subdistrict Municipality, Chaiwan District, Udon Thani Province include: There should be measures to promote ethics for operating staff, such as ethics training. Rewarding good behavior and punishing those who commit corruption, etc.

Keywords: Management, principles of good governance, subdistrict municipality

1. ความเป็นมาและความสำคัญของปัญหา

แนวคิดเรื่องการบริหารกิจการบ้านเมืองที่ดี (Good governance) เป็นแนวคิดของธนาคารโลก (World Bank) ที่นำมาใช้ในการกำหนดนโยบายการให้กู้เงินกับประเทศในซีกโลกใต้ตั้งแต่ช่วงทศวรรษ 1980 เพื่อแก้ปัญหาเรื่องไร้ประสิทธิภาพ และการคอรัปชั่นของรัฐบาล ในประเทศกำลังพัฒนา โดยเฉพาะประเทศใน แถบลาตินอเมริกา และแอฟริกาที่มีปัญหาในการบริหารงาน จนทำให้เกิดปัญหากู้เงินธนาคารโลกไปแล้วไม่ สามารถหาเงินมาชำระคืนได้ สำหรับประเทศไทยแนวคิดดังกล่าวได้ถูกนำมาใช้หลังวิกฤตทางเศรษฐกิจในปี 2540 เป็นต้นมา (สุพจน์ ทรายแก้ว,2553)

จากปัญหาบริบทดั่งกล่าว เทศบาลตำบลหนองแวงแก้มหอม เป็นองค์กรปกครองส่วนท้องถิ่น ผู้บริหารท้องถิ่นได้ ในหมวด ๑๔ การปกครองส่วนท้องถิ่นภายใต้หลักการของการเป็นรัฐเดี่ยวตามที่บัญญัติไว้ในมาตรา ๑ ของรัฐธรรมนูญแห่ง ราชอาณาจักรไทย พุทธศักราช ๒๕๖๐ หมวดนี้บัญญัติขึ้นเพื่อให้สามารถจัดการปกครองส่วนท้องถิ่นได้ โดยกำหนดให้การปกครองส่วนท้องถิ่นต้องเป็นไปตามหลักแห่งการปกครองตนเอง มีความโปร่งใส และเป็นไปตาม เจตนารมณ์ของประชาชนในท้องถิ่น และให้ประชาชนในท้องถิ่นมีส่วนร่วมในการได้มาซึ่งสมาชิกสภาท้องถิ่นและ ผู้บริหารท้องถิ่น กำหนดกลไกให้ประชาชนเสนอความต้องการและตรวจสอบการทำงานขององค์กรปกครอง ส่วนท้องถิ่นได้ พร้อมทั้งกำหนดให้องค์กรปกครองส่วนท้องถิ่นมีหน้าที่และอำนาจในการให้บริการประชาชนและ จัดกิจกรรมสาธารณะต่าง ๆ มีรายได้เป็นของตนเอง และมีอิสระในการบริหารงานต่าง ๆ โดยจะต้องรายงานผล การดำเนินงานให้ประชาชนทราบ พร้อมทั้งกำหนดให้การบริหารงานบุคคลในองค์กรปกครองส่วนท้องถิ่นเป็นไป ตามระบบคุณธรรม

ผู้วิจัยเป็นบุคลากรในฐานะปัจจุบันทำงานตำแหน่ง นักวิชาการศึกษา เป็นบุคลากรในสังกัดเทศบาลตำบลหนองแวงแก้มหอม เทศบาลตำบลหนองแวงแก้มหอม เห็นปัญหาการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี จึงสนใจทำการวิจัย การบริหารกิจการบ้านเมืองที่ดี (Good governance) เป็นแนวคิดของธนาคารโลก (World Bank) จึงเห็นความสำคัญในประเด็นการนำหลักธรรมาภิบาลมาเป็นแนวทางปฏิบัติ ซึ่งข้อมูลที่ได้สามารถนำไปปรับปรุงการดำเนินงานการพัฒนา และแก้ไขปัญหาต่าง ๆ จึงสนใจที่จะทำการวิจัยเรื่องนี้ ผลการวิจัยจะมีประโยชน์ในหลายมิติ ดังนี้ 1. บทบาทผู้นำในการบริหาร 2. การกำหนดนโยบาย หรือยุทธศาสตร์องค์กร 3. ความพึงพอใจของประชาชนผู้รับบริการ 4.เกิดธรรมาภิบาลต่อภาครัฐ หรือองค์กร หลักธรรมาภิบาลจึงถือเป็นหลักพื้นฐานในการปกครองผู้ใต้บังคับบัญชาในการบริหารจัดการ เพราะจะช่วยให้สามารถบริหารงานได้อย่างมีประสิทธิภาพ อีกทั้งยังทำให้พนักงานทุกคนมีความสุขในการทำงาน และยังช่วยสร้างขวัญ และกำลังใจที่ดี พร้อมปฏิบัติหน้าที่ตามที่ตนได้รับมอบหมายอย่างเต็มกำลังความสามารถ ซึ่งจะส่งผลดีโดยรวมกับการดำเนินงานให้เจริญก้าวหน้าต่อไปได้อีกในอนาคต

2. วัตถุประสงค์ของการวิจัย

1. เพื่อศึกษาการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี

2. เพื่อเปรียบเทียบการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี จำแนกตาม เพศ อายุ ระดับการศึกษา และอาชีพ

3. เพื่อเสนอแนวทางเสริมสร้างการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี

3. ขอบเขตของการวิจัย

1. ขอบเขตด้านเนื้อหา ผู้วิจัยได้กำหนดขอบเขตของเนื้อหาที่ใช้ในการศึกษา ดังนี้ศึกษาแนวคิด ตามกรอบของระเบียบสำนักนายกรัฐมนตรีว่าด้วยการสร้างระบบบริหารกิจการบ้านเมือง และสังคมที่ดี พ.ศ. 2542 โดยมีหลักการพื้นฐาน 6 ด้าน ได้แก่ 1.1 หลักนิติธรรม (The rule of law) 1.2 หลักคุณธรรม (Morality) 1.3 หลักความโปร่งใส (Accountability) 1.4 หลักการมีส่วนร่วม (Participation) 1.5 หลักความรับผิดชอบ (Responsibility) และ 1.6 หลักความคุ้มค่า (Cost - Effectiveness or economy)

2. ขอบเขตด้านประชากร และกลุ่มตัวอย่าง

2.1 ประชากร ได้แก่ หัวหน้าครัวเรือนในพื้นที่เทศบาลตำบลหนองแวงแก้มหอมอายุ 18 ปีขึ้นไป อำเภอไชยวาน จังหวัดอุดรธานี 15 หมู่บ้าน จำนวน 5,347 คน (ข้อมูลทั่วไปของ สำนักปลัด เทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี, 2565)

2.2 กลุ่มตัวอย่าง ได้แก่ หัวหน้าครัวเรือนในพื้นที่เทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี จำนวน 373 คน คำนวณหากลุ่มตัวอย่างโดยวิธีการของทาโร่ ยามาเน่ (Taro Yamane อ้างใน บุญชม ศรีสะอาด 2538 : 40)

3. ขอบเขตด้านตัวแปร

จากแนวคิดทฤษฎี และผลงานวิจัยที่เกี่ยวข้อง ผู้วิจัยได้นำมาใช้ประโยชน์ในการกำหนดตัวแปรอิสระที่ถือเป็นปัจจัยที่มีความสัมพันธ์กับธรรมาภิบาล จึงพอสรุปกรอบแนวคิดเกี่ยวกับการวิจัยดังนี้

3.1 ตัวแปรอิสระ (Independent Vaiables) คือ ปัจจัยส่วนบุคคลของประชาชนที่มีอายุ 18 ปีขึ้นไป ที่มาใช้บริการการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี ประกอบด้วย เพศ อายุ ระดับการศึกษา และอาชีพ

3.2 ตัวแปรตาม (Dependent variable) คือ การใช้กรอบแนวคิดการวิจัยจากพระราชกฤษฎีกาว่าด้วยหลักเกณฑ์ และวิธีการบริหารกิจการบ้านเมืองที่ดี พ.ศ. 2546 ที่กำหนดให้หน่วยงานของรัฐ และเจ้าหน้าที่ของรัฐต้องบริหารราชการโดยยึดหลักพื้นฐาน 6 ด้าน ดังนี้ หลักนิติธรรม (The rule of law) หลักคุณธรรม (Morality) หลักความโปร่งใส (Accountability) หลักการมีส่วนร่วม (Participation) หลักความรับผิดชอบ (Responsibility) และหลักความคุ้มค่า (Cost - Effectiveness or economy)

4. ประโยชน์ของการวิจัย

1. ได้ทราบถึงแนวทางการเสริมสร้างธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี

2. ได้ทราบถึงปัญหา และอุปสรรค ตลอดจนแนวทางการแก้ไขปัญหาการเสริมสร้างธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี

3. ผลจากการศึกษาจะเป็นประโยชน์ในทางวิชาการ และแนวทางการเสริมสร้างธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี ตลอดจนการบริหารจัดการขององค์กรปกครองส่วนท้องถิ่น ในการปรับปรุง และพัฒนาองค์กรปกครองส่วนท้องถิ่นอื่น ๆ ตามหลักธรรมาภิบาลอย่างยั่งยืนมีประสิทธิภาพ และเจริญก้าวหน้าต่อไป

5. ประชากรและกลุ่มตัวอย่าง

1. ประชากร ได้แก่ ประชากรทั้งหมดในการศึกษาครั้งนี้ คือ ประชากรที่อาศัยในเขตเทศบาลตำบล
หนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี 15 หมู่บ้าน จำนวนประชากร 5,347 คน

2. กลุ่มตัวอย่าง ได้แก่ กลุ่มตัวอย่างที่ศึกษา ประชาชนที่มีอายุ18 ปีขึ้นไป ที่อาศัยอยู่ในเขตเทศบาล
ตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยใช้แนวคิดการกำหนดขนาดกลุ่มตัวอย่างของ
Taro Yamane (1973: 125) (อ้างถึงใน บุญชม ศรีสะอาด, 2538) โดยกำหนดค่าความเชื่อมั่นของกลุ่มตัวอย่าง
ในการศึกษาครั้งนี้ เท่ากับร้อยละ 95 ซึ่งหมายความว่า ยอมให้การกำหนดความคลาดเคลื่อน 5% ได้กลุ่ม
ตัวอย่างจำนวน 373 คน

6. เครื่องมือที่ใช้ในการรวบรวมข้อมูล

เครื่องมือที่ใช้ในการศึกษาวิจัยครั้งนี้ คือ แบบสอบถาม (Questionnaire) ที่เกี่ยวข้องกับข้อมูลทั่วไป
ของผู้ตอบแบบสอบถามและสร้างขึ้นมาจากการศึกษาแนวทางการบริหารจัดการตามธรรมาภิบาลของเทศบาล
ตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยให้ผู้ตอบแบบสอบถามเลือกตอบตามประเด็นที่
ตรงกับความเป็นจริง และความต้องการของผู้ตอบแบบสอบถาม โดยแบ่งเป็น 3 ส่วน คือ ดังนี้

ส่วนที่ 1 เป็นแบบสอบถามเกี่ยวกับข้อมูลทั่วไปของผู้ตอบแบบสอบถาม เป็นแบบตรวจสอบรายการ
เกี่ยวกับ เพศ อายุ ระดับการศึกษา และอาชีพ ทั้งหมด 4 ข้อ

ส่วนที่ 2 คำถามเกี่ยวกับการบริหารจัดการตามหลักธรรมาภิบาลเทศบาลตำบลหนองแวงแก้มหอม
อำเภอไชยวาน จังหวัดอุดรธานี จำนวนทั้งหมด 6 ด้าน

ส่วนที่ 3 ข้อเสนอแนะแนวทางการปรับปรุงการปฏิบัติงานตามหลักธรรมาภิบาลของเทศบาลตำบล
หนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี

7. การสร้างและการทดสอบเครื่องมือ

การสร้างเครื่องมือในการวิจัยครั้งนี้ เพื่อเก็บรวบรวมข้อมูลผู้วิจัยมีวิธีการสร้าง ดังนี้

1. ศึกษาแนวคิดทฤษฎี และงานวิจัยที่เกี่ยวข้องกับการบริหารจัดการตามหลักธรรมาภิบาลของ
เทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี จากนั้นนำมากำหนดกรอบแนวคิดที่ใช้ใน
การวิจัยกำหนดนิยาม และเพื่อใช้เป็นแนวทางการสร้างแบบสอบถาม

2. สร้างแบบสอบถามเกี่ยวกับการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวง
แก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี และตรวจสอบเนื้อหาของแบบสอบถามว่าครอบคลุมวัตถุประสงค์
หรือไม่ จากนั้นไปให้อาจารย์ ร.ศ. ดร. โกศล สอดส่อง อาจารย์ที่ปรึกษาตรวจสอบแล้วนำมาปรับปรุงตาม
คำแนะนำของอาจารย์ที่ปรึกษา

3. นำแบบสอบถามที่ปรับปรุงตามคำแนะนำของอาจารย์ที่ปรึกษา ให้ผู้เชี่ยวชาญอย่างน้อย 3 ท่าน
ตรวจสอบ (Content Validity) ดังนี้

3.1 นายโกมล พินิจมนตรี ตำแหน่ง นายกเทศมนตรีตำบลหนองแวงแก้มหอม

3.2 นายสัญญา สายสิงห์ ตำแหน่ง ปลัดเทศบาลตำบลหนองแวงแก้มหอม

3.3 นายเกียรติศักดิ์ ผิวบาง ตำแหน่ง   หัวหน้าสำนักปลัด

จากนั้นปรับปรุงแก้ไขตามคำแนะนำของผู้เชี่ยวชาญ

4. นำแบบสอบถามที่ได้ไปทดลองใช้ (TrY Out) กับกลุ่มประชากรที่ไม่ใช่กลุ่มตัวอย่างจำนวน 30 คน เพื่อหาคุณภาพของเครื่องมือโดยการหาค่า ReliabilitY ของแบบสอบถามโดยใช้ค่า Cronbachsalpha = 0.975 ได้ค่า ReliabilitY ของแบบสอบถามมีค่าเชื่อถือสามารถนำไปเก็บข้อมูลจริงไป

8. การเก็บรวบรวมข้อมูล

การเก็บรวบรวมข้อมูลผู้ศึกษาได้ดำเนินการเก็บรวบรวมข้อมูลด้วยตัวเอง โดยมีวิธีการดำเนินงานตามขั้นตอน ดังนี้

1. ผู้วิจัยทำการแจกแบบสอบถาม และรวบรวมแบบสอบถามจากผู้ตอบแบบสอบถามด้วยตนเองโดยให้หัวหน้าครอบครัว หรือตัวแทนเป็นผู้ตอบแบบสอบถาม จำนวน 373 คน

2. บันทึกข้อมูลเอกสารและข้อมูลแบบสอบถามเพื่อทำการวิเคราะห์ทางสถิติ

3. จากการเก็บรวบรวมข้อมูลผู้วิจัยได้แจกแบบสอบถามไปจำนวน 373 ชุด โดยวิธีสุ่มตัวอย่าง อย่างง่ายตามสัดส่วนของประชากรในแต่ล่ะชุมชน โดยที่แบบสอบถามได้รับกลับคืนมา และมีความสมบูรณ์ จำนวน 373 ชุด จึงคิดเป็น 100 เปอร์เซ็นต์

9. การวิเคราะห์ข้อมูลและสถิติที่ใช้ในการวิจัยและสถิติที่ใช้ในการเคราะห์ข้อมูล

ผู้วิจัยเลือกใช้สถิติในการวิเคราะห์ เพื่อให้สอดคล้องกับลักษณะข้อมูลและตอบวัตถุประสงค์ ดังนี้

1. ข้อมูลทั่วไปใช้สถิติค่าความถี่ร้อยละ (percentage) เพื่อบรรยายค่าตัวแปรตามลักษณะข้อมูล

2. การวิเคราะห์การบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยใช้สถิติความถี่ ร้อยละ ค่าเฉลี่ย (X) และค่าส่วนเบี่ยงเบนมาตรฐาน (S.D.)

3. การทดสอบสมมติฐานใช้ค่าสถิติ (t-test) (ธานินทร์ ศิลป์จารุ, 2555 : 356) เพื่อวิเคราะห์ความแตกต่างระหว่างเพศ และการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี และใช้การวิเคราะห์ความแปรปรวนทางเดียว (One-way ANOVA) (ธานินทร์ ศิลป์จารุ, 2555 : 357) เพื่อวิเคราะห์ความแตกต่างอายุ ระดับการศึกษา อาชีพ และรายได้เฉลี่ยต่อเดือนที่ระดับนัยสำคัญทางสถิติที่ 0.05 และเมื่อพบความแตกต่างจะทำการทดสอบความแตกต่างรายคู่ โดยวิธี เชฟเฟ่ (Scheffe's method) โดยมีสมมติฐาน ดังนี้

3.1 ประชาชนมีความคิดเห็นต่อการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี อยู่ในระดับมาก

3.2 ประชาชนที่มีเพศต่างกันมีความเห็นต่อการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี แตกต่างกัน

3.3 ประชาชนที่มีระดับการศึกษาต่างกันมีความคิดเห็นต่อการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี แตกต่างกัน

　　　　　3.4 ประชาชนที่มีอาชีพต่างกันมีความคิดเห็นต่อการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี แตกต่างกัน

10. ผลการวิจัย

　　　　　สรุปผลการวิจัย เรื่อง การบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี สามารถสรุปออกเป็น 4 ส่วน ได้ดังนี้

　　　　　1. ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม พบว่า ผู้ตอบแบบสอบถามส่วนใหญ่เป็นเพศหญิง จำนวน 310 คน คิดเป็นร้อยละ 83.1 และเป็นเพศชาย จำนวน 63 คน คิดเป็นร้อยละ 16.9 และมีอายุไม่เกิน 30 ปี จำนวน 37 คน คิดเป็นร้อยละ 9.9 อายุ31-40 ปี จำนวน 62 คน คิดเป็นร้อยละ16.6   อายุ41-50 ปี จำนวน 244 คน คิดเป็นร้อยละ 65.4 อายุ51 ขึ้นไป จำนวน 30 คน คิดเป็นร้อยละ 8.0 และมีระดับการศึกษา ประถมศึกษา จำนวน 47 คน คิดเป็นร้อยละ 12.6 มัธยมต้น/มัธยมปลาย/เทียบเท่า จำนวน 252 คน คิดเป็นร้อยละ 67.6 ปริญญาตรี จำนวน 66 คน คิดเป็นร้อยละ 17.7 และสูงกว่าปริญญาตรีขึ้นไป จำนวน 8 คน คิดเป็นร้อยละ 2.1 ส่วนใหญ่ประกอบอาชีพส่วนตัว จำนวน 144 คน คิดเป็นร้อยละ 38.6 รองลงมาคือเกษตรกร จำนวน 143 คน คิดเป็นร้อยละ 38.3 และน้อยที่สุดคือ รับจ้างทั่วไปจำนวน 18 คน คิดเป็นร้อยละ 4.8

　　　　　2. การบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$=4.26,S.D.=0.58) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านหลักความรับผิดชอบ ($\overline{X}$= 4.30, S.D.= 0.54) รองลงมาคือด้านหลักการมีส่วนร่วม ($\overline{X}$ = 4.29, S.D. = 0.54) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านหลักนิติธรรม ($\overline{X}$ = 4.23, S.D.= 0.63) และวิเคราะห์ข้อมูลออกเป็นแต่ละด้านได้ดังนี้

　　　　　2.1 ด้านหลักนิติธรรม โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$=4.23,S.D.=0.63) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 5. เทศบาลใช้อำนาจในการบังคับใช้ข้อบังคับเทศบาลรวมทั้งกฎหมายระเบียบข้อบังคับที่เกี่ยวข้องอย่างเสมอภาค ไม่มีการเลือกปฏิบัติกับบุคคลใดหรือกลุ่มบุคคลใดเป็นกรณีพิเศษ เพื่อความเป็นธรรม($\overline{X}$= 4.37, S.D.= 0.48) รองลงมาคือ ข้อ 4. เทศบาลเผยแพร่ประชาสัมพันธ์ข้อบังคับเทศบาลและกฎหมายที่เกี่ยวข้องกับสิทธิและหน้าที่ของประชาชนให้ประชาชนทราบอย่างทั่วถึง($\overline{X}$ = 4.34, S.D.= 0.61) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 3. เทศบาลเปิดโอกาสให้ประชาชนร่วมแสดงความคิดเห็นอย่างกว้างขวางในการออกข้อบังคับเทศบาล และเป็นที่ยอมรับของชุมชน ($\overline{X}$ = 4.05, S.D.= 0.88)

　　　　　2.2 ด้านหลักคุณธรรม โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.27, S.D.=0.58) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 10. ผู้บริหารเทศบาลมีคุณธรรมในการปกครองผู้ใต้บังคับบัญชา อนุมัติเบิกจ่ายงบประมาณโดยยึดหลักความถูกต้องเป็นไปตามระเบียบกฎหมายที่กำหนด และจัดสรรงบประมาณให้เกิดความเป็นธรรมแก่ทุกชุมชน($\overline{X}$ – 4.37. S.D.=0.48) รองลงมาคือ ข้อ 9. สมาชิกสภาทศบาลตระหนักในหน้าที่ของตน มุ่งรักษาผลประโยชน์ส่วนรวม มาประชุมอย่างสม่ำเสมอ และพิจารณาเรื่องต่าง ๆ ในสภาอย่างมีเหตุผลตรงไปตรงมา ($\overline{X}$ = 4.34, S.D.=0.61) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 8. เทศบาลมีมาตรฐานจริยธรรม หรือกรอบกติกาการปฏิบัติงานของสมาชิกสภาทุกคน โดยทำเป็นมติของสภาเพื่อควบคุมกันเอง($\overline{X}$ = 4.05, S.D.=0.88)

2.3 ด้านหลักความโปร่งใส โดยภาพรวมอยู่ในระดับมาก ($\overline{\mathbf{X}}$ = 4.25, S.D.= 0.60) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 14. เทศบาลประชาสัมพันธ์ข้อบังคับเทศบาล กฎหมายระเบียบ คำสั่งของเทศบาลรวมทั้งข่าวสารราชการที่ประชาชนควรรู้และต้องปฏิบัติ ($\overline{\mathbf{X}}$= 4.37, S.D.= 0.55) รองลงมาคือ ข้อ 12 เทศบาลปิดประกาศวาระการประชุมของสภาให้ประชาชนทราบล่วงหน้า และเปิดโอกาสให้ประชาชนที่สนใจเข้าร่วมสังเกตการณ์ในการประชุมสภา ($\overline{\mathbf{X}}$ = 4.37, S.D.=0.65) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 13.เทศบาลปิดประกาศข้อบังคับงบประมาณรายจ่ายประจำปี และข้อบังคับงบประมาณรายจ่ายเพิ่มเติมให้ประชาชนทราบ ($\overline{\mathbf{X}}$ = 4.05, S.D.= 0.88)

2.4 ด้านหลักการมีส่วนร่วม โดยภาพรวมอยู่ในระดับมาก ($\overline{\mathbf{X}}$ = 4.29, S.D.= 0.54) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 20. เทศบาลสนับสนุนให้มีการจัดตั้งกลุ่ม หรือองค์กรชุมชน หรือสนับสนุนการดำเนินกิจกรรมต่าง ๆ ($\overline{\mathbf{X}}$ = 4.37, S.D.= 0.48) และข้อ 25. เทศบาลมีกิจกรรมให้บริการประชาชนนอกสถานที่หรือจัดเทศบาลเคลื่อนที่เพื่ออำนวยความสะดวกแก่ประชาชน ($\overline{\mathbf{X}}$ = 4.37, S.D.= 0.48) รองลงมาคือ ข้อ 19. เทศบาลเปิดโอกาสให้ประชาชนเข้าร่วมฟังการประชุมสภาเทศบาล และร่วมสังเกตการณ์ประชุมสภาเทศบาล ($\overline{\mathbf{X}}$ = 4.34, S.D.= 0.61)และข้อ24. เทศบาลจัดเวทีประชาคมเพื่อแถลงผลงานและเปิดโอกาสให้ประชาชนแสดงความคิดเห็นและซักถาม ($\overline{\mathbf{X}}$ = 4.34, S.D.= 0.61) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 23.เทศบาลเปิดโอกาสให้ประชาชนมีส่วนร่วมในการเสนอข้อบังคับเทศบาลเพื่อให้สภา เทศบาลพิจารณาออกข้อบังคับตำบลตามพระราชบัญญัติว่าด้วยการเข้าชื่อเสนอข้อบัญญัติท้องถิ่น พ.ศ. 2542 ($\overline{\mathbf{X}}$ = 4.18, S.D.= 0.68)

2.5 ด้านหลักความรับผิดชอบ โดยภาพรวมอยู่ในระดับมาก ($\overline{\mathbf{X}}$ = 4.30, S.D.= 0.54) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 27. เทศบาลจัดบริการสาธารณะอย่างมีคุณภาพ เป็นธรรมและทั่วถึงทั้งในและนอกสถานที่ ให้ประชาชนเป็นที่พึ่งได้เมื่อเกิดความเดือดร้อน ($\overline{\mathbf{X}}$ = 4.37, S.D.= 0.65)และข้อ 30. เทศบาลนำเอาโครงการ/กิจกรรม ที่บรรจุไว้ในแผนพัฒนาไปจัดทำข้อบังคับงบประมาณเพื่อนำไปสู่การปฏิบัติตามที่สัญญาไว้กับประชาชน หากทำไม่ได้ก็แจ้งให้ประชาชนทราบ ($\overline{\mathbf{X}}$ = 4.37, S.D.= 0.65) รองลงมาคือ ข้อ 29.เทศบาลมีความจริงใจในการนำโครงการ / กิจกรรมที่เสนอโดยประชาชน / ประชาคม นำไปสู่การปฏิบัติอย่างเป็นรูปธรรมโดยคำนึงถึงความจำเป็นเร่งด่วน ($\overline{\mathbf{X}}$ = 4.34, S.D.= 0.61) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 28. เทศบาลเอาใจใส่ต่อปัญหาความเดือดร้อนของประชาชน เปิดโอกาสให้ประชาชนได้ร้องทุกข์และแจ้งความเดือดร้อน และมีตู้รับเรื่องราวร้องทุกข์ประจำหมู่บ้าน ($\overline{\mathbf{X}}$ = 4.12, S.D.= 0.78)

2.6 ด้านหลักความคุ้มค่า โดยภาพรวมอยู่ในระดับมาก ($\overline{\mathbf{X}}$ = 4.24, S.D.= 0.65)และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 34. เทศบาลจัดทำทะเบียนคุมครุภัณฑ์ต่าง ๆ อย่างชัดเจนเป็นปัจจุบันและควบคุมการใช้ให้เป็นไปตามวัตถุประสงค์และประโยชน์ต่อส่วนรวม ($\overline{\mathbf{X}}$ = 4.34, S.D.= 0.61)และข้อ 35. เทศบาลต่อรองราคากับผู้รับจ้างในการจัดซื้อ – จัดจ้าง ให้ได้ราคาที่ต่ำกว่างบประมาณที่ตั้งไว้เพื่อให้มีงบประมาณเหลือไปดำเนินการในโครงการอื่นเพิ่มขึ้น และทำให้ประชาชนได้รับผลประโยชน์มากขึ้น ($\overline{\mathbf{X}}$ = 4.34, S.D.= 0.61) รองลงมาคือ ข้อ 32. สภาเทศบาลจัดตั้งคณะกรรมการติดตามตรวจสอบการใช้จ่ายงบประมาณไม่ให้รั่วไหลสูญเปล่าของฝ่ายบริหาร ($\overline{\mathbf{X}}$ = 4.31, S.D.= 0.72) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ

33. เทศบาลมีการรณรงค์ให้ทุกฝ่ายรวมทั้งประชาชนในพื้นที่ให้มีความประหยัดในการใช้ทรัพยากรธรรมชาติ รวมทั้งมีกิจกรรมบำรุงรักษาสภาพธรรมชาติให้ใช้ได้นาน ($\overline{\mathbf{X}}$ = 4.05, S.D.= 0.88)

      3. ผลการเปรียบเทียบการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยจำแนกตามปัจจัยส่วนบุคคล โดยภาพรวมพบว่า เพศไม่แตกต่างกัน ส่วน อายุ ระดับการศึกษา และอาชีพแตกต่างกัน พบว่าแตกต่างกันอย่างมีระดับนัยสำคัญทางสถิติที่ระดับ 0.05

      4. ข้อเสนอแนวทางพัฒนาการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้ม หอม อำเภอไชยวาน จังหวัดอุดรธานี ได้แก่

      4.1 ควรมีมาตรการในการส่งเสริมจริยธรรมให้แก่เจ้าหน้าที่ผู้ปฏิบัติงาน เช่น การอบรมด้าน จริยธรรม การให้รางวัลแก่ผู้ประพฤติดีและลงโทษผู้ที่กระทำการทุจริต เป็นต้น

      4.2 ควรมีการสร้างความรู้ ความเข้าใจ อีกทั้งกระตุ้นประชาชนให้ทราบถึงบทบาทอำนาจหน้าที่ ของประชาชนที่มีต่อเทศบาล เพื่อให้ประชาชนทราบว่าตนเองต้องมีส่วนเกี่ยวข้อง มีบทบาทมีหน้าที่ ต่อการ ทำงานของเทศบาลอย่างไร อันจะส่งผลให้การใช้หลักธรรมาภิบาล สามารถตอบสนองความต้องการ ของ ประชาชน และเกิดประโยชน์สูงสุดต่อประชาชนได้

      4.3 ในการจัดซื้อ-จัดจ้างในแต่ละครั้งของทางเทศบาล ถ้าประชาชนท่านใดมีความ สงสัยก็สามารถสอบถามและร่วมตรวจสอบรายละเอียดในแต่ละอย่างได้

      4.4 เทศบาลควรมีการเปิดโอกาสให้ประชาชนมีส่วนร่วมในการตรวจสอบการทำงาน และควรมี การประชาสัมพันธ์ข้อมูลข่าวสารต่าง ๆ ให้กับประชาชนได้เข้าถึงง่ายที่สุด

      4.5 ควรเน้นย้ำเรื่องความปลอดภัยทางสังคมและทรัพย์สินให้มากขึ้น โดยเฉพาะด้านยาเสพติด ซึ่งจะต้องให้ความสำคัญและร่วมมือทำท้องที่ให้เกิดประสิทธิผลโดยชุมชนกับเทศบาลเกิดการมีส่วนร่วมทั้งด้าน การพัฒนาโครงสร้างพื้นฐานและโครงสร้างทางสังคมให้เข้มแข็ง เกิดความคุ้มค่าในการใช้งบประมาณทั้งบริบท การเสริมสร้างชุมชนเข้มแข็งและโครงสร้างพื้นฐานที่ตรงกับความต้องการของชุมชน

      4.6 ควรมีวิธีการตรวจสอบการใช้จ่ายงบประมาณให้มีความคุ้มค่า และเกิดประสิทธิภาพในการ บริหารจัดการ ที่ใช้งานง่ายและรวดเร็ว

11. อภิปรายผลการวิจัย

      การบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัด อุดรธานี โดยภาพรวมอยู่ในระดับมาก ($\overline{\mathbf{X}}$=4.26,S.D.=0.58) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ย สูงสุดคือด้านหลักความรับผิดชอบ ($\overline{\mathbf{X}}$= 4.30, S.D.= 0.54) รองลงมาคือด้านหลักการมีส่วนร่วม ($\overline{\mathbf{X}}$ = 4.29, S.D. = 0.54) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านหลักนิติธรรม ($\overline{\mathbf{X}}$ = 4.23, S.D. = 0.63) อาจเป็นเพราะ เทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี ความสามารถในการบริหารงานยึดหลักธรร มาภิบาลได้ครบถ้วนทุกด้าน ประชาชนในพื้นที่ที่รับผิดชอบมองเห็นผลลัพธ์การพัฒนาอย่างเป็นรูปธรรม ผลงานการบริหารมีทั้งประสิทธิภาพและประสิทธิผล มีผลงานเป็นตัวชี้วัดที่ดีย่อมส่งผลต่อความเจริญก้าวหน้า ของท้องถิ่นและประชาชน ทำให้ชุมชนอยู่ดีมีสุขและเป็นที่ยอมรับ ซึ่งสอดคล้องกับงานวิจัยของ (Fukflang,2014) ได้ศึกษาเรื่องความเข้าใจในการบริหารงานตามหลักธรรมาภิบาลของพนักงานส่วนตำบล

องค์การบริหารส่วนตำบลท่าทอง อำเภอสวรรคโลก จังหวัดสุโขทัย ผลการศึกษาพบว่า โดยรวมอยู่ในระดับ มาก ทั้ง 6 ด้านได้แก่ หลักนิติธรรม หลักคุณธรรมหลักความโปร่งใส หลักความมีส่วนร่วม หลักความรับผิดชอบ หลักความคุ้มค่า และสอดคล้องกับงานวิจัยของ (Wongsriwong,2015) ได้วิจัยเรื่องการนำ หลักธรรมาภิบาล มาใช้ในการบริหารงานองค์การบริหารส่วนตำบลลานกระบือ จังหวัดกำแพงเพชร ผลการวิจัยพบว่า โดย ภาพรวมอยู่ในระดับมาก ด้านหลักนิติธรรม มีค่าเฉลี่ยรวมอยู่ในระดับมาก อาจเป็นเพราะผู้บริหาร ได้ปฏิบัติ ตามระเบียบข้อบังคับต่อประชาชนด้วยความเสมอภาคไม่เลือกปฏิบัติ การบริหารงานมีความชัดเจนปฏิบัติตาม กฎหมาย มีระเบียบและข้อบังคับของทางราชการที่เชื่อถือได้อย่าง เคร่งครัด ซึ่งสอดคล้องกับงานวิจัยของ (Meungpratup Phra,2011) ได้วิจัยเรื่องการบริหารงานตามหลักธรรมาภิบาลของเทศบาลเมืองบางกรวย จังหวัดนนทบุรี ผลการวิจัยพบว่า การบริหารงานตามหลักธรรมาภิบาล ทั้ง 6 ด้าน อันดับที่ 1 คือ หลักนิติ ธรรมรองลงมา หลักคุณธรรม หลักความโปร่งใส หลักการมีส่วนร่วม   หลักความรับผิดชอบและหลักความ คุ้มค่า พบว่าโดยภาพรวมค่าเฉลี่ยอยู่ในระดับมาก

ด้านหลักคุณธรรม มีค่าเฉลี่ยรวมอยู่ในระดับมาก อาจเป็นเพราะบุคลากร มีความสุภาพอ่อนโยนและมี ไมตรีจิตพร้อมให้บริการกับประชาชนและปฏิบัติหน้าที่โดยยึดหลักคุณธรรมมีภาวะความเป็นผู้นำปฏิบัติตนเป็น ตัวอย่างที่ดีแก่ประชาชน ซึ่งสอดคล้องกับงานวิจัยของ (Fukflang,2014) ศึกษาเรื่องความเข้าใจในการ บริหารงานตามหลักธรรมาภิบาลของพนักงานส่วนตำบลองค์การบริหารส่วนตำบลท่าทอง อำเภอสวรรคโลก จังหวัดสุโขทัย ผลการศึกษาพบว่า โดยรวมอยู่ในระดับมาก ทั้ง 6 ด้านได้แก่ หลักคุณธรรม หลักนิติธรรม หลัก ความโปร่งใส หลักความมีส่วนร่วม หลักความรับผิดชอบและหลักความคุ้มค่า ด้านหลักความโปร่งใส มีค่าเฉลี่ย รวมอยู่ในระดับมาก อาจเป็นเพราะเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี มีคำ ประกาศให้บุคลากรในเทศบาลรับทราบเกี่ยวกับสิทธิในการได้รับสวัสดิการต่าง ๆ และระดับการบริหารงาน ภายในไปอย่างเปิดเผยต่อสาธารณชน ตรวจสอบได้มีการประชาสัมพันธ์/ปิดประกาศให้ประชาชนรับทราบ ข้อมูลข่าวสารที่ เผยแพร่มีความถูกต้องชัดเจนตรงประเด็น ซึ่งสอดคล้องกับงานวิจัยของ (Chokchutchawankul,2013) ได้วิจัยเรื่อง การบริหารตามหลักธรรมาภิบาลขององค์การบริหารส่วนตำบล กรณีศึกษาเขตอำเภอหนองหญ้าไช จังหวัดสุพรรณบุรี ผลการศึกษาพบว่า ระดับความคิดเห็นเกี่ยวกับการ บริหารตามหลักธรรมาภิบาล ทั้ง 6 ด้าน อยู่ในระดับมาก ได้แก่ด้านหลักความโปร่งใส รองลงมา ได้แก่ ด้าน หลักคุณธรรม ด้านหลักนิติธรรม ด้านหลักการมีส่วนร่วม ด้านหลักความรับผิดชอบ และอันดับสุดท้าย ได้แก่ ด้านหลักความคุ้มค่า

ด้านหลักการมีส่วนร่วม มีค่าเฉลี่ยรวมอยู่ในระดับมาก อาจเป็นเพราะการบริหารโครงการ ทุก โครงการมีการเปิดโอกาสให้ประชาชนได้รับทราบ ประชาชนมีส่วนร่วมในการจัดกิจกรรมต่าง ๆ เช่น การ แข่งขันกีฬา การรดน้ำดำหัวผู้สูงอายุ งานประเพณีต่าง ๆ อีกทั้งเปิดโอกาสให้ประชาชนเข้ารับฟังการประชุม สภา เพื่อกำหนดนโยบาย ออกระเบียบ ข้อบังคับ และประชาชนมีส่วนร่วมในการติดสินใจเรื่องสำคัญที่มี ผลกระทบต่อชุมชน/หมู่บ้าน ซึ่งสอดคล้อง กับงานวิจัยของ (Wongsawad,2016) ได้วิจัยเรื่องการบริหารงาน ตามหลักธรรมาภิบาลขององค์การบริหารส่วนตำบลทับผึ้ง อำเภอศรีสำโรง จังหวัดสุโขทัย ผลการวิจัยพบว่า รวมอยู่ในระดับมาก อันดับที่หนึ่ง คือ ด้านหลักการมีส่วนร่วม ได้แก่ เปิดโอกาสให้ประชาชนเข้าไปมีส่วนร่วม

ในการจัดกิจกรรมต่าง ๆ ขององค์การบริหารส่วนตำบล รองลงมา คือ เปิดโอกาสให้ประชาชนเข้ารับฟังการประชุมสภาเพื่อกำหนดนโยบาย ออกระเบียบ ข้อบังคับ ขององค์การบริหารส่วนตำบลองค์การบริหารส่วนตำบล เปิดโอกาสให้ประชาชนเข้า มามีส่วนร่วมในการติดสินใจเรื่องสำคัญที่มีผลกระทบต่อชุมชน/หมู่บ้าน องค์การบริหารส่วนตำบลเปิดโอกาส ให้ประชาชนได้เสนอความคิดในการแก้ไขปัญหาชุมชน/หมู่บ้าน และอันดับสุดท้าย คือ องค์การบริหารส่วนตำบลเปิดโอกาสให้ประชาชนเข้ามามีส่วนร่วมในการประเมินผลงาน

ด้านหลักความรับผิดชอบ มีค่าเฉลี่ยรวมอยู่ในระดับมาก อาจเป็นเพราะผู้บริหารมีปฏิบัติตามข้อกำหนดและนโยบายที่ได้ประกาศต่อประชาชนในชุมชนอย่างครบถ้วนอีกทั้งบุคลากรมีความรับผิดชอบต่อหน้าที่มีขวัญและกำลังใจในการปฏิบัติงานและผู้บริหารมีวิสัยทัศน์ พันธกิจ และเป้าหมายไว้อย่างชัดเจน ซึ่งสอดคล้องกับงานวิจัยของ (Srivaranon,2015) ได้วิจัยเรื่องการดำเนินงานตามหลักธรรมาภิบาลขององค์การบริหารส่วนตำบลจอมทอง อำเภอเมือง จังหวัดพิษณุโลก ผลการวิจัยพบว่า ผลการดำเนินงานขององค์การบริหารส่วนตำบลจอมทอง ตามหลักธรรมาภิบาล ทั้ง 6 ด้านโดยภาพรวมอยู่ในระดับมาก เมื่อพิจารณาเป็นรายด้านเรียงตามลำดับค่าเฉลี่ยจากมากไปหาน้อยได้แก่ ด้านความรับผิดชอบ ด้านความคุ้มค่า ด้านนิติธรรม ด้านการมีส่วนร่วม ด้านคุณธรรม และด้านความโปร่งใส

ด้านหลักความคุ้มค่า มีค่าเฉลี่ยรวมอยู่ในระดับมาก อาจเป็นเพราะในพื้นที่รับผิดชอบมีการรณรงค์ให้ประชาชนประหยัดทรัพยากรธรรมชาติและยึดแนวพระราชดำริเศรษฐกิจพอเพียง โดยใช้ทรัพยากรที่มีอยู่อย่างจำกัดให้เกิดผลประโยชน์สูงสุดต่อชุมชน/หมู่บ้าน และการบริหารที่มีประสิทธิภาพคำนึงถึงการหมุนเวียนสิ่งแวดล้อมของชุมชน สอดคล้องกับงานวิจัยของ (Singsai,2013) ได้ศึกษาวิจัยเรื่องความเข้าใจในหลักธรรมาภิบาลของบุคลากร องค์การบริหารส่วนตำบลไทยชนะศึก อำเภอทุ่ง เสลี่ยม จังหวัดสุโขทัย ผลการวิจัยพบว่าโดยภาพรวมอยู่ใน ระดับมาก เมื่อพิจารณาเป็นรายด้านพบว่าด้านที่มีค่าเฉลี่ยอยู่ในระดับมาก ได้แก่ ด้านหลักความคุ้มค่า และด้านหลักความโปร่งใส

ผลการเปรียบเทียบการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี โดยจำแนกตามปัจจัยส่วนบุคคล โดยภาพรวมพบว่า เพศไม่แตกต่างกัน ส่วนอายุ ระดับการศึกษา และอาชีพแตกต่างกัน พบว่าแตกต่างกันอย่างมีระดับนัยสำคัญทางสถิติที่ระดับ 0.05 ซึ่งสอดคล้องกับงานวิจัยของพีระ พันธุ์งาม (2561) วิจัยเรื่องการบริหารงานตามหลักธรรมาภิบาลขององค์การบริหารส่วนตำบลวังซ้าย อำเภอวังเหนือจังหวัดลำปาง ผลการวิจัยพบว่าผลการทดสอบสมมติฐานพบว่า ปัจจัยส่วนบุคคลเพศ อายุ ระดับการศึกษา อาชีพ รายได้เฉลี่ยต่อเดือนที่ต่างกันมีความคิดเห็นต่อการบริหารงานตามหลักธรรมาภิบาลแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 3) ข้อเสนอแนะประเด็นสำคัญ ได้แก่ สภาองค์การบริหารส่วนตำบลวังซ้ายควรมีการตรวจสอบการออกข้อบัญญัติ กฎ ระเบียบให้สอดคล้องกับความจำเป็นตรงกับสภาพปัญหาของท้องถิ่น ควรจัดระบบการควบคุมภายในเพื่อป้องกันปัญหาการทุจริตประพฤติมิชอบ การดำเนินงานตามแผนงาน/โครงการต้องมีความโปร่งใส มีหลักฐานสามารถตรวจสอบได้และควรส่งเสริมสนับสนุนให้ภาคประชาชนมีส่วนร่วมในการตรวจสอบการบริหารงานโดยจัดให้มีศูนย์เครือข่าย ภาคีประชาชนร่วมติดตามตรวจสอบการบริหารงาน

12. ข้อเสนอแนะ

    1. ข้อเสนอแนะในการนำผลการวิจัยในครั้งนี้ไปใช้

        1.1 เทศบาลมีการเปิดโอกาสให้ประชาชนมีส่วนร่วมในการตรวจสอบการทำงานและมีการประชาสัมพันธ์ข้อมูลข่าวสารต่าง ๆ ให้กับประชาชนได้เข้าถึงง่ายที่สุด

        1.2 เปิดโอกาสให้ประชาชนในตำบลเข้ามามีส่วนร่วม ในการจัดทำข้อบัญญัติงบประมาณรายจ่ายและการใช้งบประมาณของเทศบาล

        1.3 มีการจัดเวทีสาธารณะเพื่อให้ประชาชนได้แสดงความคิดเห็นอย่างอิสระ

        1.4 มีการให้ความรู้ ความเข้าใจในบทบาทแก่ประชาชน สื่อมวลชนและสาธารณชนให้สามารถมีส่วนร่วมในการดำเนินงานได้อย่างเต็มที่และเกิดประโยชน์สูงสุด โดยการออกประชาสัมพันธ์อย่างสม่ำเสมอ ทั้งในด้านพบปะพูดคุยแลกเปลี่ยนและวารสารเผยแพร่

        1.5 เน้นหลักการบริหารโดยให้ประชาชนส่วนใหญ่ได้มีส่วนร่วมในการพัฒนา และกำหนดยุทธศาสตร์ในการพัฒนาหมู่บ้านการสร้างหลักประกันในความปลอดภัยต่อชีวิตและทรัพย์สิน

        1.6 จัดให้มีระบบเอกสารที่เป็นระเบียบ สะดวกต่อการใช้งานและตรวจสอบจากประชาชนโดยการจัดให้มีข้อมูลรายละเอียดต่าง ๆ อยู่ในห้องสมุดประจำหมู่บ้าน เพื่อความสะดวกของประชาชนและจัดให้มีที่ร้องเรียนร้องทุกข์ประจำหมู่บ้าน

    2. ข้อเสนอแนะในการวิจัยครั้งต่อไป

        2.1 ควรศึกษาปัจจัยที่มีผลต่อการมีส่วนร่วมของประชาชนในการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี

        2.2 ควรศึกษาเปรียบเทียบการบริหารจัดการตามหลักธรรมาภิบาลของเทศบาลตำบลหนองแวงแก้มหอม อำเภอไชยวาน จังหวัดอุดรธานี กับเทศบาลอื่น

บรรณานุกรม

กัญช์ อินทนู. (2550). **การบริหารงานตามหลักธรรมาภิบาลขององค์การบริหารส่วนตำบลกรณีศึกษา: องค์การบริหารส่วนตำบลในเขตอำเภอทุ่งสง จังหวัดนครศรีธรรมราช.** รายงานการศึกษาอิสระหลักสูตรรัฐประศาสตร์ มหาวิทยาลัยขอนแก่น.

ดิเรก ปัทมสิริวัฒน์. (2544). **โครงการพัฒนาที่มีภัยร้ายแรงต่อสิ่งแวดล้อมการป้องกันภัยและการมีส่วนร่วมของท้องถิ่น.** สมาคมเศรษฐศาสตร์แห่งประเทศไทย. กรุงเทพมหานคร:บริษัท พีเอลิฟวิ่ง จำกัด.

ปฐม มณีโรจน์. (2554). **สาธารณคดี ภาครัฐในมุมมองกฎหมายการเมืองและการบริหาร.** กรุงเทพฯ: สุภาภรณ์การพิมพ์.

บุญชม ศรีสะอาด. (2538). **การวิจัยเบื้องต้น.** พิมพ์ครั้งที่ 2 . กรุงเทพฯ: สุวีริยาศาสน์.

"รัฐธรรมนูญแห่งราชอาณาจักรไทย พ.ศ. 2560". (6 เมษายน 2560). ราชกิจจานุเบกษา, เล่ม 134 ตอนที่ 40 ก, น. 32-46.

สุพจน์ ทรายแก้ว. (2553). **การพัฒนารูปแบบการจัดกระบวนการเรียนรู้เพื่อเสริมสร้างทักษะใน. ศตวรรษ ที่ 21**. กรุงเทพฯ : สำนักนายกรัฐมนตรี.

Taro Yamane. (1973). **Statistics: An Introductory Analysis.** 3rd Ed. New York.Harper and Row Publications.

Scheffe, H. (1953). **A method for judging all contrasts in the analysis of variance.** Biometrika.

Wilson, W. W., & McLaren, R. C. (1973). **Police Administration**. New York : McGraw-Hill.

สมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการ
สำนักงานอัยการสูงสุด
Performance Performance Of Administrative Officials Under
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บทคัดย่อ

　　การวิจัยครั้งนี้มีวัตถุประสงค์ 1) เพื่อศึกษาระดับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัด สำนักงานเลขาธิการสำนักงานอัยการสูงสุด 2) เปรียบเทียบสมรรถนะการปฏิบัติงานของข้าราชการธุรการ สังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุดจำแนกตามปัจจัยส่วนบุคคล 3) เพื่อให้ข้อเสนอแนะเกี่ยวกับ สมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด กลุ่มตัวอย่าง คือ ข้าราชการธุรการ สำนักงานเลขาธิการสำนักงานอัยการสูงสุด รวมจำนวนทั้งสิ้น 210 คน เครื่องมือที่ใช้ใน การวิจัย คือ แบบสอบถาม วิเคราะห์ข้อมูลด้วยความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน การทดสอบ ค่าที และการทดสอบค่าเอฟ และการวิเคราะห์ความตากต่างรายคู่ โดยวิธี Scheffe โดยกำหนดนัยสำคัญทาง สถิติที่ระดับ 0.05 โดยผู้วิจัยได้นำรูปแบบสมรรถนะหลักที่สำนักงานคณะกรรมการข้าราชการพลเรือนกำหนด คือ 1) การมุ่งผลสัมฤทธิ์ 2) บริการที่ดี 3) การสั่งสมความเชี่ยวชาญในงานอาชีพ 4) การยึดมั่นในความถูกต้อง ชอบธรรมและจริยธรรม และ 5) การทำงานเป็นทีม มาเป็นรูปแบบในการศึกษา

　　ผลการวิจัยพบว่า 1) สมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการ สำนักงานอัยการสูงสุด โดยรวมอยู่ในระดับมาก เมื่อพิจารณาเป็นรายด้าน เรียงลำดับค่าเฉลี่ยจากมากไปหา น้อย ได้แก่ ด้านการมุ่งผลสัมฤทธิ์ ด้านการทำงานเป็นทีม ด้านการสั่งสมความเชี่ยวชาญในงานอาชีพ ด้านการ ยึดมั่นในความถูกต้อง ชอบธรรมและจริยธรรม และด้านการบริการที่ดี 2) ข้าราชการธุรการสังกัดสำนักงาน เลขาธิการสำนักงานอัยการสูงสุด ที่มีเพศ ตำแหน่ง และภูมิลำเนาแตกต่างกัน มีสมรรถนะในการปฏิบัติงาน โดยรวมและรายด้านไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 และข้าราชการธุรการสังกัดสำนักงาน

เลขาธิการสำนักงานอัยการสูงสุดที่มีอายุ ระยะเวลาการปฏิบัติงาน และอัตราเงินเดือนแตกต่างกัน มีสมรรถนะในการปฏิบัติงานโดยรวมและรายด้านแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 แต่เมื่อพิจารณาเป็นรายด้าน พบว่า ข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ที่มีอายุ ระยะเวลาการปฏิบัติงาน และอัตราเงินเดือนต่างกันมีสมรรถนะการปฏิบัติงานแตกต่างกันทุกด้าน (มีค่า sig ต่ำกว่า 0.05 ทุกด้าน) และ 3) ข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ได้เสนอแนะเกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการ จำนวน 5 ด้าน จำแนกเป็นรายด้าน คือ ด้านการมุ่งผลสัมฤทธิ์ บุคลากรควรปฏิบัติหน้าที่ในความรับผิดชอบอย่างเต็มความสามารถ บุคลากรควรปฏิบัติหน้าที่ด้วยความรวดเร็วถูกต้อง และควรมีเป้าหมายในการทำงานเดียวกัน ด้านการบริการที่ดี บุคลากรควรให้การบริการเสมอภาคกับผู้รับบริการทุกคนและบุคลากรควรให้บริการด้วยความรวดเร็ว ด้านการสั่งสมความเชี่ยวชาญในงานอาชีพ บุคลากรควรมีการเรียนรู้พัฒนาด้ายตนเองตลอดเวลา บุคลากรควรนำความรู้ของตนไปใช้ในการสร้างวิสัยทัศน์เพื่อการปฏิบัติงานในอนาคต และบุคลากรควรมีความชำนาญในแต่ละด้าน ด้านการยึดมั่นในความถูกต้อง ชอบธรรมและจริยธรรม บุคลากรควรรักษาคำพูดและบุคลากรกล้าตัดสินใจปฏิบัติหน้าที่ราชการด้วยความถูกต้อง ด้านการทำงานเป็นทีม บุคลากรควรวางแผนร่วมกันในทีมและบุคลากรควรให้ข้อมูลที่เป็นประโยชน์ต่อทีมงาน

คำสำคัญ : สมรรถนะการปฏิบัติงาน, สำนักงานอัยการสูงสุด, ข้าราชการธุรการ

ABSTRACT

The objectives of this research were 1) To study the performance level of administrative officials under the Secretariat of the Office of the Attorney General. 2) to compare the performance of administrative officials under the Secretariat of the Office of the Attorney General classified by personal factors, and 3) to provide a proposal. An introduction to the performance of administrative officials under the Secretariat of the Office of the Attorney General. The sample group was administrative officers. Secretariat of the Office of the Attorney General There were 210 people in total. The research tools were questionnaires. Data were analyzed by frequency, percentage, mean, standard deviation, T-test and F-test. and analysis of pairwise difference by Scheffe method with statistical significance at 0.05. accumulation of expertise in professional work; 4) adherence to righteousness and ethics; and 5) working as a team. as a model for education

The research findings were as follows: Overall, it was at a high level. when considering side by side In order of average from the highest to the least, including the achievement-oriented aspect. Team work On the accumulation of professional expertise In adherence to accuracy righteous and ethical and good service. 2) Administrative officials under the Secretariat of the Office of the Attorney General with different genders, positions and

domiciles. There were no significant differences in overall performance and each aspect at the .05 level. Operation period and different salary rates The overall performance and each aspect were significantly different at the .05 level. and different salaries had different performance in all aspects (all sig values were lower than 0.05); and 3) administrative officials under the Secretariat of the Office of the Attorney General. made recommendations about the performance of administrative officials in 5 aspects, classified by aspect, namely the achievement-oriented aspect Personnel should perform their responsibilities to the best of their ability. Personnel should perform their duties with speed and accuracy. and should have the same goals in work good service Personnel should provide equal service to all service users and personnel should provide prompt service. On the accumulation of professional expertise Personnel should learn to develop themselves all the time. People should use their knowledge to create a vision for future performance. and personnel should have expertise in each field In adherence to accuracy righteous and ethical Personnel should keep their word and dare to make decision to perform official duties with accuracy. Team work Personnel should plan together as a team and personnel should provide information that is useful to the team.

Keywords: Work performance, Office of the Attorney General, Administrative officials

1. ความเป็นมาและความสำคัญของปัญหา

ทรัพยากรมนุษย์ถือได้ว่าเป็นปัจจัยพื้นฐานที่สำคัญมากกว่าทรัพยากรอื่น ๆ เนื่องจากสามารถพัฒนาได้ เพิ่มคุณค่าในตัวเองได้ สามารถนำกลับมาใช้ได้อยู่เสมอ ยิ่งใช้มากเท่าไรยิ่งทำให้มีทักษะและประสบการณ์มากขึ้นเท่านั้น ทั้งนี้ทรัพยากรมนุษย์ยังเป็นแรงผลักดันสำคัญที่ทำให้องค์กรก้าวไปสู่ผลสำเร็จ บรรลุตามเป้าหมายที่องค์กรได้กำหนดไว้ แต่ว่ามนุษย์ล้วนมีความหลากหลาย มีความรู้สึกนึกคิดซับซ้อน มีพฤติกรรมที่แตกต่างกัน ฉะนั้นเพื่อให้การดำเนินงานขององค์กรสำเร็จตามวัตถุประสงค์ที่กำหนดไว้ อย่างมีประสิทธิภาพและประสิทธิผล องค์กรจึงมีความจำเป็นอย่างยิ่งที่ต้องพัฒนาขีดความสามารถของบุคลากรเพื่อมุ่งสู่องค์กรที่มีสมรรถนะ บุคลากรมีความรู้ ความคิดริเริ่ม เตรียมพร้อมเมื่อมีการเปลี่ยนแปลงและสามารถปรับตัวได้อย่างเหมาะสมต่อสถานการณ์ต่าง ๆ ที่จะเกิดขึ้นทั้งในปัจจุบันและในอนาคต (ชัยธนัตถ์กร ภวิศพิริยะกฤติ, 2553)

สมรรถนะ (Competency) เป็นกรอบแนวคิดหนึ่งที่องค์กรนำมาใช้ระบบการบริหารทรัพยากรบุคคล เนื่องจากมีประโยชน์ต่อองค์กรอย่างมหาศาล อาทิเช่น ช่วยสนับสนุนวิสัยทัศน์ ภารกิจ และกลยุทธ์ขององค์กร ให้บรรลุเป้าหมายได้เป็นอย่างดีและเร็วยิ่งขึ้น ทั้งนี้ยังทำให้การบริหารทรัพยากรบุคคลมีประสิทธิภาพ ไม่ว่าจะเป็นในเรื่อง การคัดเลือกบุคลากร การพัฒนา การฝึกอบรม และการบริหารผลงานหรือการรักษาไว้และใช้ประโยชน์ กล่าวคือ ในระบบการคัดเลือกเดิมจะมุ่งเน้นการวัดความถนัด ความรู้เฉพาะในงาน การประเมินความเหมาะสมกับตำแหน่งถึงแม้ว่าจะเป็นสิ่งสำคัญสำหรับการปฏิบัติงานแต่ทั้งนี้ก็ยังคงไม่เพียงพอ

เพราะยังต้องมุ่งเน้นในส่วนเฉพาะของบุคคลที่ไม่สามารถมองเห็นได้ เช่น ค่านิยม ทัศนคติ บุคลิกภาพ ต้อง เพิ่มขึ้นด้วยเพราะสิ่งต่าง ๆ เหล่านี้จะส่งผลต่อพฤติกรรมการปฏิบัติงานของบุคคลด้วย ทั้งนี้องค์กรต้องหา หนทางในการฝึกอบรมเพื่อให้บุคลากรขององค์กรมีพฤติกรรมในการทำงานอย่างที่องค์กรต้องการสำหรับการ บริหารผลงาน ควรมีความเหมาะสมและเป็นธรรม เพราะถึงแม้ว่าการคัดเลือกจะมีผู้ที่มีความเหมาะสมเข้ามา ทำงาน แต่ถ้าหากขาดการบริหารผลงานที่ดี องค์กรก็ไม่สามารถรักษาบุคลากรที่ดีไว้ได้ ฉะนั้นเมื่อมีการ ประเมินพฤติกรรมในการทำงานแล้ว การจ่ายค่าตอบแทนควรให้สัมพันธ์กันด้วยเช่น บุคคลที่มีผลงานที่ดีกว่า มากกว่าคนอื่น ๆ ก็ควรได้รับค่าตอบแทนที่มากกว่าด้วยเช่นกันจึงอาจกล่าวได้ว่า สมรรถนะเป็นปัจจัยที่ช่วย ให้การทำงานขององค์กรมีขีดสมรรถนะในการแข่งขันเพิ่มมากขึ้น โดยเฉพาะการเพิ่มขีดความสามารถในการ บริหารทรัพยากรบุคคลซึ่งเป็นปัจจัยหนึ่งที่สำคัญยิ่งในองค์กร

สมรรถนะหลัก (Core competency) หมายถึง คุณลักษณะร่วมของข้าราชการทั้งระบบเพื่อหล่อ หลอมค่านิยม และพฤติกรรมที่พึงประสงค์ร่วมกัน ประกอบด้วย การมุ่งผลสัมฤทธิ์ (Achievement motivation) บริการที่ดี (Service mind) การสั่งสมความเชี่ยวชาญในงานอาชีพ (Expertise) การยึดมั่นใน ความถูกต้องชอบธรรมและจริยธรรม (Integrity) การทำงานเป็นทีม (Teamwork)

สำหรับในประเทศไทย ตามพระราชบัญญัติระเบียบข้าราชการพลเรือน พ.ศ. 2551 มาตรา 72 ให้ ส่วนราชการมีหน้าที่ดำเนินการให้มีการเพิ่มพูนประสิทธิภาพและเสริมสร้างแรงจูงใจแก่ข้าราชการพลเรือน สามัญ เพื่อให้ข้าราชการพลเรือนสามัญมีคุณธรรม จริยธรรม คุณภาพชีวิต มีขวัญและกำลังใจในการปฏิบัติ ราชการให้เกิดผลสัมฤทธิ์ต่อภารกิจของรัฐ ทั้งนี้ตามหลักเกณฑ์และวิธีการที่สำนักงานคณะกรรมการ ข้าราชการพลเรือน (ก.พ.) กำหนด สำนักงานคณะกรรมการข้าราชการพลเรือนจึงได้นำสมรรถนะมาใช้ใน การบริหารทรัพยากรบุคคลเพื่อเสริมสร้างให้การปฏิบัติงานของข้าราชการ และส่วนราชการมีประสิทธิภาพ และประสิทธิผลยิ่งขึ้นตามหลักการของหนังสือเวียน สำนักงาน ก.พ. ที่ นร 1008/ว 27 ลงวันที่ 29 กันยายน พ.ศ. 2552 ได้กำหนดมาตรฐานและแนวทางการกำหนดความรู้ ความสามารถ ทักษะและสมรรถนะที่จำเป็น สำหรับข้าราชการพลเรือน เพื่อเป็นการหล่อหลอมค่านิยมและพฤติกรรมที่พึงประสงค์ร่วมกัน โดยมี องค์ประกอบด้วยกัน 5 ด้าน ได้แก่ 1) การมุ่งผลสัมฤทธิ์ 2) การบริการที่ดี 3) การสั่งสมความเชี่ยวชาญใน งานอาชีพ 4) การยึดมั่นในความถูกต้อง ชอบธรรมและจริยธรรม และ 5) การทำงานเป็นทีม (สำนักพัฒนา ระบบจำแนกตำแหน่งและค่าตอบแทน, 2553)

สำนักงานอัยการสูงสุดได้เล็งเห็นความสำคัญในการจัดทำสมรรถนะ เพื่อมุ่งเน้นพัฒนาบุคลากรให้มี ความรู้ ความสามารถและทักษะในการปฏิบัติหน้าที่ ควบคู่ไปกับการเป็นคนดี มีคุณธรรม จริยธรรม จิตสำนึก ในการพัฒนางาน เพื่อตอบสนองต่อความต้องการและความคาดหวังของประชาชนอย่างมีคุณภาพ รวมถึง พัฒนาบุคลากรให้มีความเจริญก้าวหน้าในหน้าที่การงานได้รับการยอมรับและยกย่องในการปฏิบัติราชการ ต่อไป โดยสำนักงานอัยการสูงสุดได้กำหนดสมรรถนะของข้าราชการธุรการสำนักงานอัยการสูงสุด ประกอบด้วย 5 สมรรถนะ ได้แก่ 1) การมุ่งผลสัมฤทธิ์ 2) การบริการที่ดี 3) การสั่งสมความเชี่ยวชาญในงาน อาชีพ 4) การยึดมั่นในความถูกต้องชอบธรรมและจริยธรรม และ 5) การทำงานเป็นทีม

ในส่วนของสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ตามราชกิจจานุเบกษา ประกาศคณะกรรมการ อัยการ เรื่อง การแบ่งหน่วยงาน และการกำหนดอำนาจและหน้าที่ของหน่วยงานภายในของสำนักงานอัยการ

สูงสุด พ.ศ. 2563 นั้น ได้มีการปรับปรุงโครงสร้าง การแบ่งหน่วยงาน การกำหนดอำนาจและหน้าที่ของหน่วยงานภายในของสำนักงานอัยการสูงสุด ให้สอดคล้องกับภารกิจขององค์กรอัยการตามรัฐธรรมนูญแห่งราชอาณาจักรไทย โดยได้จัดตั้ง สำนักงานเลขาธิการสำนักงานอัยการสูงสุด เป็นหน่วยงานราชการธุรการ ขึ้นตรงต่ออัยการสูงสุด มีเลขาธิการสำนักงานอัยการสูงสุดเป็นผู้บังคับบัญชาและรับผิดชอบในการปฏิบัติราชการ

ผู้วิจัยซึ่งปัจจุบันปฏิบัติงานอยู่ในสำนักงานเลขาธิการสำนักงานอัยการสูงสุด จึงสนใจที่จะศึกษาวิจัยเกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ซึ่งข้อมูลที่ได้จากการวิจัยจะเป็นประโยชน์ต่อการปฏิบัติงานของบุคลากรสำนักงานอัยการสูงสุดให้มีประสิทธิภาพมากขึ้น และเป็นประโยชน์โดยรวมต่อองค์กร ตอบสนองต่อความต้องการและความคาดหวังของประชาชนเพื่อประโยชน์สูงสุดอย่างแท้จริง และทราบถึงปัญหาของบุคลากรเกี่ยวกับสมรรถนะการปฏิบัติงานโดยจำแนกตามปัจจัยส่วนบุคคล

2. วัตถุประสงค์ของการวิจัย

1. เพื่อศึกษาระดับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด

2. เพื่อเปรียบเทียบระดับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด จำแนกตามปัจจัยส่วนบุคคล

3. เพื่อให้ข้อเสนอแนะเกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด

3. ขอบเขตของการวิจัย

1. **ขอบเขตด้านเนื้อหา**

ขอบเขตของเนื้อหา การวิจัยในครั้งนี้ ผู้วิจัยมุ่งศึกษาสาระสำคัญของสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด 5 ด้าน ดังนี้ คือ 1. การมุ่งผลสัมฤทธิ์ (Achievement motivation) 2. บริการที่ดี (Service mind) 3. การสั่งสมความเชี่ยวชาญในงานอาชีพ (Expertise) 4. การยึดมั่นในความถูกต้องชอบธรรมและจริยธรรม (Integrity) 5.   การทำงานเป็นทีม (Teamwork)

2. **ขอบเขตด้านประชากร**

ประชากร ได้แก่ บุคลากรสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ประกอบด้วยข้าราชการธุรการตำแหน่งประเภทวิชาการและตำแหน่งประเภททั่วไป จำนวน 439 คน

กลุ่มตัวอย่าง ได้แก่ บุคลากรสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ประกอบด้วยข้าราชการธุรการสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ตำแหน่งประเภทวิชาการและตำแหน่งประเภททั่วไป รวมจำนวนทั้งสิ้น 210 คน

3. ขอบเขตด้านพื้นที่

ศึกษาเฉพาะหน่วยงานสำนักงานเลขาธิการสำนักงานอัยการสูงสุด

4. ขอบเขตด้านระยะเวลา

ในการทำการวิจัยครั้งนี้ ผู้วิจัยได้ทำการศึกษา เก็บรวบรวมข้อมูลการวิจัย และสรุปผลการวิจัย
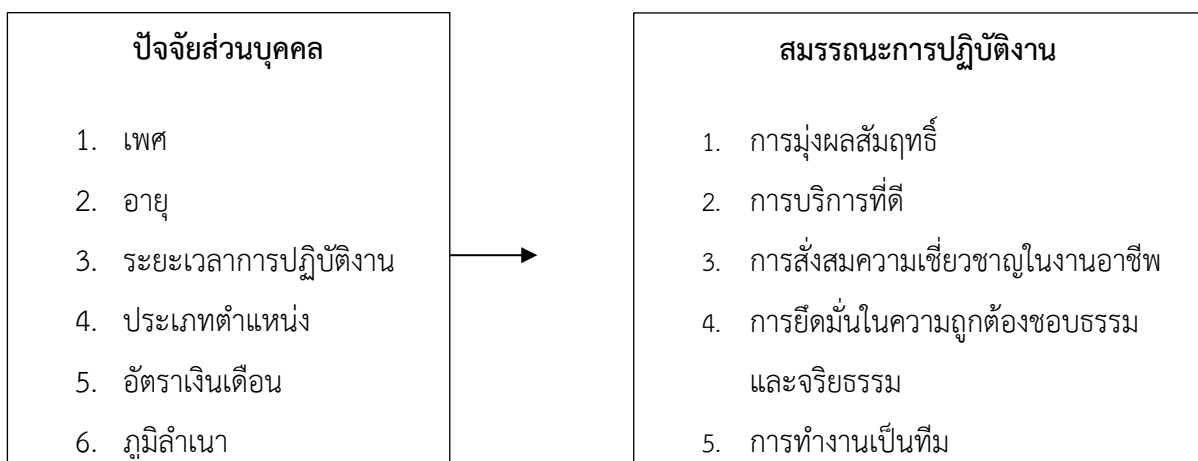ระหว่างเดือนกรกฎาคม จนถึงเดือนธันวาคม พ.ศ. 2565

4. ประโยชน์ของการวิจัย

1. ทำให้ทราบสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงาน
อัยการสูงสุด

2. ทำให้ทราบผลการเปรียบเทียบระดับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงาน
เลขาธิการสำนักงานอัยการสูงสุด จำแนกตามปัจจัยส่วนบุคคล

3. ทำให้ทราบข้อเสนอแนะเกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงาน
เลขาธิการสำนักงานอัยการสูงสุด

4. ผลการวิจัยสามารถนำไปเป็นข้อเสนอแนะเชิงนโยบายในการบริหารทรัพยากรบุคคลของสำนักงาน
เลขาธิการสำนักงานอัยการสูงสุด และหน่วยงานอื่น ๆ ได้

5. กรอบแนวคิดในการวิจัย

ตัวแปรอิสระ   **ตัวแปรตาม**

ปัจจัยส่วนบุคคล	สมรรถนะการปฏิบัติงาน
1. เพศ 2. อายุ 3. ระยะเวลาการปฏิบัติงาน 4. ประเภทตำแหน่ง 5. อัตราเงินเดือน 6. ภูมิลำเนา	1. การมุ่งผลสัมฤทธิ์ 2. การบริการที่ดี 3. การสั่งสมความเชี่ยวชาญในงานอาชีพ 4. การยึดมั่นในความถูกต้องชอบธรรม และจริยธรรม 5. การทำงานเป็นทีม

6. ประเภทของการวิจัย

การวิจัยในครั้งนี้เป็นการวิจัยเชิงปริมาณ (Quantitative Research) โดยการวิจัยเชิงสำรวจ (Survey
Fesearch) และใช้วิธีเก็บข้อมูลด้วยแบบสอบถาม (Questionnaire) มุ่งศึกษา สมรรถนะการปฏิบัติงานของ
ข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด

7. เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล

การวิจัยครั้งนี้ผู้วิจัยใช้เครื่องมือในการวิจัยคือแบบสอบถามเรื่องสมรรถนะการปฏิบัติงานของ
ข้าราชการธุรการสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ซึ่งเนื้อหาประกอบด้วย 3 ตอน คือ

ตอนที่ 1 สถานภาพทั่วไปของผู้ตอบแบบสอบถามเป็นแบบสอบถามแบบเลือกตอบจำนวน 6 ข้อ

ตอนที่ 2 คำถามเกี่ยวกับสมรรถนะหลักในการปฏิบัติงานของข้าราชการธุรการสังกัด
สำนักงานเลขาธิการสำนักงานอัยการสูงสุด แบบสอบถามประกอบด้วยสมรรถนะ 5 ด้าน

ตอนที่ 3 ข้อเสนอแนะเกี่ยวกับสมรรถนะหลักในการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงาน
เลขาธิการสำนักงานอัยการสูงสุด ซึ่งเป็นแบบสอบถามแบบปลายเปิด

8. การสร้างและการทดสอบเครื่องมือ

เครื่องมือที่ใช้ในการวิจัยครั้งนี้ เป็นแบบสอบถามที่ผู้วิจัยได้สร้างขึ้นตามขั้นตอน ดังต่อไปนี้

1. ศึกษาแนวคิด ทฤษฎี และงานวิจัยที่เกี่ยวข้องกับสมรรถนะการปฏิบัติงานของบุคลากร
หน่วยงานสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด

2. กำหนดขอบเขตคำถามให้ครอบคลุมกรอบแนวความคิด วัตถุประสงค์และองค์ประกอบ
ที่ทำให้ทราบถึงสมรรถนะการปฏิบัติงานของบุคลากรหน่วยงานสังกัดสำนักงานเลขาธิการสำนักงานอัยการ
สูงสุด แล้วนำข้อมูลเหล่านั้นมาใช้ในการสร้างแบบสอบถาม

3. นำร่างของแบบสอบถาม เสนออาจารย์ที่ปรึกษา ตรวจสอบ แก้ไขและเสนอแนะ
ปรับปรุงเพื่อความเหมาะสมและถูกต้องของแบบสอบถาม

4. นำแบบสอบถามที่ปรับปรุงแก้ไขแล้ว เสนอผู้เชี่ยวชาญ เพื่อตรวจสอบความครอบคลุม
ถูกต้อง ความเที่ยงตรงเชิงเนื้อหา (Content validity) ความถูกต้องเที่ยงตรงเชิงโครงสร้าง (Construct
validity) และความถูกต้องของรูปแบบของแบบสอบถาม การใช้ภาษาเพื่อให้ถูกต้องตามหลักวิชาการและเพื่อ
ความสมบูรณ์ของแบบสอบถาม ผู้เชี่ยวชาญจำนวน 5 ท่านดังนี้

5. นำแบบสอบถามมาหาค่า IOC (Index of item objective congruence) (ดัชนีความ
สอดคล้องระหว่างข้อคำถามกับจุดประสงค์) โดยให้เกณฑ์ในการตรวจพิจารณาข้อคำถาม ดังนี้

ให้คะแนน +1   ถ้าแน่ใจว่าข้อคำถามวัดได้ตรงตามวัตถุประสงค์

ให้คะแนน 0   ถ้าไม่แน่ใจว่าข้อคำถามวัดได้ตรงตามวัตถุประสงค์

ให้คะแนน -1   ถ้าแน่ใจว่าข้อคำถามวัดได้ไม่ตรงตามวัตถุประสงค์

แล้วนำผลคะแนนที่ได้จากผู้เชี่ยวชาญมาคำนวณหาค่า IOC ตามสูตรโดยใช้เกณฑ์

ข้อคำถามที่มีค่า IOC ตั้งแต่ 0.50-1.00   มีค่าความเที่ยงตรงใช้ได้

ข้อคำภามที่มีค่า IOC ต่ำกว่า 0.50   ต้องปรับปรุง ใช้ไม่ได้

6. ผลการวิเคราะห์ค่า IOC พบว่าแบบสอบถามทุกข้อมีค่า IOC .60 ขึ้นไป

7. นำแบบสอบถามที่ผ่านการตรวจสอบของผู้เชี่ยวชาญมาแก้ไขและเสนออาจารย์ที่ปรึกษา
อีกครั้ง แล้วนำแบบสอบถามไปทดลองใช้ (Try out) กับบุคลากรสำนักงานอัยการสูงสุดส่วนกลาง ที่ไม่ใช่กลุ่ม
ตัวอย่าง จำนวน 30 คน เพื่อหาค่าความเชื่อมั่นของแบบสอบถามด้วยค่าสัมประสิทธิ์แอลฟา (Alpha
coefficient) ตามวิธีของคอนบราช (Cronbach) ได้ค่าความเชื่อมั่น .97

9. การเก็บรวบรวมข้อมูล

ข้อมูลปฐมภูมิ ได้แก่ ข้อมูลจากแบบสอบถาม เกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการ สังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด และเพื่อให้ได้ข้อมูลที่ครบถ้วนสมบูรณ์ทุกด้าน ผู้วิจัยจึงได้ ดำเนินการตามขั้นตอน ดังนี้

1. ผู้วิจัยดำเนินการขอหนังสือรับรอง แนะนำตัวผู้วิจัยจากวิทยาลัยพิชญบัณฑิต ถึงหัวหน้าส่วน ราชการหน่วยงานสังกัดสำนักงานอัยการสูงสุด เพื่อขออนุญาตให้ผู้วิจัยได้เก็บรวบรวมข้อมูล

2. ผู้วิจัยใช้วิธีการแจกแบบสอบถามผ่านทางออนไลน์ Google Form โดยรวบรวมแบบสอบถามและ ตรวจสอบความครบถ้วนสมบูรณ์ของการตอบแบบสอบถามก่อนนำไปวิเคราะห์ข้อมูลทุติยภูมิ ได้แก่ ข้อมูลที่ ผู้วิจัยได้ศึกษาค้นคว้า จากเอกสาร บทความวิชาการ หนังสือ อินเตอร์เน็ต วิทยานิพนธ์ การค้นคว้าอิสระ และ รายงานการวิจัยที่เกี่ยวข้องกับสมรรถนะในการปฏิบัติงานทั้งองค์กรของรัฐและเอกชน

10. การวิเคราะห์ข้อมูลและสถิติที่ใช้ในการศึกษา

ในการวิจัยครั้งนี้ผู้วิจัยได้ใช้โปรแกรมสำเร็จรูปทางสังคมศาสตร์ในการวิเคราะห์ข้อมูลและประมวลผล โดยมีขั้นตอนดังต่อไปนี้

1. วิเคราะห์ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม จากแบบสอบถามตอนที่ 1 โดยการแจกแจงความถี่ และหาค่าร้อยละ

2. วิเคราะห์ข้อมูลสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงาน อัยการสูงสุด โดยการหาค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน ด้วยใช้เกณฑ์การแปลความหมายของค่าเฉลี่ย (บุญชม ศรีสะอาด, 2545, หน้า 103) ดังนี้

ค่าเฉลี่ย 4.51 – 5.00 หมายถึง มีสมรรถนะมากที่สุด

ค่าเฉลี่ย 3.51 – 4.50 หมายถึง มีสมรรถนะมาก

ค่าเฉลี่ย 2.51 – 3.50 หมายถึง มีสมรรถนะปานกลาง

ค่าเฉลี่ย 1.51 – 2.50 หมายถึง มีสมรรถนะน้อย

ค่าเฉลี่ย 1.00 – 1.50 หมายถึง มีสมรรถนะน้อยที่สุด

3. ทดสอบสมมติฐานโดยการทดสอบค่า ที (t-test) และการทดสอบ One-way ANOVA (F-test) กำหนดนัยสำคัญทางสถิติที่ระดับ .05 และหากพบว่าค่าเฉลี่ยมีความแตกต่างจะวิเคราะห์ด้วยวิธีการของ Fisher's least significant difference (LSD)

11. สถิติที่ใช้ในการวิเคราะห์ข้อมูล

1. ค่าความถี่, ค่าร้อยละ (Percentage) สำหรับวิเคราะห์เพื่อบรรยายปัจจัยส่วนบุคคล

2. ค่าเฉลี่ย ($\overline{\text{X}}$)

3. ค่าส่วนเบี่ยงเบนมาตรฐาน (SD) สำหรับวิเคราะห์เรื่องสมรรถนะในการปฏิบัติงานของ บุคลากรส่วนกลาง สำนักงานอัยการสูงสุด

4. การทดสอบค่า T (t-test) และการทดสอบค่า F (F-test)

12. ผลการวิจัย

  1. ผลการวิเคราะห์ข้อมูลทั่วไป พบว่า ข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ส่วนใหญ่เป็นเพศหญิง อายุระหว่าง 30-39 ปี มีระยะเวลาการปฏิบัติงาน 5-10 ปี ตำแหน่งประเภทวิชาการ มีอัตราเงินเดือนระหว่าง 25,001 – 30,000 บาท และมีภูมิลำเนาอยู่ต่างจังหวัด

  2. สมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด โดยรวมอยู่ในระดับมาก และเมื่อพิจารณาเป็นรายด้านพบว่า

    2.1 ด้านการมุ่งผลสัมฤทธิ์ โดยรวมอยู่ในระดับมาก เมื่อจำแนกเป็นรายข้อ พบว่าอยู่ในระดับมากทุกข้อ เรียงลำดับค่าเฉลี่ยจากมากไปน้อย คือ กำหนดมาตรฐานในการปฏิบัติงานเพื่อให้ได้ผลงานที่ดี เสนอวิธีการทำงานแบบใหม่ที่คาดว่าจะทำให้งานมีประสิทธิภาพมากยิ่งขึ้น และบริหารทรัพยากรเพื่อให้ได้ประโยชน์สูงสุดต่อภารกิจขององค์กร ส่วนข้อที่มีค่าเฉลี่ยน้อย คือ มีความพยายามในการปฏิบัติงานให้แล้วเสร็จตามกำหนดเวลา

    2.2 ด้านการบริการที่ดี โดยรวมอยู่ในระดับมาก เมื่อจำแนกเป็นรายข้อ พบว่าอยู่ในระดับมากทุกข้อ เรียงลำดับค่าเฉลี่ยจากมากไปน้อย คือ หาแนวทางแก้ไขปัญหาที่เกิดขึ้นแก่ผู้รับบริการอย่างเต็มใจ พร้อมที่จะเปลี่ยนขั้นตอนการให้บริการเพื่อประโยชน์สูงสุดของผู้รับบริการ และประสานงานทั้งภายในและภายนอกหน่วยงาน ส่วนข้อที่มีค่าเฉลี่ยน้อย คือ ให้บริการแก่ผู้รับบริการด้วยความเป็นมิตร

    2.3 ด้านการสั่งสมความเชี่ยวชาญในงานอาชีพ โดยภาพรวมอยู่ในระดับมาก เมื่อจำแนกเป็นรายข้อพบว่าอยู่ในระดับมากทุกข้อ เรียงลำดับค่าเฉลี่ยจากมากไปน้อย คือ สนับสนุนให้เกิดบรรยากาศแห่งการพัฒนาความเชี่ยวชาญในองค์กร พัฒนาความรู้ความสามารถของตนให้ดียิ่งขึ้น และสามารถนำความรู้ใหม่ๆ มาประยุกต์ใช้ในการปฏิบัติหน้าที่ได้ ส่วนข้อที่มีค่าเฉลี่ยน้อย คือ ศึกษาหาความรู้ใหม่ๆ ในสาขาอาชีพของตน

    2.4 ด้านการยึดมั่นในความถูกต้องชอบธรรมและจริยธรรม โดยรวมอยู่ในระดับมาก เมื่อจำแนกเป็นรายข้อพบว่าอยู่ในระดับมากทุกข้อ เรียงลำดับค่าเฉลี่ยจากมากไปน้อย คือ ปฏิบัติหน้าที่ยึดหลักกฎหมาย ระเบียบ มีจิตสำนึกในความเป็นข้าราชการที่ดี และยึดมั่นในหลักการจรรยาบรรณแห่งวิชาชีพ ส่วนข้อที่มีค่าเฉลี่ยน้อย คือ พิทักษ์ผลประโยชน์ของทางราชการ

    2.5 ด้านการทำงานเป็นทีม โดยรวมอยู่ในระดับมาก เมื่อจำแนกเป็นรายข้อพบว่า อยู่ในระดับมากทุกข้อ เรียงลำดับค่าเฉลี่ยจากมากไปน้อย คือ ให้ความร่วมมือกับสมาชิกในทีมงาน ประสานสัมพันธ์เพื่อส่งเสริมกำลังใจของทีมงาน และเต็มใจเรียนรู้งานจากผู้อื่น ส่วนข้อที่มีค่าเฉลี่ยน้อย คือ ช่วยเหลือเมื่อเพื่อนร่วมงานร้องขอด้วยความยินดี

  3. ผลการเปรียบเทียบสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด พบว่า ข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ที่มีเพศ ประเภทตำแหน่ง และภูมิลำเนาแตกต่างกัน มีสมรรถนะในการปฏิบัติงานโดยรวมและรายด้านไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 ส่วนข้าราชการธุรการสังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุดที่มีอายุ ระยะเวลาการปฏิบัติงาน และอัตราเงินเดือนแตกต่างกัน มีสมรรถนะในการปฏิบัติงานโดยรวมและรายด้านแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 และเมื่อพิจารณาเป็นรายด้าน พบว่า ข้าราชการธุรการ

สังกัดสำนักงานเลขาธิการสำนักงานอัยการสูงสุด ที่มีอายุ ระยะเวลาการปฏิบัติงาน และอัตราเงินเดือนต่างกัน มีสมรรถนะการปฏิบัติงานแตกต่างกันทุกด้าน (มีค่า sig ต่ำกว่า 0.05 ทุกด้าน)

      4. ข้อเสนอแนะเกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการสังกัดสำนักงานเลขาธิการ สำนักงานอัยการสูงสุด ได้เสนอแนะเกี่ยวกับสมรรถนะการปฏิบัติงานของข้าราชการธุรการ จำนวน 5 ด้าน จำแนกเป็นรายด้าน คือ ด้านการมุ่งผลสัมฤทธิ์ บุคลากรควรปฏิบัติหน้าที่ในความรับผิดชอบอย่างเต็ม ความสามารถ บุคลากรควรปฏิบัติหน้าที่ด้วยความรวดเร็วถูกต้อง และควรมีเป้าหมายในการทำงานเดียวกัน ด้านการบริการที่ดี บุคลากรควรให้การบริการเสมอภาคกับผู้รับบริการทุกคนและบุคลากรควรให้บริการด้วย ความรวดเร็ว ด้านการสั่งสมความเชี่ยวชาญในงานอาชีพ บุคลากรควรมีการเรียนรู้พัฒนาด้ายตนเองตลอดเวลา บุคลากรควรนำความรู้ของตนไปใช้ในการสร้างวิสัยทัศน์เพื่อการปฏิบัติงานในอนาคต และบุคลากรควรมีความ ชำนาญในแต่ละด้าน ด้านการยึดมั่นในความถูกต้อง ชอบธรรมและจริยธรรม บุคลากรควรรักษาคำพูดและ บุคลากรกล้าตัดสินใจปฏิบัติหน้าที่ราชการด้วยความถูกต้อง ด้านการทำงานเป็นทีม บุคลากรควรวางแผน ร่วมกันในทีมและบุคลากรควรให้ข้อมูลที่เป็นประโยชน์ต่อทีมงาน

บรรณานุกรม

กนกวรรณ ขัดโพธิ์. (2556). **สมรรถนะในการปฏิบัติงานและความต้องการพัฒนาสมรรถนะในการ ปฏิบัติงานของบุคลากรสายสนับสนุน**. วิทยานิพนธ์รัฐศาสตรมหาบัณฑิต, สาขาวิชารัฐศาสตร์, บัณฑิตวิทยาลัย, มหาวิทยาลัยเกษตรศาสตร์.

จิตติสานติ์ วุฒิเวชช์. (2553). **ความคิดเห็นเกี่ยวกับสมรรถนะหลักในการปฏิบัติราชการของพนักงานคุม ประพฤติ กรมคุมประพฤติ ภาคตะวันออกเฉียงเหนือ**. การศึกษาค้นคว้าอิสระรัฐประศาสนศาสตร มหาบัณฑิต สาขาวิชานโยบายสาธารณะ, มหาวิทยาลัยมหาสารคาม.

ชยุต สุดดวงแก้ว. (2555). **การพัฒนาสมรรถนะในการปฏิบัติงานของบุคลากรองค์การบริหารส่วนตำบล ดอนแก้ว อำเภอแม่ริม จังหวัดเชียงใหม่**. วิทยานิพนธ์รัฐประศาสนศาสตรมหาบัณฑิต สาขาวิชา การบริหารองค์การภาครัฐและเอกชน, มหาวิทยาลัยราชภัฏมหาสารคาม.

มะลิ ผงจำปา. (2557). **สมรรถนะการปฏิบัติงานของบุคลากรท้องถิ่นองค์การบริหารส่วนตำบลในเขต อำเภอธาตุพนม จังหวัดนครพนม**. วิทยานิพนธ์รัฐประศาสนศาสตรมหาบัณฑิต สาขาวิชา รัฐ ประศาสนศาสตร์, มหาวิทยาลัยราชภัฏมหาสารคาม.

สมฤทัย อยู่รอด. (2555). **ความคิดเห็นเกี่ยวกับสมรรถนะหลักของพนักงานมหาวิทยาลัย (สายสนับสนุน) สังกัดสำนักงานอธิบดี มหาวิทยาลัยราชภัฏรำไพพรรณี**. วิทยานิพนธ์บริหารธุรกิจ มหาบัณฑิต, สาขาวิชาการบริหารธุรกิจ, บัณฑิตวิทยาลัย, มหาวิทยาลัยราชภัฏรำไพพรรณี.

สำนักงานอัยการสูงสุด. (2559). **แผนปฏิบัติราชการประจำปีสำนักงานอัยการสูงสุด**. กรุงเทพฯ : สำนักงาน อัยการสูงสุด.

อนุชา เพ็งสุวรรณ. (2548). **การศึกษาความต้องการฝึกอบรมเพื่อการพัฒนาสมรรถนะของข้าราชการ สำหรับการรองรับพระราชบัญญัติระเบียบข้าราชการพลเรือนฉบับใหม่ : กรณีศึกษาข้าราชการ**

พลเรือนสังกัดสำนักงานคณะกรรมการการอุดมศึกษา (สกอ.). วิทยานิพนธ์รัฐประศาสนศาสตรมหาบัณฑิต, สาขาวิชาการบริหารทั่วไป, บัณฑิตวิทยาลัย, มหาวิทยาลัยบูรพา.

Cronbach, L.J. (1990). **Essentials of psychological testing.** (5th ed.). New York: Harper & Row.

Kaplan, R. S. and Norton, D. P. (1996). **The Balanced Scorecard : translating strategy in action.** Boston : Harvard Business School Publishing Corporation.

Taro Yamane(1973).**Statistics: An Introductory Analysis.** 3rdEd.New York.Harper and Row Publications.

การมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนตำบลผักปัง
อำเภอภูเขียว จังหวัดชัยภูมิ
Participation in Local Politics of the People of Phak Pang Subdistrict,
Phu Khiao District Chaiyaphum Province

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บทคัดย่อ

      การวิจัยครั้งนี้มีวัตถุประสงค์หลักเพื่อศึกษาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนตำบลผัก ปัง กลุ่มตัวอย่างที่ใช้ในการวิจัยคือประชาชนในพื้นที่ตำบลผักปัง จำนวน 361 คน เครื่องมือที่ใช้ในการเก็บ รวบรวมข้อมูล คือแบบสอบถาม ประกอบไปด้วยเนื้อหา 3 ส่วน และแบบสัมภาษณ์ สถิติที่ใช้ในการวิเคราะห์ ข้อมูล คือสถิติพรรณนา ได้แก่ จำนวน ร้อยละ ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน สถิติเชิงอนุมาน ได้แก่ T - test และ F - test ตามลำดับ ค่าความเชื่อมั่นของแบบสอบถามเท่ากับ 0.779

      ผลการวิจัยพบว่า การมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการ ดำเนินการเลือกตั้ง รองลงมาคือด้านหลักอปหาริยธรรมส่งเสริมการมีส่วน และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือ ด้านการตัดสินใจทางการเมือง

      การวิเคราะห์เปรียบเทียบการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภู เขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ สถานภาพ และระดับการศึกษา โดยภาพรวมประชาชนในตำบลผัก ปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีเพศ อายุ สถานภาพ และระดับการศึกษา ต่างกัน มีส่วนร่วมทางการเมือง ท้องถิ่นไม่แตกต่างกัน

ผลการวิเคราะห์ปัญหาและแนวทางแก้ไขปัญหาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนใน ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ได้แก่ ควรมีการประชาสัมพันธ์และประกาศตามกำหนดระยะเวลา เหมาะสมในการเลือกตั้งสามารถตรวจสอบรายชื่อ

คำสำคัญ : การมีส่วนร่วม, ประชาชน, การเมืองท้องถิ่น

ABSTRACT

The main objective of this research is to study the participation in local politics of the people of Phak Pang Subdistrict. The sample group used in the research was 361 people in the Phak Pang subdistrict area. The instrument used for data collection was a questionnaire consisting of 3 parts and an interview form. Statistics used to analyze data are descriptive statistics including number, percentage, mean, and standard deviation. Inferential statistics include T - test and F - test respectively. The confidence value of the questionnaire is 0.779

The research results found that Participation in local politics of people in Phak Pang Subdistrict, Phu Khieo District, Chaiyaphum Province Overall, it is at a high level. And when considering each aspect, it was found that the aspect with the highest average was the election operation aspect. Next is the principle of non-apariyadhamma promoting participation. And the area with the lowest average is political decision-making.

Comparative analysis of local political participation of people in Phak Pang Subdistrict, Phu Khiao District, Chaiyaphum Province. classified by gender, age, status, and educational level Overall, people in Phak Pang Subdistrict, Phu Khieo District, Chaiyaphum Province, with different genders, ages, statuses, and educational levels, have no difference in participation in local politics.

The results of the problem analysis and solutions to the problem of local political participation of people in Phak Pang Subdistrict, Phu Khiao District, Chaiyaphum Province include: There should be public relations and announcements at an appropriate time period in the election. Names can be checked.

Keywords: Participation, citizens, local politics

1. ความเป็นมาและความสำคัญของปัญหา

การปกครองท้องถิ่นเป็นส่วนหนึ่งทำให้เกิดการพัฒนาทางการเมืองในระบอบประชาธิปไตย ความ เข้มแข็งของการปกครองจะเกิดขึ้นได้ จะต้องเกิดจากการมีส่วนร่วมของประชาชน การส่งเสริมให้เกิดการมี ส่วนร่วมของประชาชนต่อการเลือกตั้งจึงเป็นส่วนสำคัญในการที่ส่งเสริมระบบการเมืองให้มีความเป็น ประชาธิปไตยและก่อให้เกิดการพัฒนาประชาธิปไตยได้อย่างยั่งยืน โดยเฉพาะการเลือกตั้งในระดับท้องถิ่นอัน

เป็นพื้นฐานสำคัญในการที่จะทำให้ประชาชนเกิดการเรียนรู้ทางการเมืองโดยการมีส่วน การเลือกตั้งสมาชิก สภาท้องถิ่นเป็นการเมืองที่มีความใกล้ชิดกับประชาชนในท้องถิ่นมากที่สุด ในอดีตที่ผ่านมาประชาชนใน ท้องถิ่นจะมีส่วนร่วมในการปกครองท้องถิ่นของตนเองน้อยมากการมีส่วนร่วมที่เป็นรูปธรรม คือ การเปิด โอกาสให้ประชาชนไปใช้สิทธิเลือกตั้งสมาชิกสภาท้องถิ่น แต่เมื่อเลือกตั้งเสร็จสิ้น มีสมาชิกสภาท้องถิ่นมีคณะ ผู้บริหารหรือผู้บริหารท้องถิ่นแล้วประชาชนจะไม่มีส่วนร่วมอย่างอื่นเลย ในกรณีที่ประชาชนสนใจจะมีส่วนร่วม ในการปฏิบัติก็พบว่าไม่มีช่องทางที่เปิดให้ประชาชนทำอะไรได้มากนัก จึงทำให้องค์กรปกครองส่วนท้องถิ่นขาด พลัง ขาดความร่วมมือ และขาดความสนใจจากประชาชนส่งผลให้การปกครองท้องถิ่น ซึ่งเป็นการปกครอง ของคนในท้องถิ่นเอง ประสบความล้มเหลวอย่าง รัฐธรรมนูญแห่งราชอาณาจักรไทย พ.ศ.2560 หมวดที่ 14 ว่าด้วยการปกครองท้องถิ่นได้บัญญัติถึงสาระหลักเกี่ยวกับการมีส่วนร่วมของประชาชนในการบริหารกิจการ ขององค์กรปกครองส่วนท้องถิ่น และการมีส่วนร่วมในองค์การบริหารส่วนท้องถิ่น

การมีส่วนร่วมของประชาชนในกระบวนการเลือกตั้ง การเลือกตั้งเป็นสิทธิและหน้าที่ของประชาชน ชาวไทยทุกคนที่มีอายุครบ 18 ปีบริบูรณ์ เพื่อไปทำหน้าที่คัดเลือกตัวแทนของตนเข้าไปออกกฎหมายและเข้า ไปบริหารประเทศ ดังนั้น ประชาชนจะต้องมีส่วนร่วมในการเลือกตั้ง และทำให้การเลือกตั้งสุจริตและเที่ยง ธรรม ประชาชนสามารถมีส่วนร่วมในกระบวนการเลือกตั้งได้ดังนี้ 1) สมัครเป็นสมาชิกพรรคการเมือง 2) สอดส่องดูแลการเลือกตั้ง แจ้งเหตุหรือเบาะแสการทุจริตซื้อสิทธิขายเสียง 3) ใช้สิทธิเลือกตั้งโดยพร้อมเพรียง 4) ร่วมตรวจสอบการเลือกตั้งโดยเป็นสมาชิกหรืออาสาสมัครขององค์การเอกชนที่คณะกรรมการการเลือกตั้ง รับรองให้ตรวจสอบการเลือกตั้ง 5) ร่วมเป็นเจ้าหน้าที่จัดการเลือกตั้งในระดับต่าง ๆ เช่น กรรมการประจำ หน่วยเลือกตั้ง กรรมการนับคะแนน กรรมการการเลือกตั้งประจำองค์กรปกครองส่วนท้องถิ่น กรรมการการ เลือกตั้งประจำเขตเลือกตั้ง เป็นต้น

การมีส่วนร่วมในรูปแบบของกลุ่มผลประโยชน์ การรวมตัวกันของบุคคลเป็นกลุ่มบุคคลหรือองค์กรใน สังคม มีเป้าหมายหลักอยู่ที่การรักษาผลประโยชน์ของกลุ่มตนเท่านั้น โดยไม่มีเป้าหมายที่จะเข้าไปเป็นรัฐบาล เพื่อบริหารประเทศแต่อย่างใด สำหรับเป้าหมายของแต่ละกลุ่มจะแตกต่างกันไป บางกลุ่มอาจเรียกร้องให้ รัฐบาลทำตามสิ่งที่กลุ่มตนต้องการ เช่น การเรียกร้องให้แก้ไขปัญหาเรื่องที่ดินทำกิน ราคาพืชผลการเกษตร หรือเพื่ออำนวยความสะดวกแก่กลุ่มของตน หรืออาจเรียกร้องให้รัฐบาลจัดทำนโยบายหรือโครงการที่กลุ่มตน จะได้เป็นโยชน์ เป็นต้น

ดังนั้นการมีส่วนร่วมทางการเมืองจึงมีอิทธิพลต่อการกำหนดนโยบายของรัฐ หรือผู้นำรัฐบาล รวมทั้ง กดดันให้รัฐบาลกระทำตามความประสงค์ของประชาชน และการมีส่วนร่วมทางการเมืองเป็นเครื่องชี้วัด พัฒนาการทางการเมืองในระบอบประชาธิปไตยของแต่ละประเทศ ซึ่งจะเห็นได้ว่า ประเทศที่พัฒนาการเมือง การปกครองในระบอบประชาธิปไตยอยู่ในระดับที่ดีแล้ว ก็มักจะกำหนดให้ประชาชนทุกระดับมีสิทธิในการมี ส่วนร่วมทางการเมืองตามบทบัญญัติแห่งรัฐธรรมนูญอย่างเป็นรูปธรรม โดยเฉพาะการเลือกตั้งในระดับท้องถิ่น เป็นพื้นฐานสำคัญในการที่จะทำให้ประชาชนเกิดการเรียนรู้ทางการเมืองโดยการมีส่วนร่วม เนื่องจากการ เลือกตั้งในระดับท้องถิ่นเป็นการเมืองที่มีความใกล้ชิดกับประชาชนมากที่สุด ซึ่งในอดีตที่ผ่านมาประชาชนใน ท้องถิ่นจะมีส่วนร่วมในการปกครองท้องถิ่นของตนเองน้อยมาก การมีส่วนร่วมที่เป็นรูปธรรมคือ การเปิด โอกาสให้ประชาชนไปใช้สิทธิเลือกตั้งสมาชิกสภาท้องถิ่น แต่เมื่อเลือกตั้งเสร็จสิ้นประชาชนจะไม่มีส่วนร่วม

อย่างอื่นเลย ในกรณีที่ประชาชนสนใจจะมีส่วนร่วมในการปฏิบัติก็พบว่า ไม่มีช่องทางที่เปิดให้ประชาชนทำ อะไรได้มากนัก ทำให้องค์กรปกครองส่วนท้องถิ่นขาดพลัง ขาดความร่วมมือ และขาดความสนใจจาก ประชาชนส่งผลให้การปกครองท้องถิ่น ซึ่งเป็นการปกครองของคนในท้องถิ่นเองประสบความล้มเหลว

      องค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ มีผู้มีสิทธิเลือกตั้ง จำนวน 11,284 คน ที่ผ่านมาในการเลือกตั้งแต่ละครั้งพบว่าประชาชนไปใช้สิทธิเลือกตั้งไม่เกินร้อยละ 75 ทั้งที่มีหน่วยเลือกตั้ง ประจำทุกหมู่บ้าน บางหมู่บ้านที่มีพื้นที่และประชากรมากก็มีมากกว่า 1 หน่วยเลือกตั้ง นอกจากนี้ยังมีการ รณรงค์จากหน่วยงานที่เกี่ยวข้องเพื่อให้ประชาชนไปใช้สิทธิในการเลือกตั้ง ทั้งในระดับประเทศและระดับ ท้องถิ่นเพื่อให้ประชาชนมีความตระหนักในสิทธิหน้าที่และประโยชน์จากการเข้าร่วมกิจกรรมทางการเมือง แต่ กลับพบว่านอกจากประชาชนจะไม่ให้ความสำคัญกับการรณรงค์ของหน่วยงานภาครัฐและเอกชนรวมถึง หน่วยงานอื่นที่เกี่ยวข้องแล้ว ยังไม่ให้ความสนใจที่จะไปรับฟังการรณรงค์หาเสียงของผู้สมัครรับเลือกตั้ง ทำให้ ไม่มีความเข้าใจและไม่สามารถเชื่อมโยงนโยบายของผู้หาเสียงว่าจะให้ประโยชน์กับประชาชนอย่างไร รวมถึง ไม่ตระหนักเห็นความสำคัญของการรับฟังข้อมูลข่าวสารจากทางราชการ ทั้งนี้ อาจเป็นไปได้ว่าสังคมในปัจจุบัน มีความสลับซับซ้อนเป็นสังคมของการแข่งขันทุกคนต้องดิ้นรนต่อสู้เพื่อสร้างฐานะและความมั่นคงของชีวิต ทำ ให้มีภาระทางครอบครัวและความจำเป็นด้านเศรษฐกิจ ทำให้มีการเคลื่อนย้ายที่อยู่อาศัยทั้งในแบบถาวรและ ชั่วคราวหรือการไปทำงานห่างไกลจากท้องถิ่นที่ตัวเองมีสิทธิเลือกตั้ง เหตุผลเหล่านี้อาจมีส่วนทำให้ประชาชน ขาดความสนใจ ขาดความตระหนักและขาดโอกาสด้านการมีส่วนร่วมทางการเมือง ขณะที่การประชาสัมพันธ์ ของภาครัฐเพื่อปลูกฝังให้ประชาชนเกิดความตระหนักและสำนึกเห็นความสำคัญของการมีส่วนร่วมทางการ เมืองก็ดำเนินไปอย่างไม่เป็นระบบและต่อเนื่อง ขาดการประสานงานระหว่างหน่วยงานที่เกี่ยวข้อง

      จากปรากฏการณ์การเลือกตั้งที่ผ่านมาและการเลือกตั้งที่กำลังจะมีขึ้นดังกล่าว ผู้วิจัยซึ่งปฏิบัติราชการ ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จึงมีความสนใจที่จะศึกษาการมีส่วนร่วมทางการเมืองท้องถิ่น ของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ เพื่อนำผลที่ได้จากการวิจัยครั้งนี้เสนอต่อผู้ที่มีส่วน เกี่ยวข้องได้ใช้เป็นข้อมูล ในการสร้างความเข้าใจให้ประชาชนเกิดความตระหนัก มีจิตสำนึกและตื่นตัวที่จะเข้า ไปมีส่วนร่วมทางการเมืองให้มากยิ่งขึ้นต่อไป

2. วัตถุประสงค์ของการวิจัย

      1. เพื่อศึกษาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัด ชัยภูมิ

      2. เพื่อเปรียบเทียบการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ สถานภาพ และระดับการศึกษา

      3. เพื่อศึกษาปัญหาและแนวทางแก้ไขปัญหาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนใน ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

3. ขอบเขตของการวิจัย

ขอบเขตด้านประชากร

ประชากรสำหรับการวิจัยเชิงปริมาณ ได้แก่ ประชาชนผู้มีสิทธิออกเสียงเลือกตั้งอายุตั้งแต่ 18 ปี บริบูรณ์ขึ้นไปที่อาศัยอยู่ในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จำนวน 11,284 คน (อ้างอิงข้อมูลจาก ทะเบียนราษฎรที่ว่าการอำเภอภูเขียว ณ วันที่ 20 เมษายน 2566)

กลุ่มเป้าหมายการวิจัยเชิงคุณภาพ (Qualitative Research) เก็บรวบรวมข้อมูลด้วยวิธีการสัมภาษณ์ เชิงลึก (In Depth Interview) เป็นผู้ให้ข้อมูลสำคัญ (Key Informant) ได้แก่ กลุ่มผู้นำชุมชนทั้ง 17 หมู่บ้าน คณะผู้บริหาร บุคลากรเจ้าหน้าที่ขององค์การบริหารส่วนตำบลผักปัง รวม 20 คน

ขอบเขตด้านเนื้อหา

ศึกษาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชน ศึกษาเฉพาะกรณีตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จำนวน 4 ด้าน คือ

        1) ด้านการดำเนินการเลือกตั้ง

        2) ด้านการร่วมรณรงค์การเมืองท้องถิ่น

        3) ด้านการตัดสินใจทางการเมือง

        4) ด้านหลักอปหาริยธรรมส่งเสริมการมีส่วนร่วม

ขอบเขตด้านพื้นที่ ได้แก่ เขตพื้นที่ของตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

4. ประโยชน์ของการวิจัย

1. ทำให้ทราบการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในองค์การบริหารส่วนตำบลตำบลผัก ปัง อำเภอภูเขียว จังหวัดชัยภูมิ

2. ทำให้ทราบผลการเปรียบเทียบการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชน องค์การบริหาร ส่วนตำบลตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ตามปัจจัยส่วนบุคคล

3. ทำให้ทราบปัญหาและแนวทางแก้ไขปัญหาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนใน องค์การบริหารส่วนตำบลตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

4. นำผลจากการวิจัยครั้งนี้ ไปเสนอเป็นฐานข้อมูลในการจัดทำแผนนโยบาย แนวทางสำหรับพัฒนา และปรับปรุงแก้ไขการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนให้มีประสิทธิภาพเหมาะสม ซึ่งจะเป็น ประโยชน์ต่อการพัฒนาการเมืองการปกครองส่วนท้องถิ่นขององค์การบริหารส่วนตำบลตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

5. ประชากรและกลุ่มตัวอย่าง

ประชากร

ประชากรที่ใช้ในการวิจัย ได้แก่ ประชาชนผู้มีสิทธิออกเสียงเลือกตั้ง อายุตั้งแต่ 18 ปีบริบูรณ์ขึ้นไป ที่อาศัยอยู่ในเขตตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จำนวน 16,992 คน แต่ในการศึกษาวิจัยนี้จะใช้ ประชากรที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 11,284 คน จาก 17 หมู่บ้าน (อ้างอิงข้อมูลจากทะเบียนราษฎร ที่ว่าการอำเภอภูเขียว ณ วันที่ 20 เมษายน 2566)

กลุ่มตัวอย่าง

กลุ่มตัวอย่างที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ประชาชนที่อาศัยอยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 361 คน กำหนดขนาดกลุ่มตัวอย่างโดยใช้สูตรของยามาเน่ (Yamane, 1967) โดยกำหนดระดับค่าความเชื่อมั่นที่ 95% และได้ทำการสุ่มตัวอย่างแบบแบ่งชั้นภูมิ แบบเป็นสัดส่วนโดยแบ่งกลุ่มตัวอย่างออกเป็น 17 กลุ่ม จาก 17 หมู่บ้าน ตามสัดส่วนแต่ละหมู่บ้าน

6. เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล

การจัดเก็บข้อมูลเชิงปริมาณกับกลุ่มตัวอย่าง จำนวน 361 คน ซึ่งเป็นประชาชนที่อยู่ในพื้นที่ตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ จาก 17 หมู่บ้าน ได้แก่ โดยการสร้างและตรวจสอบคุณภาพเครื่องมือที่ใช้ในการวิจัยครั้งนี้ เป็นแบบสอบถาม (Questionnaires) โดยมีขั้นตอนการพัฒนาแบบสอบถาม ดังนี้

(1) ศึกษาค้นคว้าจากเอกสารตำราวิชาการ แนวคิด ทฤษฎีและผลงานวิจัยที่เกี่ยวข้อง ทั้งเป็นงานวิจัยเชิงเอกสาร และข้อมูลจากอินเตอร์เน็ต

(2) สร้างแบบสอบถามให้ครอบคลุมขอบเขตการวิจัย โดยใช้คำถาม 2 ประเภท คือ แบบสอบถามปลายปิดและแบบสอบถามปลายเปิด มีโครงสร้างดังนี้

ตอนที่ 1 เป็นแบบสอบถามลักษณะปลายปิด เกี่ยวกับปัจจัยด้านบุคคลของผู้ตอบแบบสอบถามประกอบด้วย เพศ อายุ สถานภาพ การศึกษา

ตอนที่ 2 เป็นแบบสอบถามลักษณะแบบปลายปิด เป็นคำถามเกี่ยวกับการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ มีจำนวน 37 ข้อ โดยแบ่งออกเป็น 4 ด้าน ได้แก่ 1) ด้านการดำเนินการเลือกตั้ง 2) ด้านการร่วมรณรงค์เลือกตั้ง 3) ด้านการตัดสินใจในทางการเมือง 4) หลักอปริหานิยธรรมส่งเสริมการมีส่วนร่วม ผู้วิจัยใช้ลักษณะคำถามแบบมาตราส่วน 5 ระดับโดยใช้หลักของ Likert Scale คือ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด โดยกำหนดเป็นตัวเลข และความหมาย

แบบสัมภาษณ์แบบมีโครงสร้างเกี่ยวกับปัญหา และแนวทางการแก้ไขปัญหาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชน

7. การเก็บรวบรวมข้อมูล

การเก็บรวบรวมข้อมูลผู้วิจัยได้นำเครื่องมือ คือแบบสอบถามไปเก็บรวบรวมข้อมูลโดยวางแผนและปฏิบัติการดังนี้

1) ทำหนังสือขอความร่วมมือ ในการจัดเก็บข้อมูลวิทยาลัยพิชญบัณฑิตเพื่อขอความร่วมมือถึงนายกเทศมนตรีองค์การบริหารส่วนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

2) ผู้วิจัยได้ติดต่อประธานชุมชนชนในแต่ละหมู่บ้าน เพื่อขอความร่วมมือในการเก็บข้อมูล

3) ดำเนินการเก็บรวบรวมข้อมูลผู้วิจัย จากประชากรกลุ่มตัวอย่างใช้วิธีสุ่มกลุ่มตัวอย่างเป็นแบบแบ่งชั้นแต่ละหมู่บ้าน (Stratified Sampling) โดยใช้แบบสอบถามและสัมภาษณ์แบบมีโครงสร้างกับประชาชนผู้มีคุณสมบัติครบถ้วนตามที่กำหนดจึงแจกแบบสอบถามให้ตอบแบบสอบถาม

4) ตรวจสอบความถูกต้อง และความสมบูรณ์ของแบบสอบถามเพื่อนำไปวิเคราะห์โดยใช้สถิติ
ประมวลผล

8. การวิเคราะห์ข้อมูล

การวิเคราะห์ข้อมูลและการใช้ค่าสถิติในการวิจัยครั้งนี้ ผู้วิจัยได้ประมวลผลข้อมูลเกี่ยวกับปัจจัยส่วน
บุคคล ประกอบด้วย เพศ อายุ การศึกษา สถานภาพ ปัจจัยด้านทางสังคมและเศรษฐกิจ ประกอบด้วย กลุ่ม
อาชีพ รายได้ต่อเดือน และตำแหน่งหน้าที่ในชุมชน และวิเคราะห์ข้อมูลการมีส่วนร่วมทางการเมืองท้องถิ่นของ
ประชาชนตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ วิเคราะห์โดยใช้สถิติพรรณนา (descriptive statistics)
ได้แก่ ค่าร้อยละ (Percentage) ค่าเฉลี่ย ($\overline{\text{X}}$) ค่าเบี่ยงเบนมาตรฐาน (S.D.)

ตอนที่ 1 ปัจจัยส่วนบุคคลของผู้ที่ตอบแบบสอบถาม โดยใช้สถิติพื้นฐานหาค่าความถี่ (Frequency)
และค่าร้อยละ (Percentage) แล้วเสนอแบบความเรียง

ตอนที่ 2 ข้อมูลที่ได้จากแบบสอบถามเกี่ยวกับการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชน ใช้
สถิติเชิงพรรณนา (Descriptive Statistics) โดยใช้สถิติพื้นฐาน ได้แก่ การหาค่าเฉลี่ย (Mean) และส่วน
เบี่ยงเบนมาตรฐาน (Standard Deviation)

ตอนที่ 3 การทดสอบสมมุติฐาน เป็นการเปรียบเทียบการมีส่วนร่วมทางการเมืองท้องถิ่น ของ
ประชาชนตามปัจจัยด้านบุคคลของผู้ตอบแบบสอบถามประกอบด้วย เพศ อายุ สถานภาพ การศึกษา ปัจจัย
ด้านทางสังคมและเศรษฐกิจ ประกอบด้วย กลุ่มอาชีพ รายได้ต่อเดือน และตำแหน่งหน้าที่ในชุมชน ใช้สถิติ
ทดสอบที t-test และ F-test ที่ระดับนัยสำคัญทางสถิติที่ระดับ 0.05

ตอนที่ 4 ข้อคำถามปลายเปิดที่แสดงปัญหา แนวทางแก้ไขการมีส่วนร่วมทางการเมืองท้องถิ่นของ
ประชาชน และข้อมูลจากแบบสัมภาษณ์ ผู้วิจัยรวบรวมข้อมูลทำการจัดกลุ่มข้อมูล (Data Grouping) ตาม
ประเด็นแล้วเรียบเรียงนำเสนอในรูปแบบวิเคราะห์เชิงเนื้อหา (Content Analysis Technique)

9. ผลการวิจัย

1. ข้อมูลทั่วไปของผู้ตอบแบบสอบถามพบว่าส่วนใหญ่เป็นเพศชาย จำนวน 212 คน คิดเป็นร้อยละ
58.73 อายุอยู่ระหว่าง 42 - 49 ปี จำนวน 114 คน คิดเป็นร้อยละ 31.58 และช่วงอายุที่มีจำนวนน้อยที่สุด
คือ 50 ปีขึ้นไป จำนวน 30 คน คิดเป็นร้อยละ 8.31 มีสถานภาพสมรส จำนวน 251 คน คิดเป็นร้อยละ 69.53
และสถานภาพที่มีจำนวนน้อยที่สุดคือหม้าย/หย่าร้าง จำนวน 41 คน คิดเป็นร้อยละ 11.36 ส่วนใหญ่มีระดับ
การศึกษามัธยมศึกษา/ ปวช./ปวส. จำนวน 207 คน คิดเป็นร้อยละ 57.34 รองลงมาคือประถมศึกษา จำนวน
120 คน คิดเป็นร้อยละ 33.24 และระดับการศึกษาที่มีจำนวนน้อยที่สุดคือปริญญาโท จำนวน 5 คน คิดเป็น
ร้อยละ 1.39

2. การมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ
โดยภาพรวมอยู่ในระดับมาก ($\overline{\text{X}}$ = 3.68, S.D.= 0.30) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุด
คือด้านการดำเนินการเลือกตั้ง ($\overline{\text{X}}$ = 4.08, S.D.= 0.47) รองลงมาคือด้านหลักอปหาริยธรรมส่งเสริมการมีส่วน

ร่วม ($\overline{X}$ = 3.65, S.D.= 0.44) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านการตัดสินใจทางการเมือง ($\overline{X}$ = 3.50, S.D.= 0.27) และวิเคราะห์ข้อมูลออกเป็นแต่ละด้านได้ดังนี้

      2.1 ด้านการดำเนินการเลือกตั้ง โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.08, S.D.= 0.47) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 1. ท่านมีส่วนร่วมเป็นกรรมการดำเนินการจัดการเลือกตั้งท้องถิ่น ($\overline{X}$ = 4.36, S.D.= 0.80) รองลงมาคือ ข้อ 9. ท่านได้มีส่วนร่วมในการคัดค้านคุณสมบัติของผู้สมัคร ในการดำเนินการเลือกตั้งท้องถิ่น ($\overline{X}$ = 4.14, S.D.= 0.76) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 5. ท่านได้มีส่วนร่วมเป็นกรรมการนับคะแนนในการดำเนินการเลือกตั้งท้องถิ่น($\overline{X}$ = 3.90, S.D.= 0.71)

      2.2 ด้านการร่วมรณรงค์การเมืองท้องถิ่น โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.58, S.D.= 0.51) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 15. ท่านได้มีส่วนร่วมเป็นกรรมการนับคะแนนในการดำเนินการเลือกตั้งท้องถิ่น ($\overline{X}$ = 4.15, S.D.= 0.74) รองลงมาคือ ข้อ 11. ท่านมีส่วนร่วมเป็นกรรมการดำเนินการจัดการเลือกตั้งในการดำเนินการเลือกตั้งท้องถิ่น ($\overline{X}$ = 4.06, S.D.= 0.71) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 25.ท่านได้มีส่วนร่วมเป็นกรรมการนับคะแนนในการดำเนินการเลือกตั้งท้องถิ่น ($\overline{X}$ = 3.31, S.D.= 0.99)

      2.3 ด้านการตัดสินใจทางการเมือง โดยภาพรวมอยู่ในระดับปานกลาง ($\overline{X}$ = 3.50, S.D.= 0.27) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 31.ประชาชนมีการตัดสินใจทางการเมืองโดยการเป็นสมาชิกของพรรคการเมือง ($\overline{X}$ = 4.13, S.D.= 0.85) รองลงมาคือ ข้อ 32.ประชาชนมีการตัดสินใจทางการเมืองโดยการเข้ากลุ่มสมาคมนักหนังสือพิมพ์ ($\overline{X}$ = 3.93, S.D.= 0.93) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 40.ประชาชนมีการตัดสินใจทางการเมืองโดยการเปิดเผยต่อสาธารณะชน ถ้าการเลือกตั้งมีการขายเสียง ($\overline{X}$ = 2.92, S.D.= 0.67)

      2.4 ด้านหลักอปหาริยธรรมส่งเสริมการมีส่วนร่วม โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.65, S.D.= 0.44) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 43. อบต. ของท่านมีการออกกฎระเบียบข้อบังคับ หรือประกาศที่มีความสุจริตยุติธรรม ไม่เอื้อประโยชน์ให้แก่บุคคลใดบุคคลหนึ่ง ($\overline{X}$ = 3.97, S.D.= 0.90) รองลงมาคือ ข้อ 44.ท่านให้ความเคารพและเชื่อฟังผู้นำท้องถิ่นของท่าน ($\overline{X}$ = 3.82, S.D.= 0.77) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 41. เมื่อทาง อบ.ต.มีการจัดประชุมประชาชนในพื้นที่เป็นประจำ ท่านได้เข้าร่วมประชุมอย่างสม่ำเสมอ ($\overline{X}$ = 3.13, S.D.= 0.70)

      3. การวิเคราะห์เปรียบเทียบการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ สถานภาพ และระดับการศึกษา โดยภาพรวมประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีเพศ อายุ สถานภาพ และระดับการศึกษา ต่างกัน มีส่วนร่วมทางการเมืองท้องถิ่นไม่แตกต่างกัน

      4. ผลการวิเคราะห์ปัญหาและแนวทางแก้ไขปัญหาการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ ได้แก่

      1. ควรมีการประชาสัมพันธ์และประกาศตามกำหนดระยะเวลาเหมาะสมในการเลือกตั้งสามารถตรวจสอบรายชื่อ

      2. ควรประชาสัมพันธ์ ให้มาดูรายชื่อที่จะมีสิทธิ์การเลือกตั้ง มีสิทธิ์จะเลือกตั้งหรือไม่

3. ควรช่วยกันในการรณรงค์ แนะนำ และประชาสัมพันธ์ ในการเลือกตั้ง แต่ละครั้งที่มีการเลือกตั้ง เช่น แจกแผ่นพับ ใบปลิว ขององค์การบริหารส่วนตำบล

4. ผู้สมัครควรมีคุณธรรม มีหลักธรรมในการดำรงตนในการใช้ชีวิตที่ดี

5. ควรใช้หลักธรรมะมาช่วยในการรณรงค์ประชาสัมพันธ์การเลือกตั้งให้บริสุทธิ์ยุติธรรมให้มากขึ้น

10. การอภิปรายผล

จากผลการวิจัย สามารถนำมาอภิปรายผลได้ดังนี้

การมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.68, S.D.= 0.30) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการดำเนินการเลือกตั้ง ($\overline{X}$ = 4.08, S.D.= 0.47) รองลงมาคือด้านหลักอปหาริยธรรมส่งเสริมการมีส่วนร่วม ($\overline{X}$ = 3.65, S.D.= 0.44) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านการตัดสินใจทางการเมือง ($\overline{X}$ = 3.50, S.D.= 0.27) ที่เป็นเช่นนี้อาจเป็นเพราะว่าทางหน่วยงานที่รับผิดชอบเช่น องค์การบริหารส่วนจังหวัด เทศบาล หรือองค์การบริหารส่วนตำบล ได้ให้ความสำคัญในเรื่องของการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ โดยการมีการจัดประชุมประชาชนในพื้นที่เป็นประจำ ประชาสัมพันธ์ผ่านช่องทางต่าง ๆ ซึ่งสอดคล้องกับงานวิจัยของฐานิตา เฉลิมช่วง (2559) ที่ได้ทำการวิจัยเรื่องปัจจัยที่ส่งผลต่อการมีส่วนร่วมทางการเมืองของประชาชนในระดับเทศบาล จังหวัดฉะเชิงเทรา พบว่าปัจจัยที่ส่งผลต่อการมีส่วนร่วมทางการเมืองของประชาชนในระดับเทศบาลจังหวัดฉะเชิงเทรา มากที่สุดคือปัจจัยด้านสิ่งแวดล้อมทางการเมือง ทั้งนี้เนื่องจากประชาชนในระดับเทศบาลจังหวัดฉะเชิงเทราให้ความสำคัญกับการไปใช้สิทธิเลือกตั้ง เพราะเป็นหน้าที่ตามกฎหมายและจะไม่เสียสิทธิขั้นพื้นฐานตลอดจนการจัดการเลือกตั้ง ที่บ่อยครั้งประชาชนเองก็ยังคงออกไปใช้สิทธิเลือกตั้งเสมอ ไม่คิดเบื่อหน่ายเพราะด้วยเขาตระหนักในความสำคัญของการมีส่วนร่วมทางการเมืองนั่นเอง ซึ่งขัดแย้งกับงานวิจัยของพรทิพย์ อริยเดช (2554) ได้ทำการศึกษาเรื่อง "ปัจจัยที่มีผลต่อการมีส่วนร่วมทางการเมืองของประชาชนในตำบลพังเทียมอำเภอพระทองคำ จังหวัดนครราชสีมา" ผลการวิจัยพบว่าปัจจัยที่มีผลต่อการมีส่วนร่วมทางการเมืองของประชาชนในตำบลพังเทียม อำเภอพระทองคำ จังหวัดนครราชสีมาประกอบด้วย เพศ อายุ สถานภาพ ระดับการศึกษา รายได้ อาชีพ การรับรู้ข่าวสารทางการเมือง และสภาพแวดล้อมของท้องถิ่น "ไม่มีผล" ต่อการมีส่วนร่วมทางการเมืองแต่อย่างใด และยังสอดคล้องกับงานวิจัยของศักดิ์ดา เอี่ยมชัย (2566) ที่ได้วิจัยเรื่องการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในเขตอำเภอพรหมพิรามจังหวัดพิษณุโลก พบว่าการศึกษา ระดับการมีส่วนร่วมทางการเมืองท้องถิ่นของผู้ตอบแบบสอบถามในภาพรวมอยู่ในระดับมาก เมื่อพิจารณาเป็นรายด้าน พบว่าอยู่ในระดับมากทั้งหมด โดยเรียงลำดับจากมากไปหาน้อย ได้แก่ด้านการตัดสินใจในการเลือกตั้ง ด้านการดำเนินการเลือกตั้ง และด้านการร่วมรณรงค์เลือกตั้ง เมื่อพิจารณาเป็นรายด้าน พบว่า ด้านการดำเนินการเลือกตั้ง เรียงลำดับจากมากไปหาน้อย ได้แก่ เป็นกรรมการดำเนินการจัดการเลือกตั้งในการดำเนินการเลือกตั้งท้องถิ่น เป็นกรรมการประจำหน่วยเลือกตั้งในการดำเนินการเลือกตั้งท้องถิ่น เป็นกรรมการนับคะแนนในการดำเนินการเลือกตั้งท้องถิ่น

การวิเคราะห์เปรียบเทียบการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภู
เขียว จังหวัดชัยภูมิ ที่จำแนกตามเพศ อายุ สถานภาพ และระดับการศึกษา โดยภาพรวมประชาชนในตำบลผัก
ปัง อำเภอภูเขียว จังหวัดชัยภูมิ ที่มีเพศ อายุ สถานภาพ และระดับการศึกษา ต่างกัน มีส่วนร่วมทางการเมือง
ท้องถิ่นไม่แตกต่างกัน ซึ่งสอดคล้องกับงานวิจัยของพระชัชชัย สมนตาสาทิโก (2564) ที่ได้ทำการวิจัยเรื่องการ
มีส่วนร่วมทางการเมืองของประชาชนในการปกครองส่วนท้องถิ่นในอำเภอจัตุรัส จังหวัดชัยภูมิ พบว่า
ประชาชนที่มีเพศต่างกันมีความคิดเห็นต่อการมีส่วนร่วมทางการเมืองของประชาชน ในการปกครองส่วน
ท้องถิ่นไม่แตกต่างกัน ทั้งนี้เนื่องจากเพศสามารถที่จะแสดงออกในการเข้าไปมีส่วนร่วม ทางการเมืองได้เสมอ
ทั้งเพศชายและเพศหญิงขึ้นอยู่กับความสนใจทางการเมืองของแต่ละบุคคลสอดคล้อง กับแนวคิดของพรศักดิ์
ผ่องแผ้ว (2562) ที่ได้กล่าวถึงการมีส่วนร่วมทางการเมืองไว้ว่า การมีส่วนร่วม ทางการเมืองเป็นกิจกรรมต่าง ๆ
ตามความสมัครใจของสมาชิกในสังคมการเมืองที่จะกระทำ โดยมีจุดมุ่งหมาย ทั้งทางตรงและทางอ้อมต้องการ
มีอิทธิพลต่อการกำหนดนโยบายหรือการทำงานของรัฐบาล ไม่ว่าจะใน ระดับท้องถิ่นหรือระดับชาติรวมถึง
กิจกรรมง่ายๆเช่น การไปใช้สิทธิเลือกตั้งการถกเถียงปัญหาการเมือง หรือการสมัครรับเลือกตั้งเป็นตัวแทนของ
ประชาชน และยังสอดคล้องกับงานวิจัยของบุศรา โพธิสุข (2559, หน้า 151-164) ได้ศึกษาวิจัยเรื่อง การมี
ส่วนร่วมทางการเมืองท้องถิ่นของประชาชน: ศึกษาเฉพาะกรณี ตำบลช้างเผือก อำเภอเมือง จังหวัดเชียงใหม่
พบว่า เพศของประชาชนมีส่วนร่วมทางการเมืองท้องถิ่น ไม่แตกต่างกัน และยังสอดคล้องกับผลการวิจัยของ
กันต์ญาณัฐ อัษฎาวรพัฒน์ (2560) วิจัยเรื่อง การมีส่วนร่วมทางการเมืองในระดับท้องถิ่นของสตรีในเขตอำเภอ
เมืองทุ่งสง จังหวัดนครศรีธรรมราช พบว่าปัจจัยด้านอื่น ๆ คือ ภูมิลำเนา และระยะเวลาพักอาศัย ไม่มีผลต่อ
การมีส่วนร่วมทางการเมืองในการปกครองส่วนท้องถิ่นของสตรีในเขตอำเภอเมืองทุ่งสงจังหวัดนครศรีธรรมราช
ซึ่งไม่เป็นไปตาม สมมติฐานที่ตั้งไว้

11. ข้อเสนอแนะ

1. ข้อเสนอแนะในการนำผลการวิจัยไปใช้

จากผลการวิจัยครั้งนี้พบว่าการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภู
เขียว จังหวัดชัยภูมิ โดยภาพรวมอยู่ในระดับมาก และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ยน้อยที่สุด
คือด้านการตัดสินใจทางการเมือง ดังนั้นทางหน่วยงานท้องถิ่นที่เกี่ยวข้องในตำบลผักปัง อำเภอภูเขียว จังหวัด
ชัยภูมิ ควรมีการดำเนินการ ดังนี้

1.1 ควรเปิดโอกาสให้ประชาชนได้รับทราบและติดตามการหาเสียงของนักการเมืองท้องถิ่น การ
ลงคะแนนเลือกตั้ง และการเคลื่อนไหวทางการเมืองอย่างสม่ำเสมอ เพื่อเป็นส่วนหนึ่งในข้อมูลประกอบการ
ตัดสินใจมีส่วนร่วม

1.2 ควรให้ประชาชนได้รับทราบข้อมูลข่าวสารเกี่ยวกับการเมืองอย่างทั่วถึง ควรเพิ่มช่องทางการ
สื่อสารเพื่อเผยแพร่ข้อมูลข่าวสารที่หลากหลาย และเปิดโอกาสให้ประชาชนได้รับข้อมูลข่าวสารอย่างอิสระโดย
ไม่มีการปิดกั้น

1.3 ควรให้ความสำคัญกับการพัฒนาด้านทรัพยากร สิ่งแวดล้อม สังคม ค่านิยม ให้เอื้อต่อการมี
ส่วนร่วมของประชาชนมากขึ้น รวมถึงเปิดโอกาสให้ประชาชนได้มีส่วนในการแสดงความคิดเห็นเกี่ยวกับ
นโยบายต่าง ๆ ของพรรคการเมืองท้องถิ่นด้วย

1.4 ควรมุ่งเน้นในประเด็นวิธีการส่งเสริม การเลือกตั้ง ให้ความรู้ด้านกฎกติกาของการเลือกตั้งทุกระดับให้ความสำคัญกับการโฆษณาประชาสัมพันธ์ และการรณรงค์ทางการเมืองอย่างต่อเนื่องสม่ำเสมอ สร้างจิตสำนึก ปลูกฝังค่านิยมเกี่ยวกับประชาธิปไตย และกระตุ้นให้ประชาชนเกิดความต้องการให้มีคนดีที่มีความรู้ความสามารถเข้ามาบริหารท้องถิ่นของตนประการสุดท้ายที่สำคัญที่สุด คือประชาชนทุกคนควรตระหนักถึงสิทธิและหน้าที่ของพลเมืองไทย

2. ข้อเสนอแนะในการวิจัยครั้งต่อไป

2.1 ควรมีการศึกษาเปรียบเทียบการมีส่วนร่วมที่ส่งผลต่อการพัฒนาท้องถิ่นและชุมชน เช่น ด้านสังคม เศรษฐกิจ และการท่องเที่ยว เป็นต้น

2.2 ควรมีการศึกษาเชิงคุณภาพ เพื่อให้ได้ข้อมูลเชิงลึกเกี่ยวกับการมีส่วนร่วมทางการเมืองท้องถิ่นของประชาชนในตำบลผักปัง อำเภอภูเขียว จังหวัดชัยภูมิ

บรรณานุกรม

กองการประชาสัมพันธ์, กรุงเทพมหานคร. (2553). **สถิติการเลือกตั้งสมาชิกสภากรุงเทพมหานครและสมาชิกสภาเขตกรุงเทพมหานคร เดือนกรกฎาคม ปี 2553**. กรุงเทพฯ: กองการประชาสัมพันธ์ กรุงเทพมหานคร.

กัลยา หนูสาย. (2550). **ปัจจัยที่มีความสัมพันธ์กับการมีส่วนร่วมทางการเมืองของประชาชนในองค์การบริหารส่วนตำบลเขาพระทอง อำเภอชะอวด จังหวัดนครศรีธรรมราช**. วิทยานิพนธ์รัฐประศาสนศาสตรมหาบัณฑิต มหาวิทยาลัยขอนแก่น.

ถวิลวดี บุรีกุล. (2543). **การมีส่วนร่วมทางการเมืองของประชาชน : กรณีการเลือกตั้งสมาชิกวุฒิสภา พ.ศ. 2543**. กรุงเทพมหานคร : สถาบันพระปกเกล้า.

ทศพร ศิริสัมพันธ์. (2535). **คู่มือเทคนิควิธีการส่งเสริมประสิทธิภาพในหน่วยราชการ.** กรุงเทพมหานคร : ศูนย์ปฏิบัติการโครงการส่งเสริมประสิทธิภาพในส่วนราชการ สำนักงาน ก.พ. พระราชบัญญัติระเบียบข้าราชการพลเรือน พ.ศ.2535.

วรทิพย์ มีมาก และคณะ. (2547). **หน้าที่พลเมืองในระบอบประชาธิปไตย อันมีพระมหากษัตริย์ทรงเป็นประมุข.** กรุงเทพมหานคร : รำไทยเพรส.

วัชรี ทรัพย์มี. (2523). **การแนะแนวในโรงเรียน.** พิมพ์ครั้งที่ 2. กรุงเทพมหานคร : ไทยวัฒนาพานิช.

ศิริวรรณ เสรีรัตน์ และคณะ. (2541). **พฤติกรรมองค์การ.** กรุงเทพมหานคร : บริษัทธีรฟิล์ม และไซเท็กซ์ จำกัด.

อนุรักษ์ นิยมเวช. (2554). **บทความเกี่ยวกับการพัฒนาการเมืองและการมีส่วนร่วมของประชาชน** (พิมพ์ครั้งที่ 1). กรุงเทพฯ: สำนักการพิมพ์ สำนักงานเลขาธิการวุฒิสภา.

Weiner, Myron. (1971). **Political Participation: Crisis of Political Process.** pp 161-163 in Leonard, Binder and others, eds. Crisis on Sequences in Political Development. Princeton: Princeton University Press.

Yamane, Taro. (1973). **statistic and Introductory Analysis.** 3rd ed. New York : Harper & Row.

คุณค่าพุทธศิลป์ ศึกษาเฉพาะกรณีเกี่ยวกับพระพุทธรูปยุคทวารวดี
ในจังหวัดสุพรรณบุรี

Buddhist Arts Value: A Case Study of Buddha Image in Davaravati Period
in Suphanburi Province

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บทคัดย่อ

พุทธศิลป์ในพระพุทธศาสนา ปรากฏเป็นลักษณะของพระพุทธรูปในสมัยทวารวดี เป็นสิ่งที่สะท้อนความงดงามของศิลปะ เมืองโบราณอู่ทอง จังหวัดสุพรรณบุรีเป็นเมืองโบราณที่มีความสำคัญในการศึกษาโบราณคดีสมัยทวารวดี นักวิชาการต่างสันนิษฐานกันว่าบริเวณเมืองอู่ทองมีมนุษย์อยู่อาศัยมาตั้งแต่ยุคก่อนประวัติศาสตร์ และพุทธศิลป์ยุคทวารวดี เข้ามาตั้งแต่พุทธศตวรรษที่ ๓ แต่ตามหลักฐานมีนักวิชาการโบราณคดี ด้านประติมากรรม สถาปัตยกรรมและจารึก พบว่า การเผยแผ่พระพุทธศาสนาเข้ามาประมาณพุทธศตวรรษ ที่ ๘-๑๐ เนื่องจากพบพุทธศิลป์ประติมากรรมดินเผารูปปลายเส้นรูปภิกษุสาวก ๓ รูป ครองจีวรทำท่าบิณฑบาต ซึ่งเป็นเป็นหลักฐานที่เก่าที่สุดกว่าที่อื่นๆ จึงเชื่อกันว่าผู้คนในบริเวณเมืองอู่ทองนี้คงจะรู้จักและเริ่มนับถือพระพุทธศาสนามาก่อนแล้ว ซึ่งในบทความวิชาการนี้ผู้เขียนจะนำเสนอเกี่ยวกับคุณค่าพุทธศิลป์ทวารวดีที่ปรากฏในรูปแบบของเจดีย์และโบราณสถาน โบราณวัตถุต่างๆ ล้วนแล้วทำให้เกิดคุณค่าในด้านต่างๆ ซึ่งมีประเด็นหลักอยู่ 5 ด้านด้วยกันคือ คุณค่าทางด้านศาสนา เมื่อศาสนาเกิดขึ้นก็ใช้ศิลปะเป็นเครื่องมือในการเผยแพร่ศาสนา จึงมีการสร้างพระพุทธรูปขึ้นมา เพื่อเป็นตัวแทนของพระพุทธเจ้าเพื่อศาสนิกชนจะได้ทำพิธีหรือเคารพบูชาทำให้เกิดความสงบทางด้านจิตใจและช่วยส่งเสริมให้คนเป็นคนดีสร้างความดีละเว้นความชั่วพัฒนาตนเองให้ดีขึ้น คุณค่าทางประวัติศาสตร์ นำมาพัฒนาต่อยอดเป็นการเท่องเที่ยวสร้างรายได้ให้ชุมชนและคุณค่าทางสังคม ทำให้เกิดการสำนึกรักบ้านเกิด ภูมิใจในบ้านเกิดที่มีหลักฐานทางประวัติศาสตร์อันมีประวัติความเป็นมาที่ยาวนานและน่าภาคภูมิใจ

คำสำคัญ: คุณค่า, พุทธศิลป์, พระพุทธรูป, ยุคทวารวดี

ABSTRACT

Buddhist art in Buddhism, it seems to be the appearance of a Buddha image in the Dvaravati period, is something that reflects the beauty of art. U-Thong Ancient City Suphanburi Province is an ancient city that is important in the study of archeology in the Dvaravati period. Scientists have assumed that the U-Thong area has been inhabited by humans since prehistoric times. and Buddhist art from the Dvaravati period Entered in the 3rd century BC, but according to evidence there are archeological scientists sculpture architecture, and inscriptions show that the spread of Buddhism began around the 8-10th Buddhist centuries because Buddhist art was found in terracotta sculptures with line drawings of three monks wearing robes doing alms, which is the oldest evidence. Therefore, it is believed that people in this area of U-Thong City probably knew and started practicing Buddhism earlier. In this academic article, the author will report on the value of the Buddhist art of Dvaravati, which appears in the form of pagodas ancient sites, and Various antiquities. all of which create value in different areas. which has five main themes: religious values When religion emerged, art was used as a means to spread religion. Therefore, an image of Buddha was created. It depicts the Buddha so that religious people can perform ceremonies or pay homage to him. It creates peace of mind and helps to encourage people to be good people, do good deeds, and refrain from evil, generating income for the community and social value causing a feeling of love for one's hometown, Proud of the hometown that has historical evidence that has a long and proud history.

Keywords: Buddhist Arts, Value, Buddha Image, Davaravati

1. บทนำ

เมื่อครั้งพุทธกาลมีเรื่องเล่าขานต่อๆกันมาว่า ในช่วงที่พระพุทธองค์เสด็จไปทรงเทศนาโปรดพระพุทธมารดา บนสวรรค์ชั้นดาวดึงส์ พระเจ้าปเสนทิโกศล มีความรำลึกถึงพระพุทธองค์ ด้วยมิได้ทรงเห็นเป็นเวลานาน จึงตรัสให้นาย ช่างทำพระพุทธรูปขึ้นด้วยไม้แก่นจันทน์แดง ประดิษฐานไว้เหนืออาสนะที่พระพุทธองค์เคยประทับ ครั้นพระพุทธองค์ เสด็จกลับลงมาจากดาวดึงส์ถึงที่ประทับ ด้วยพระบรมพุทธานุภาพ บันดาลให้พระพุทธรูปแก่นจันทน์ เลื่อนหลีกจากพระพุทธอาสน์ทำท่าจะอันตรธานหายไป พระเจ้าปเสนทิโกศลนึกเสียดาย จึงทูลขอให้พระพุทธองค์ทรงตรัส "ห้าม" พระแก่นจันทน์ มิให้อันตรธานไปไหน พระพุทธองค์สั่งให้พระเจ้าปเสนทิโกศลรักษาพระแก่นจันทน์นั้นไว้ (กลายเป็นที่มาของพระพุทธรูปปางห้ามพระแก่นจันทน์) หากเชื่อตามนี้ ก็แปลว่า พระแก่นจันทน์ คือพระพุทธรูปองค์แรกของโลก เพราะมีอายุร่วมสมัยกับยุคพุทธกาล ย่อมเก่าแก่กว่าการสร้างพระพุทธรูปในสมัยคันธาราฐ โดยชาวกรีก เมื่อประมาณพุทธศตวรรษที่ 4

ชาวพุทธส่วนใหญ่มีความเชื่อว่า พระพุทธรูปมีความศักดิ์สิทธิ์ช่วยให้บรรลุถึงสิ่งที่ตนหวัง ตามวัตถุประสงค์ที่ตั้งไว้ได้และมองว่าการได้กราบไหว้สักการบูชาพระพุทธรูปเพื่อความเป็นสิริมงคล ซึ่งก็ สอดคล้องกับหลักคำสอนในทางพระพุทธศาสนา เมื่อนึกถึงหลักคำสอนแล้วนำเอามาประพฤติปฏิบัติใน ชีวิตประจำวันทำให้เกิดความสงบสุขทางด้านจิตใจ อิทธิพลหรืออำนาจของแรงศรัทธาที่เกิดจากพระพุทธรูป เป็นจุดศูนย์รวมจิตใจของศาสนิกชน จึงทำให้เห็นว่าคุณค่าพุทธศิลป์เป็นงานที่แฝงอยู่ด้วยปรัชญา ความคิดและ จิตวิญญาณของผู้ที่สร้างขึ้นพร้อมกับความเชื่อและความศรัทธา ศาสนิกชนที่ได้พบเห็นก็รู้สึกถึงความสงบและ เกิดความศรัทธาในพุทธศิลป์ที่ปรากฏ ภายหลังพุทธปรินิพพาน พุทธบริษัทต้องการน้อมระลึกถึงพระพุทธคุณ ของพระองค์และปรารถนาที่จะแสดงความเคารพสักการบูชา ดังท่านพระอานนท์ทูลถามพระพุทธองค์ พระ พุทธองค์ตรัสถึงสังเวชนียสถาน คือ สถานที่ประสูติ ตรัสรู้ แสดงปฐมเทศนา และปรินิพพาน เป็นสถานที่ระลึก ถึงพระพุทธองค์ภายหลังมีพระสถูปบรรจุพระบรมสารีริกธาตุ 8 แห่ง เรียกว่า "ธาตุเจดีย์" เป็นสถานที่เคารพ สักการบูชาของพุทธบริษัท สิ่งก่อสร้างที่เรียกว่า "พุทธสถาน" คงได้รับการดูแลรักษา การทำนุบำรุง และการ ประดับประดาเพื่อให้เกิดความเลื่อมใส ตามแนวคิดและจิตนาการของพุทธบริษัท ต่อมาก็พัฒนาการมาเป็น งานศิลปกรรมของพระพุทธศาสนา รวมเรียกว่า "พุทธศิลป์หรือ พุทธศิลปะ (เสถียร โพธินันทะ, 2539, หน้า 108) โดยแรกเริ่มนั้นการสร้างพุทธศิลปกรรมมีมาแล้วตั้งแต่ครั้งพุทธกาล เช่น อนาถปิณฑิกเศรษฐีสร้างเช ตะวันวิหารถวายเป็นวัด ซึ่งประกอบด้วยเสนาสนะอันเป็นพุทธศิลปกรรมที่งดงามและเป็นที่สัปปายะ คือ มี ความสงบเหมาะแก่การปฏิบัติธรรม ความว่าอนาถบิณฑิกคหบดีได้เห็นพระอุทยานของเจ้าเชตราชกุมารซึ่งเป็น สถานไม่ไกล ไม่ใกล้นักจากหมู่บ้าน มีการคมนาคมสะดวก ชาวบ้านที่มีความประสงค์ไปมาได้ง่าย กลางวันมีคน น้อย กลางคืนเงียบมีเสียงอึกทึกน้อย ปราศจากกลิ่นไอคน เป็นสถานควรแก่การประกอบกรรมในที่ลับของ มนุษย์ชน สมควรเป็นที่หลีกเร้น (วิ.จู. (ไทย) 7/256/87-89) พระพุทธศาสนาเป็นเครื่องยึดเหนี่ยวทางจิตใจ และมีระเบียบแบบแผนของพิธีกรรม หลักธรรมคำสอนของพุทธศาสนาเป็นหลักที่พึ่งทางจิตใจให้เกิดสันติสุขใน สังคม และยึดถือปฏิบัติสืบต่อกันมาเป็นวัฒนธรรมอันดีงาม อิทธิพลที่ได้รับทางศิลปกรรมเชิงพุทธศิลป์และ สถาปัตยกรรมต่าง ๆ นั้น ได้ถือกำเนิดขึ้นหลังจากสมเด็จพระสัมมาสัมพุทธเจ้าปรินิพพานแล้ว เมื่อมีการสังคยา นาพระไตรปิฎกเกิดขึ้นส่งผลให้การถ่ายทอดวิทยาการทางด้านพุทธศาสตร์มีรูปแบบที่หลากหลาย และแตกต่าง กันออกในขณะที่ตำรามุ่งถ่ายทอดพุทธประวัติและชาดกต่างๆ แต่ศิลปะก็ถือเป็นเครื่องมือในการถ่ายทอด หลักจริยศาสตร์ที่ได้ผลเช่นกัน พุทธศิลป์จึงแพร่ขยายออกไปอย่างรวดเร็ว จนเกิดมรดกทางวัฒนธรรมที่ดำรง อยู่และสืบทอดต่อกันมา (วัชรินทร์ บัวจันทร์, 2554, หน้า 5) จะเห็นได้ว่าพระพุทธศาสนาเข้ามาในดินแดน ประเทศไทยประมาณ พ.ศ. 236 สมัยเดียวกันกับประเทศศรีลังกา โดยการส่งสมณทูตไปเผยแผ่ พระพุทธศาสนาในประเทศต่างๆ 9 สาย โดยการอุปถัมภ์ของพระเจ้าอโศกมหาราชกษัตริย์อินเดีย ขณะนั้น ประเทศไทยอยู่ในดินแดนที่เรียกว่าสุวรรณภูมิ โดยการนำของพระโสณะและพระอุตตระเป็นพระเถระชาว อินเดียได้เดินทางมาเผยแผ่พระพุทธศาสนาในแถบนี้ สำหรับประเทศไทยมีหลักฐานที่อ้างอิงได้ คือ ธรรมจักร และกวางหมอบที่ขุดพบที่บริเวณปฐมเจดีย์ที่จังหวัดนครปฐม เป็นศิลปกรรมสมัยทวาราวดีมีอายุราวพุทธ ศตวรรษที่ 10-11 ศิลปกรรมดังกล่าว มีลักษณะเช่นเดียวกับศิลปะสมัยเดียวกับของอินเดีย หลังจากนั้นพุทธ ศิลปวัตถุได้วิวัฒนาการไปตามอิทธิพลของพุทธศาสนาที่แผ่ไปในยุคหลังๆ เช่น ลังกาพุกาม และเขมร พระพุทธศาสนาเข้ามาสู่ประเทศไทยหลายครั้งและแต่ละครั้งมีความแตกต่างกันทั้งในด้านคำสอนและผลของ

การเข้ามาเผยแผ่ โดยสามารถแบ่งออกได้เป็น 4 ยุค คือ ยุคเถรวาทแบบอโศก ยุคมหายาน ยุคเถรวาทแบบ
พุกามและยุคเถรวาทแบบลังกาวงศ์ ยุคทวารวดีตรงกับยุคเถรวาทแบบอโศกพุทธศิลป์ในยุคนี้ที่เป็นสถูป หรือ
เจดีย์ปรากฏในภาคกลาง ภาคตะวันออกและภาคตะวันออกเฉียงเหนือของประเทศ (กรมศิลปากร โบราณคดี
และประวัติศาสตร์เมืองสุพรรณบุรี, 2533) หน้า 215) พุทธศิลป์ในสมัยทวารวดีแบ่งออกเป็น 3 ยุค คือ ทวาร
วดีตอนต้น ส่วนใหญ่สร้างด้วยหินขนาดใหญ่มีลักษณะคล้ายพุทธรูปในสมัยคุปตะของอินเดีย แต่การสร้างยังไม่
ประณีตทำให้พระพุทธรูปในยุคนี้ดูค่อนข้างกระด้าง ทวารวดีตอนกลางการสร้างมีความประณีตกว่าตอนต้น
มาก พระพักตร์มีลักษณะแบนกว้างและสั้น เคร่งขรึม พระโอษฐ์กว้างและแบะพระเนตรโปนมีทั้งที่สร้างด้วยหิน
แข็งที่ขนาดใหญ่โต แบบลอยองค์และจำหลักนูนกับที่สร้างด้วยสำริดซึ่งมีขนาดเล็กประมาณครึ่งฟุต ทวารวดี
ตอนปลายเป็นลักษณะผสมผสานกันระหว่างศิลปะศรีวิชัยและอู่ทองพบที่ จังหวัดลำพูนและเชียงใหม่
พระพุทธรูปในสมัยนี้ได้สร้างปางต่างๆ เมืองโบราณอู่ทองเป็นเมืองโบราณสมัยทวารวดี มีผังเมืองเป็นรูปวงรี
ตัวเมืองมีคูน้ำคันดินล้อมรอบภายในตัวเมืองและบริเวณโดยรอบมีซากโบราณกระจายอยู่ไม่น้อยกว่า 20 แห่ง
ห่างออกไปทางทิศตะวันตกเฉียงใต้เป็นที่ตั้งของโบราณสถานคอกช้างดิน กลุ่มศาสนสถานและสิ่งก่อสร้าง
เนื่องในศาสนาพราหมณ์หรือฮินดู ลัทธิไศวนิกาย เมืองโบราณอู่ทองมีอายุประมาณพุทธศตวรรษที่ 12-16 หรือ
ประมาณ 1,000-1,400 ปีที่ผ่านมา เป็นหลักฐานแสดงถึงความเจริญรุ่งเรืองทางวัตถุ และวิทยาการต่างๆ ใน
อดีต อันมีผลจากการผสมผสานวัฒนธรรมท้องถิ่นเข้ากับการรับวัฒนธรรมจากประเทศอินเดีย ก่อให้เกิด
รูปแบบทางวัฒนธรรมที่เรียกว่า "ทวารวดี" มีลักษณะที่สำคัญคือ การวางผังเมืองที่มีคูน้ำคันดินล้อมรอบ การ
นับถือพุทธศาสนานิกายเถรวาทการสร้างศาสนสถานด้วยอิฐขนาดใหญ่และการมีรูปแบบทางศิลปกรรมเฉพาะ
ของตนเอง เมืองอู่ทองเป็นเมืองโบราณที่มีความสำคัญทางด้านพระพุทธศาสนาของยุคทวารวดีเป็นเมือง
โบราณที่ได้รับการศึกษาทางโบราณคดีมากที่สุดแห่งหนึ่งของประเทศไทยและเป็นศูนย์กลางทางศาสนาที่
เก่าแก่ที่สุดของรัฐทวารวดี เพราะได้ค้นพบแผ่นดินเผารูปพระสงฆ์อุ้มบาตร ลักษณะเป็นแผ่นดิน เผาสีน้ำตาล
เป็นภาพพระภิกษุสามองค์ยืนอุ้มบาตรทรงครองจีวรห่มคลุม คือ ห่มจีวรคลุมทั้งสองบ่าถึงข้อมือ จีวรมีลักษณะ
เป็นริ้วชัดเจน ทรงอุ้มบาตรทรงกลมปฏิบัติวัตรคือการออกบิณฑบาตในยามเช้าและพบภาพปูนปั้นพระพุทธรูป
นาคปรกอยู่ในช่วงพุทธศตวรรษที่ 9-10 (มีอายุประมาณ 1,600-1,700 ปี) มีรูปแบบคล้ายกับศิลปะสมัยอมรวดี
ทางภาคตะวันออกเฉียงใต้ของอินเดีย (สฤษดิ์พงศ์ ขุนทรง, โบราณคดีช่วงก่อนสมัยทวารวดี, บทคัดย่อ)

2. แนวคิดพุทธศิลป์เกี่ยวกับพระพุทธรูป

มนุษย์เกี่ยวข้องกับศิลปะซึ่งเป็นสิ่งแวดล้อมที่จำเป็นในสังคมมนุษย์ทั้งในด้านผู้ชื่นชมศิลปะและจิตรกร
ผู้สร้างสรรค์ผลงาน เมื่อศิลปะมีความจำเป็นเกี่ยวข้องกับชีวิตของมนุษย์ ดังนั้นคำถามเกี่ยวกับศิลปะจึงเป็น
หน้าที่ของมนุษย์ที่จะเป็นผู้หาคำตอบ เพื่อแสดงทัศนะต่อคำถามที่เกี่ยวกับศิลปะในประเด็นต่างๆ
พระพุทธศาสนาก็มีอิทธิพลต่อศิลปะและวัฒนธรรมในสังคมไทย การสืบทอดประสบการณ์ทางศิลปะก่อให้เกิด
ทัศนะทางคุณค่าหรือสุนทรียะ ศิลปะในสังคมไทยมีความเกี่ยวข้องสัมพันธ์กับความศรัทธาทางพระพุทธศาสนา
ศิลปะในพระพุทธศาสนาไม่ได้เน้นถึงเรื่องความงามเป็นการเฉพาะ แต่มีบางแง่มุมที่สัมพันธ์อยู่กับความจริง
(reality) และความดี (goodness) พระพุทธศาสนากล่าวถึงธรรมะเป็นเรื่องหลัก ซึ่งก็คือความจริงที่เป็นจริง
และกฎเกณฑ์ธรรมชาติ (nature law) กล่าวคือ ความสัมพันธ์แห่งเหตุปัจจัย การอิงอาศัยเกื้อกูลเป็นเหตุเป็น

ผลซึ่งกันและกันในธรรมชาติที่เป็นปรากฏการณ์ อาการต่างๆ นั้น มีความเป็นปกติธรรมดาของมันเองและมีความงามอยู่ในตัวเองแล้ว เป็นความงามทางภววิสัย เป็นสุนทรียภาพในลักษณะหนึ่ง (มโน พิสุทธิรัตนานนท์, 2547), หน้า 101)

3. พุทธศิลปกรรม

เป็นงานสร้างสรรค์ทางความคิดผ่านสื่อสัญลักษณ์ของผู้ที่ศรัทธาในคำสอนของพระพุทธเจ้า (ชัปนะ ปิ่นเงิน, 2552, (อัดสำเนา)) เป็นเหตุให้ได้สร้างสรรค์งานพุทธศิลปกรรมขึ้นมาเพื่อส่งเสริมการเผยแพร่และการปฏิบัติทางพระพุทธศาสนาโดยตรง ทั้งเป็นสิ่งช่วยโน้มน้าวจิตใจของพุทธศาสนิกชน ให้เกิดความศรัทธาปสาทะ ประพฤติปฏิบัติตนให้มีแนวทางที่ดีงาม การสืบทอดงานพุทธศิลป์นั้นพระมหากษัตริย์ในอดีตได้ความสำคัญ และเป็นการทำนุบำรุงพระพุทธศาสนาให้มีความเจริญรุ่งเรือง ชาวพุทธเชื่อกันว่า พระพุทธรูปเป็นสัญลักษณ์แหงความเคารพที่ชาวพุทธมีต่อพระพุทธองค เกิดขึ้นสมัยพระเจ้ากนิษกะเปนครั้งแรกในดินแดนประเทศอินเดียทิศตะวันตกเฉียงเหนือที่ชาวกรีกเคยมีอำนาจปกครองมาตั้งแต่สมัยพระเจ้าอิเล็กซานเดอรมหาราชทรงยกทัพเขาไปปรุกรานราว พ.ศ. 217-218 (สุริยวุฒิ สุขสวัสดิ์, 2537, หนา 29)

4. พุทธศิลป์

เป็นศิลปกรรมที่สร้างขึ้นมาเพื่อสนองตอบและรับใช้งานด้านพระพุทธศาสนา ทั้งในด้านจิตรกรรม ประติมากรรมและสถาปัตยกรรม โดยไม่เลือกว่าจะเป็นมหาญาณหรือเถรวาท (วัชรินทร์ บัวจันทร์, 2554), หน้า 5) พุทธศิลป์คือเจดีย์ที่เคารพนับถือ บุคคล สถานที่หรือวัตถุ ที่สมควรเคารพบูชาเจดีย์ที่เกี่ยวกับพระพุทธเจ้ามี 4 ประเภท คือ ธาตุเจดีย์ คือสถานที่บรรจุพระบรมสารีริกธาตุ บริโภคเจดีย์ คือ สิ่งหรือสถานที่ที่พระพุทธเจ้าเคยใช้สอย ธรรมเจดีย์ คือสถานที่บรรจุพระธรรมหรือบรรจุพระพุทธพจน์ และอุทเทสิกเจดีย์คือพระพุทธรูป พุทธศิลป์จึงหมายถึงงานศิลปะที่สร้างขึ้นมาเพื่อเป็นการอุทิศและรับใช้ด้านศาสนาโดยตรง ก่อให้เกิดความศรัทธา ความเชื่อ ความเลื่อมใสในพระพุทธศาสนาโดยอาศัยองค์รวมของการสืบทอดอายุพระพุทธศาสนาให้ยั่งยืนสืบไป พระพุทธศาสนาเป็นเครื่องยึดเหนี่ยวทางจิตใจและมีระเบียบแบบแผนของพิธีกรรม หลักธรรมคำสอนของพระพุทธศาสนาเป็นหลักที่พึ่งทางจิตใจให้เกิดสันติสุขในสังคมและยึดถือต่อกันมาเป็นวัฒนธรรมอันดีงาม อิทธิพลที่ได้รับทางศิลปกรรมเชิงพุทธศิลป์และสถาปัตยกรรมต่างๆ นั้น ได้ถือกำเนิดขึ้นหลังจากสมเด็จพระสัมมาสัมพุทธเจ้าปรินิพพานแล้ว เมื่อมีการสังคายนา พระไตรปิฎกเกิดขึ้นส่งผลให้การถ่ายทอดวิทยาการทางด้านพุทธศาสตร์ มีรูปแบบที่หลากหลายและแตกต่างกันออกไปในขณะที่ตำรามุ่งถ่ายทอดพุทธประวัติและชาดกต่างๆ แต่ศิลปะก็ถือเป็นเครื่องมือในการถ่ายทอดหลักจริยศาสตร์ที่ได้ผลเช่นกัน พุทธศิลป์จึงแพร่ขยายออกไปอย่างรวดเร็วจนเกิดมรดกทางวัฒนธรรมที่ดำรงอยู่และสืบทอดถึงปัจจุบัน

5. คุณค่าพุทธศิลป์

สะท้อนให้เห็นมุมมองคุณค่าในมิติหลักธรรมคำสอนในพระพุทธศาสนา สามารถจำแนกออกได้เป็น 2 ประเภท คือ (1) อามิสบูชา คือการบูชาด้วยอามิส (2) ธรรมบูชา คือการบูชาด้วยธรรม" (อง.ทุก. (ไทย) 20/157/124) ในมังคสัตถทีปนี พระสิริมังคลาจารย์ อธิบายเกี่ยวกับการบูชาไว้ 2 ประการเช่นเดียวกัน

กล่าวคือ การบูชาด้วยอามิส และการบูชาด้วยการปฏิบัติฯ การบูชาด้วยสักการะ มีดอกไม้เป็นต้นและด้วย ปัจจัย 4 ชื่อว่าอามิสบูชา, การบูชาด้วยการปฏิบัติ ชื่อว่าปฏิบัติบูชาในอรรถกถา ท่านยังได้อธิบายเพิ่มเติมไว้อีก ว่า "การบูชาด้วยการทำสักการะ เคารพ นบนอบและการไหว้ ชื่อว่าบูชา" โดยกำหนดบุคคลอย่างสูงสุด พระพุทธเจ้า พระปัจเจกพุทธเจ้า และพระอริยสาวก ชื่อว่า ปูชนียบุคคล, จริงอยู่ ท่านเหล่านั้น เรียกว่า ปูชนีย บุคคล เพราะทำภาวะแห่งการบูชาที่บุคคลทำในตนแม้เล็กน้อย นำประโยชน์สุขมาให้ตลอดกาลนาน เหตุเพราะ เป็นทักขิไณยบุคคล" (มงคล (บาลี) 1/57-58/81-82) สมดังที่พระผู้มีพระภาคตรัส พระคาถานี้แก่ภิกษุ ทั้งหลาย ดังนี้ว่า "บุญของบุคคลผู้บูชาท่านผู้ควรบูชา คือพระพุทธเจ้า หรือพระสาวก ผู้ก้าวพ้นธรรมเครื่องเนิ่น ช้า ผู้ข้ามความโศกและความร่ำไรได้แล้ว ผู้คงที่ ผู้ดับกิเลสได้แล้ว ผู้ไม่มีภัย แต่ที่ไหน อันใครๆ ไม่อาจนับได้ว่า บุญนี้มีประมาณเท่านี้ (ขุ.ธ.(ไทย) 25/195-196/43. พุทธวรรค ธรรมบท, และดูรายละเอียดในมงคล. (บาลี) 1/59/47/58)

ในอดีตได้ปรากฏหลักฐานว่าชาวโรมันได้ติดต่อค้าขายกับชาวอินเดีย จนกระทั่งประมาณ พ.ศ. 600 ช่างกรีก-โรมัน จึงได้สร้างพระพุทธรูปเป็นรูปมนุษย์ ขึ้นได้อย่างสวยงามเหมาะสมตามพุทธลักษณะ โดยได้ อาศัยคุณลักษณะ 3 ประการ ในการสร้างพระพุทธรูป คือ 1) เนื่องจากเป็นช่างกรีก-โรมัน จึงได้ใช้สุนทรียภาพ ตามแบบฝรั่ง พระพักตร์ ก็มีลักษณะงามตามแบบฝรั่ง เช่น พระนาสิกโด่ง พระโอษฐ์เล็ก พระขนง วาดเป็นวง โค้ง บรรจบกันเหนือดั้งพระนาสิก ประภามณฑล เป็นรูปวงกลมเกลี้ยง อยู่เบื้องหลังพระเศียร 2) กระทำตาม คัมภีร์มหาบุรุษลักษณะ (ที.ปา. 11/ 157/130.และ11/159-193/130,171. อ้างถึงในพุทธทาสภิกขุ, พุทธ ประวัติจากพระโอษฐ์, พิมพ์ครั้งที่ 11, (กรุงเทพฯ: ม.ป.ท., ม.ป.ป., 2532), หน้า 31-40) มีลายธรรมจักรบนฝ่า พระหัตถ์ 3) เกิดจากความชาญฉลาดของช่างที่ ว่าจะทำอย่างไร จึงจะให้ผู้เห็นประติมากรรมนี้แล้วจะทราบ ได้ทันทีว่ารูปดังกล่าวเป็นของพระพุทธองค์ ส่วนการสร้างพระพุทธรูปจริง ๆ นั้นเริ่มมีการสร้างขึ้นมาตั้งแต่ ระหว่าง พ.ศ. 500 ถึง 550 เมื่อชาวกรีก ที่ชาวชมพูทวีป (อินเดียโบราณ) เรียกชาวต่างแดนว่า "โยนา" หรือ "โยนก" โดย พระเจ้าเมนันเดอร์ที่ 1 หรือ พระเจ้ามิลินท์ กษัตริย์เชื้อสายกรีก ยกทัพกรีกเข้ามาครอบครอง แคว้นคันธารราฐ (ปัจจุบันเป็นดินแดนของอัฟกานิสถาน) จากนั้นพระองค์ก็แผ่อาณาเขตไปทั่วบริเวณด้าน ตะวันตกเฉียงเหนือของชมพูทวีป และสร้างเมืองหลวงเป็นที่ประทับ ณ เมืองสากล หลังจากที่ได้พบพระสงฆ์ ท่านหนึ่งนามว่า นาคเสน จึงมีเรื่องราวแห่งการตั้งคำถามของพระเจ้ามิลินท์ต่อพระนาคเสนจนทำพระเจ้ามิลิ นท์ทรงเลื่อมใสในพระพุทธศาสนา (คำถามคำตอบปุจฉาวิสัชนา ซึ่งถูกเขียนบันทึกเป็นหนังสือและแปลเป็น ภาษาต่าง ๆ ที่มีชื่อเสียงมาก เรื่องนี้ก็คือ มิลินทปัญหาได้มีการสร้างสถาปัตยกรรม และประติมากรรมทางพุทธ ศาสนามากมายในแคว้นคันธารราฐ ซึ่งการสร้างพระพุทธรูปนั้นมีลักษณะต่าง ๆ ตามพุทธประวัติ (ปาง พระพุทธรูป) พระพุทธรูปรูปแรกจึงเกิดขึ้นในสมัยของพระเจ้ามิลินท์ หรือเมนันเดอร์ที่ 1 ชาวกรีกที่มา ครอบครองแคว้นคันธารราฐ เมื่อประมาณพุทธศตวรรษที่ 6 หรือ 2,000 ปีที่แล้วนั่นเอง พระพุทธรูปที่เกิดขึ้น ครั้งแรกจึงเรียกรูปแบบของพระพุทธรูปนี้ว่า แบบคันธารราฐ โดยถ่ายแบบอย่างเทวรูปที่พวกชาวกรีกนับถือกัน ในยุโรปมาสร้าง พระพุทธรูปแบบคันธารราฐจึงมีใบหน้าเหมือนฝรั่งชาวกรีก จีวรก็เป็นริ้วเหมือนเครื่องนุ่งห่ม ของเทวรูปกรีก และต่อมาในภายหลัง ราวพุทธศตวรรษ ที่ 4-12 มีคตินิยมสร้างพระพุทธรูปเป็นขนาดเล็ก ๆ (พระเครื่อง) บรรจุไว้ในพุทธเจดีย์ พุทธศิลป์ที่ปรากฏในประเทศไทยนั้น มีทั้งที่เป็นสถาปัตยกรรม ประติมากรรม และ จิตรกรรม พุทธศิลป์เหล่านี้ได้รับอิทธิพลมาจากพระพุทธศาสนาที่มาจากอินเดียในช่วงสมัย

พระเจ้าอโศกมหาราช ที่ได้จัดส่งพระสมณทูตออกเผยแผ่พระพุทธศาสนานอกจากชมพูทวีป โดยเฉพาะ ปฏิมากรรมนั้น พระพุทธรูปถือว่าเป็นองค์เปรียบ หรือสัญลักษณ์ แทนพระพุทธเจ้าเป็นหลักฐานสำหรับให้คน รุ่นหลังทราบว่า พระพุทธเจ้าทรงเป็นปูชนียบุคคลที่มีพระองค์อยู่จริง ความโดดเด่นของพุทธศิลป์ในแต่ละแบบ ที่เกิดขึ้นในระยะเวลาเดียวกันหรือใกล้เคียงกัน เช่น พุทธศิลป์แบบหริภุญไชยถูกผนวกรวมในพุทธศิลป์แบบ ทวารวดี พุทธศิลป์แบบเชียงแสน-ล้านนา อาจจะผนวกรวมไว้กับศิลป์แบบสุโขทัย ส่วนพุทธศิลป์แบบสุพรรณ ภูมิและอโยธยา หรืออู่ทองก็อาจจะนำมารวมไว้กับศิลปะแบบอยุธยา อิทธิพลของการสร้างสถาปัตยกรรมใน อินเดียมีบทบาทต่อการสร้างสถาปัตยกรรมไทยดังที่ปรากฏอยู่ทั่วไป นับตั้งแต่พระพุทธศาสนาเริ่มเข้าสู่ ประเทศไทยเป็นต้นมา

ดังนั้น จากประวัติและพัฒนาการดังกล่าวข้างต้น แสดงเห็นว่า ลักษณะพุทธศิลปะในยุคทวารวดี โดยเฉพาะทวารวดีเมืองอู่ทองถือว่า ได้รับอิทธิพลศิลปะแบบคุปตะจากอินเดีย เป็นยุคทอง ของอินเดีย ดังนั้น การสร้างรูปแบบประติมากรรมโดยเฉพาะอย่างยิ่งพระพุทธรูป รูปพระโพธิสัตว์ เทวดาและมนุษย์ในสมัยทวาร วดีอู่ทองนี้ จะมีลักษณะเป็นแบบคุปตะของอินเดียอย่างมาก สร้างขึ้นจาก อิทธิพลทางพุทธศาสนาศิลปะทวาร วดีในประเทศไทยเจริญขึ้น จะเห็นว่า พระพุทธรูปสมัยทวารวดีอู่ทองที่พบโดยมากมี 3 แบบ ได้แก่ แบบที่หนึ่ง มีอายุราวพุทธศตวรรษที่ 12 ถึงต้นพุทธศตวรรษที่ 13 มีลักษณะอิทธิพลศิลปะอินเดียแบบคุปตะ หลังคุปตะ และแบบอมราวดี เป็นพระพุทธรูปปูนปั้น พระพุทธรูปสำริด อยู่ที่เจดีย์ อายุราวพุทธศตวรรษที่ 13-14 มี ลักษณะเปนพื้นเมืองมาก เศียร พระพุทธรูปดินเผา พบที่เมืองอู่ทองจังหวัดสุพรรณบุรี และอายุราวพุทธ ศตวรรษที่ 15-16 ซึ่งได้อิทธิพลของขอมและแบบลพบุรี เข้ามาปะปน แล้วการกำหนดอายุพระพุทธรูปสมัย ทวารวดี กล่าวได้ว่าพระพุทธรูปสมัย อู่ทอง พบหลักฐานที่เกาสุดคงไดแกชั้น สวนฐานและขนดนาคพบที่เมืองอู่ ทอง จังหวัดสุพรรณบุรี มีหลายปาง แตปางที่โดดเดนและมีความสำคัญและนิยมสรางกันแพรหลายไดแก พระพุทธรูปปางประทานพร ปางแสดงธรรมสองพระหัตถ ปางประทับนั่ง หอยพระบาท ปางสมาธิ ปางสมาธิมี นาคปรก และปางปรินิพพาน

จากการศึกษาข้อมูลที่สำคัญเกี่ยวกับพุทธศิลป์ยุคทวารวดี ผู้เขียนมีวัตถุประสงค์ เพื่อศึกษาคุณค่า พุทธศิลป์ในพระพุทธศาสนา ศึกษาพุทธศิลป์ยุคทวารวดี และเพื่อวิเคราะห์คุณค่าพุทธศิลป์ยุคทวารวดีใน จังหวัดสุพรรณบุรี พุทธศิลป์ในพระพุทธศาสนาต่างก็ตั้งสมมุติฐานว่าเมืองอู่ทองเป็นเมืองหลวงของรัฐทวารวดี ศิลปะในแต่ละยุคจะทำให้ทราบถึงวิวัฒนาการการเชื่อมโยงด้านวัฒนธรรมของชุมชน เส้นทางการติดต่อ คมนาคม ใช้เป็นหลักฐานเพื่อตรวจสอบว่า เป็นยุคสมัยใดซึ่งเป็นข้อมูลที่ทำให้การศึกษาเหตุการณ์ต่างๆ พุทธ ศิลป์ยังให้คุณค่าทางประวัติศาสตร์ถูกต้องยิ่งขึ้น เพราะทำให้ทราบประวัติความเป็นมาและความสำคัญของ ชุมชนโบราณดังเดิม คุณค่าพุทธศิลป์ยุคทวารวดี

เมืองโบราณอู่ทอง ในจังหวัดสุพรรณบุรี เป็นเมืองสมัยแรกเริ่มประวัติศาสตร์และต้นกำเนิดพุทธศิลป์ ในดินแดนไทย พบหลักฐานศิลปกรรมเนื่องในพุทธศาสนาที่มีอายุราวพุทธศตวรรษที่ 12 – 13 หรือประมาณ 1,300 – 1,400 ปีมาแล้ว รูปแบบศิลปกรรมยังมีความใกล้เคียงกับศิลปะอินเดียซึ่งเป็นต้นแบบมาก อิทธิพล ของศิลปะอินเดียที่ปรากฏในระยะนี้ได้แก่ศิลปะอมราวดี ศิลปะคุปตะและหลังคุปตะ โบราณวัตถุที่กำหนดอายุ อยู่ในช่วงสมัยนี้ เช่น พระพุทธรูปหินสลักนูนแสดงพุทธประวัติตอนปฐมเทศนา ธรรมจักร พร้อมเสาและแท่น ฐานรองรับที่สมบูรณ์ที่สุดในดินแดนไทยซึ่งพบจากการขุดแต่งเจดีย์หมายเลข 11

2. พุทธศิลป์ยุคทวารวดี มีความเป็นมาและมีความสำคัญในจังหวัดสุพรรณบุรีอย่างมาก จาก
การศึกษาของนักประวัติศาสตร์และนักโบราณคดี นักวิชาการหลายท่าน ต่างมีความเห็นว่า
พุทธศาสนาน่าจะเข้ามาถึงดินแดนที่เป็นประเทศไทยปัจจุบัน นับตั้งแต่ราวพุทธศตวรรษที่ 9-10
หรือก่อนสมัยทวารวดีแล้ว โดยเฉพาะอย่างยิ่งที่เมืองอู่ทอง จังหวัดสุพรรณบุรี เพราะปรากฏรูปแบบศิลปกรรม
อินเดียแบบอมราวดีตอนปลาย ทำขึ้นในท้องถิ่นและเคยใช้ประดับศาสนสถาน คือ **แผ่นดินเผารูปพระสาวก 3
องค์**อุ้มบาตรห่มจีวรเป็นริ้วและชิ้นส่วนพระพุทธรูปขัดสมาธิพระบาทหลวมๆ บนขนดนาค จึงเชื่อกันว่าผู้คนใน
บริเวณเมืองอู่ทองนี้คงจะรู้จักและเริ่มนับถือพระพุทธศาสนาในระดับหนึ่งแล้ว และหลักฐานและหลักธรรม
พุทธศาสนาสมัยแรกเริ่มที่อู่ทองและปริมณฑล

3. การวิเคราะห์แนวคิดคุณค่าพุทธศิลป์ทวารวดีที่ปรากฏในรูปแบบของเจดีย์และโบราณสถาน
โบราณวัตถุอื่นๆ ล้วนมีอิทธิพลและคุณค่าในด้านต่างๆ อาทิ การส่งเสริมคุณธรรมจริยธรรม มีคุณค่าที่ควรแก่
อนุรักษ์ แสดงให้เห็นถึงการเข้ามาของพระพุทธศาสนา ความศรัทธาการนับถือพระพุทธศาสนานิกายต่างๆ ใน
สมัยนั้น ที่คนในยุคปัจจุบันสามารถนำมาเป็นแบบอย่างในการอนุรักษ์ คุณค่าทางศิลปกรรม ทำให้รู้ถึงรูปแบบ
ของศิลปกรรมในสมัยทวารวดี รูปแบบของศิลปกรรมที่พบในแหล่งโบราณสถานและในสถานที่ต่างๆ ได้ ใน
การศึกษาเป็นแหล่งเรียนรู้ในด้านประวัติศาสตร์ โบราณคดี ทำให้ทราบประวัติความเป็นมาและความสำคัญ
ของชุมชนโบราณทำให้เกิดคุณค่าทางเศรษฐกิจ สามารถพัฒนาเป็นแหล่งท่องเที่ยวทางประวัติศาสตร์ และ
นำมาพัฒนาต่อยอดเป็นงานฝีมือ สร้างเป็นผลิตภัณฑ์ชุมชน เป็นของที่ระลึกแก่นักท่องเที่ยวได้ เมื่อชุมชน
เป็นอยู่ดีก็จะทำให้เกิดคุณค่าทางสังคม เกิดการสำนึกรักบ้านเกิด ภูมิใจในบ้านเกิดที่มีหลักฐานประวัติศาสตร์
อันมีประวัติความเป็นมาที่ยาวนานและน่าภาคภูมิใจ

6. บทสรุป

บทความนี้ได้ข้อค้นพบว่า พุทธศิลป์ก็เหมือนกับสิ่งต่างๆ โดยทั่วไป เมื่อเข้ามาแล้วก็จะมีการ
เปลี่ยนแปลงเกิดขึ้นทั้งดีและเสื่อมลงตามสภาพแวดล้อม กาลเวลาและบริบทต่างๆ ที่เกี่ยวข้องขึ้นอยู่กับเหตุ
ปัจจัยหลายอย่าง เพราะสิ่งต่างๆ ในยุคปัจจุบันไม่แปลสภาพไปหลายอย่าง เช่น การนำเทคโนโลยีที่ทันสมัยเข้า
มาใช้ในโลกปัจจุบัน การเข้าถึงโลกโซเซียล ที่สามารถเข้าถึงได้อย่างรวดเร็ว ซึ่งเป็นทั้งส่วนที่ดีและส่วนที่ไม่ดีได้
เหมือนกัน สุพรรณบุรีเป็นเมืองที่ขึ้นชื่อได้ว่า มีความเจริญรุ่งเรืองเป็นอย่างมาก มีอายุที่ยาวนาน จากหลักฐาน
ทางประวัติศาสตร์ที่ค้นพบจากนักวิชาการหลายๆ ท่าน ซึ่งจากหลักฐานต่างๆ ส่วนใหญ่ที่เป็นศิลปะในยุคสมัย
ทวารวดี จะค้นพบกันมากในภาคกลางของประเทศไทย ซึ่งจังหวัดสุพรรณบุรีก็เป็นจังหวัดหนึ่งที่มีสิ่งต่างๆ ที่
ค้นพบมากมายโดยเฉพาะอย่างยิ่งเมืองอู่ทองเพราะหลักฐานส่วนใหญ่จะเกี่ยวข้องกับพระพุทธศาสนาเป็นส่วน
ใหญ่ ทุกสิ่งทุกอย่างมีคุณค่าในทุกด้าน ความเป็นมา วิถีชีวิต ความเป็นมาวัฒนธรรมของเราในอดีต และบ่ง
บอกถึงคุณค่าเชื่อมโยงกับวิถีชีวิตในยุคสมัยนั้นๆ สะท้อนความเป็นอยู่ของคนในสมัยนั้นๆ จนมาถึงปัจจุบัน มี
การเผยแผ่ สอดแทรกจัดทำโครงการเพื่อที่จะให้เด็กและเยาวชนได้รับรู้เรื่องของศิลปะต่างๆ ปลูกจิตสำนึกให้
เขารับรู้ อนุรักษ์และรวบรวม รวมทั้งควรมีการจัดทำพิพิธภัณฑ์เพื่อให้เด็กและเยาวชนรุ่นหลังได้ศึกษา รับรู้
เข้าใจ ถ่ายทอดความเป็นมาของศิลปะในยุคทวารวดี

บรรณานุกรม

กรมศิลปากร. (2533). **โบราณคดีและประวัติศาสตร์เมืองสุพรรณบุรี.** กรุงเทพมหานคร: ห้างหุ้นส่วนจำกัด
        สารรังสรรค์.

ชัปนะ ปิ่นเงิน. (2552). **จักกวาฬทีปนี: ต้นแบบทางความคิดพุทธลักษณ์ล้านนา.** เชียงใหม่: สถาบันวิจัย
        สังคม มหาวิทยาลัยเชียงใหม่.

พิพิธภัณฑสถานแห่งชาติอู่ทอง, พิพิธภัณฑสถานแห่งชาติ อำเภออู่ทอง สุพรรณบุรี – จังหวัดสุพรรณบุรี
        [ออนไลน์], แหล่งที่มา : http://www.suphan.biz/UtongMuseum.htm [7 พฤษภาคม 2563].

มโน พิสุทธิรัตนานนท์. (2547). **สุนทรียวิจักษณ์ในจิตรกรรมไทย**. กรุงเทพมหานคร: โอเดียนสโตร์.

วัชรินทร์ บัวจันทร์. (2554). **ศึกษาเรื่องแดนแห่งพลังศรัทธา.** ศิลปะนิพนธ์ศิลปะบัณฑิต, นครปฐม : คณะ
        จิตรกรรม ประติมากรรมและภาพพิมพ์ มหาวิทยาลัยศิลปากร.

เสถียร โพธินันทะ. (2539). **ประวัติศาสตร์พระพุทธศาสนา, (ฉบับมุขปาฐะ ภาค 1).** กรุงเทพมหานคร:
        มหามกุฏราชวิทยาลัย.

สฤษดิ์พงศ์ ขุนทรง. **โบราณคดีช่วงก่อนสมัยทวารวดี : ข้อมูลใหม่จากเมืองโบราณอู่ทอง, เป็นส่วนหนึ่งของ
        โครงการวิจัยเรื่อง "พัฒนาการของเมืองอู่ทองจากหลักฐานทางโบราณคดี"**. รายงานวิจัย โดย
        ได้รับทุนสนับสนุนจากสถาบันวิจัยและพัฒนา มหาวิทยาลัยศิลปากร, คณะโบราณคดี : มหาวิทยาลัย
        ศิลปากร.

สุริยวุฒิ สุขสวัสดิ์. (2537). **ศรีทวารวดีถึงศรีรัตนโกสินทร**. กรุงเทพมหานคร: ดานสุทธาการพิมพ์.

การพัฒนาการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช
A Buddhist Creative Tourism Development
in Nakhon Si Thammarat Province

พระครูโกศลอรรถกิจ (ชัยศักด์ แซ่ลี้)

Phrakrukosolatthakit (Chaiyasak Saelee)

พระครูโฆสิตวัฒนานุกูล

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พระครูวิจิตรศีลาจาร

Phrakruwijitsilajarn

สิทธิโชค ปาณะศรี

Sitthichok panasree

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บทคัดย่อ

บทความนี้ มีวัตถุประสงค์ 1) เพื่อศึกษาองค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ 2) เพื่อสำรวจแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช และ 3) เพื่อพัฒนาแผนที่การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช เป็นการวิจัยเชิงคุณภาพ โดยการศึกษาเอกสารและการสำรวจ นำเสนอผลการวิจัยเชิงพรรณนา

ผลการศึกษา พบว่า

1. องค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ

การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ เป็นรูปแบบการท่องเที่ยวที่มีการผสมผสานความคิดสร้างสรรค์กับการท่องเที่ยวในรูปแบบวิถีพุทธ ซึ่งมีองค์ประกอบที่สำคัญประกอบด้วย 1) พื้นที่สร้างสรรค์ 2) งานสร้างสรรค์ 3) ความสัมพันธ์เชิงสร้างสรรค์ 4) กิจกรรมสร้างสรรค์ 5) ผลิตภัณฑ์สร้างสรรค์ 6) เครือข่ายสร้างสรรค์

2. การสำรวจแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ประกอบด้วย 1) วัดพระมหาธาตุวรมหาวิหาร อำเภอเมือง จังหวัดนครศรีธรรมราช 2) วัดเจดีย์ (ไอ้ไข่) อำเภอสิชล จังหวัดนครศรีธรรมราช 3) วัดธาตุน้อย อำเภอช้างกลาง จังหวัดนครศรีธรรมราช

3. การพัฒนาแผนที่การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช พบว่า การ
เดินทางสู่แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช นักท่องเที่ยวสามารถเดินทางไปยัง
แหล่งท่องเที่ยวทั้งสามสถานที่ได้อย่างสะดวกสบาย โดยสามารถเลือกใช้รูปแบบการเดินทางที่เหมาะสมกับ
ตนเอง อาจเป็นการเดินทางด้วยรถยนต์ส่วนตัว หรือเดินทางด้วยรถประจำทาง (รถทัวร์) เดินทางโดยรถไฟ
หรือโดยเครื่องบิน นักท่องเที่ยวสามารถเลือกใช้บริการได้อย่างสะดวกสบายตามความต้องการ
คำสำคัญ : การท่องเที่ยว, การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ, ความต้องการ

ABSTRACT

The purposes of this research were 1) to study the components of Buddhist creative
tourism, 2) to explore Buddhist creative tourism destinations in Nakhon Si Thammarat
Province, and 3) to develop a map of Buddhist creative tourism in Nakhon Si Thammarat
Province. This is qualitative research by studying the document and survey studies, presenting
the descriptive research results. The study found that:

1. The components of Buddhist creative tourism. A Buddhist creative tourism is a
form of tourism that combines creativity with Buddhist tourism, which has the important
components consisting of 1) creative space, 2) creative work, 3) creative relationships, 4)
creative activities, 5) creative products, 6) creative networks.

**2. To explore Buddhist creative tourism destinations in Nakhon Si Thammarat
Province.** Creative Buddhist tourist attractions in Nakhon Si Thammarat Province comprise of:
1) Wat Phra Mahathat Woramahawihan, Mueang District, Nakhon Si Thammarat Province, 2)
Wat Chedi (Ai Khai), Sichon District, Nakhon Si Thammarat Province, 3) Wat That Noi, Chang
Klang District, Nakhon Si Thammarat Province.

**3 . to develop a map of Buddhist creative tourism in Nakhon Si Thammarat
Province.** It was found that Journeying to the creative Buddhist tourist attractions in Nakhon
Si Thammarat Province, tourists can conveniently access all three destinations. They have the
flexibility to choose their preferred mode of transportation, whether it's by private car, tour
bus, train, or plane. Tourists can select the most suitable option based on their preferences
and needs.

Keywords: Tourism, Buddhist creative tourism, needs

1. บทนำ

ภายใต้บริบทความเจริญก้าวหน้าทางเทคโนโลยีสารสนเทศ ที่มีการเชื่อมโยงกันเป็นเครือข่ายทั่วโลก
ทำให้ทุกคนสามารถรับรู้ข้อมูลข่าวสารที่เกิดขึ้นจากทั่วทุกมุมโลกภายในเวลาไม่กี่วินาที การดำเนินชีวิตของ
ผู้คนในสังคมที่มีการเปลี่ยนแปลงตลอดเวลา ทั้งนี้เพื่อให้สอดคล้องกับสภาพสังคมที่เปลี่ยนแปลงไป โดยเฉพาะ

อย่างยิ่งให้สอดคล้องกับความเจริญก้าวหน้าในมิติต่าง ๆ ที่เกิดขึ้นอย่างต่อเนื่อง รวดเร็ว การพัฒนาในทุกมิติ ของสังคมเกิดขึ้นตลอดเวลาเพื่อสนองความต้องการของผู้คนผ่านนวัตกรรมสมัยใหม่ที่หลากหลาย ทำให้การ ดำเนินชีวิตของผู้คนสะดวกสบายยิ่งขึ้น การเดินทางท่องเที่ยวไปยังสถานที่ต่าง ๆ ถือเป็นรูปแบบหนึ่งของการ ดำเนินชีวิตทั้งเพื่อรับรู้ประสบการณ์ใหม่ ๆ และเพื่อการพักผ่อนทางด้านร่างกายและจิตใจ หรือเพื่อ วัตถุประสงค์อื่น ๆ ตลอดระยะหลายปีที่ผ่านมา ผู้คนทั่วโลกมีการเดินทางท่องเที่ยวไปยังดินแดนต่าง ๆ โดย การเดินทางมาท่องเที่ยวยังประเทศไทยในจำนวนที่เพิ่มมากขึ้น ซึ่งก่อให้เกิดความหลากหลายของรูปแบบการ ท่องเที่ยวและนำไปสู่การพัฒนาในด้านต่าง ๆ เพื่อรองรับนักท่องเที่ยวที่เดินทางมาจากทั่วทุกมุมโลก ทั้งเป็น การพัฒนาความต้องการพื้นฐานในเชิงพื้นที่ที่พักอาศัย พัฒนาธุรกิจการบริการต่าง ๆ เพื่อให้เกิดความ สะดวกสบายแก่นักท่องเที่ยวที่มาเยือน

ตลอดระยะเวลาหลายปีที่ผ่านมา การท่องเที่ยวของประเทศไทยได้มีการจัดการและพัฒนารูปแบบ การท่องเที่ยวในรูปแบบที่หลากหลายตามวัตถุประสงค์ที่แตกต่างกันออกไปและตามประเภทของการจัดการ ท่องเที่ยว เช่น การท่องเที่ยวเชิงกีฬา การท่องเที่ยวเชิงเกษตร การท่องเที่ยวเชิงวัฒนธรรม การท่องเที่ยวเชิง นิเวศ การท่องเที่ยวศาสนา เป็นต้น แต่จากการศึกษาเอกสารที่เกี่ยวข้องกับการท่องเที่ยว ผู้วิจัยพบว่า การ ท่องเที่ยวเชิงสร้างสรรค์ อันเป็นการท่องเที่ยวที่สนับสนุนให้นักท่องเที่ยวได้แลกเปลี่ยนเรียนรู้เพื่อทำความ เข้าใจในคุณค่าทางสังคมวัฒนธรรม และสภาพแวดล้อมของพื้นที่ท่องเที่ยวอย่างลึกซึ้ง โดยผ่านประสบการณ์ ร่วมกับเจ้าของพื้นที่ หรือเจ้าของวัฒนธรรม (สุดแดน วิสุทธิลักษณ์ และคณะ, 2555: 108) เป็นอีกรูปแบบหนึ่ง ของการท่องเที่ยวที่ได้รับความนิยมอย่างสูงในปัจจุบัน เพราะเป็นการท่องเที่ยวที่มีการนำเสนอวัฒนธรรม ประเพณี วิถีชีวิต สิ่งที่ดีงาม คุณค่า และอัตลักษณ์ เพื่อทำให้ชุมชนเป็นแหล่งดึงดูดนักท่องเที่ยวให้เดินทางมา ท่องเที่ยวได้อย่างยั่งยืน พร้อมทั้งมีการส่งต่อการสร้างสรรค์สิ่งต่าง ๆ ของแหล่งท่องเที่ยวจากรุ่นสู่รุ่น ถือเป็น การอนุรักษ์คุณค่าเดิมและเพิ่มพูนต่อยอดองค์ความรู้ใหม่ โดยมีจุดมุ่งหมายเพื่อให้ท้องถิ่นเกิดระบบเศรษฐกิจที่ ดีและชุมชนมีรายได้ที่เพิ่มขึ้นอันจะนำไปสู่การมีคุณภาพชีวิตที่ดีต่อไป

จากแผนพัฒนาการท่องเที่ยวแห่งชาติ ฉบับที่ 3 (พ.ศ.2566-2570) ซึ่งมีวิสัยทัศน์ในการพัฒนาและ ขับเคลื่อนการท่องเที่ยวอย่างครอบคลุมและทั่วถึง ภายในระยะเวลา 5 ปี ดังนี้ "การท่องเที่ยวของประเทศไทย เป็นอุตสาหกรรมที่เน้นคุณค่า มีความสามารถในการปรับตัว เติบโตอย่างยั่งยืนและมีส่วนร่วม(Rebuilding High Value Tourism Industry with Resilience, Sustainability and Inclusive Growth)"(ราชกิจจา นุเบกษา, 2566 : 64) โดยแผนพัฒนาการท่องเที่ยวแห่งชาติ ฉบับที่ 3 นั้น มี 4 เป้าหมายหลัก ได้แก่ 1) การ ท่องเที่ยวไทยมีความเข้มแข็งและสมดุล (Resilience & Re-balancing Tourism) 2) การยกระดับความ เชื่อมโยงและโครงสร้างพื้นฐานด้านการท่องเที่ยว (Connectivity) 3) การสร้างความเชื่อมั่นและมอบ ประสบการณ์ท่องเที่ยวคุณค่าสูง (Entrusted Experience) 4) การบริหารจัดการการท่องเที่ยวอย่างยั่งยืน (Sustainable Development) และ 3 เป้าหมายรอง ประกอบด้วย 1) การพัฒนาปัจจัยสนับสนุนด้านการ ท่องเที่ยวให้มีคุณภาพสูงสำหรับทุกกลุ่ม (Supporting Elements) 2) เทคโนโลยีดิจิทัลและโครงสร้างพื้นฐาน ด้านข้อมูลพร้อมส่งเสริมการท่องเที่ยว (ICT Readiness) 3) ความพร้อมในการรับมือและจัดการกับความเสี่ยง ทุกรูปแบบอยู่เสมอ (Risk Readiness) (ราชกิจจานุเบกษา, 2566: 65-66) ซึ่งการท่องเที่ยวเชิงสร้างสรรค์และ วัฒนธรรม เป็นรูปแบบของกิจกรรมการท่องเที่ยวที่มุ่งเน้นการใช้องค์ความรู้และนวัตกรรมในการสร้างสรรค์

คุณค่าสินค้าและบริการการท่องเที่ยวเพื่อสร้างประสบการณ์ใหม่ ๆ แก่นักท่องเที่ยวจากแหล่งท่องเที่ยวที่มี
ความเกี่ยวข้องกับวัตถุสิ่งของภูมิปัญญา จิตวิญญาณ และประวัติศาสตร์ หรือผลิตภัณฑ์ทางวัฒนธรรมทั้งที่จับ
ต้องได้ (Tangible Culture) และที่จับต้องไม่ได้ (Intangible Culture) ทั้งนี้ การท่องเที่ยวเชิงสร้างสรรค์ เป็น
ประเภทการท่องเที่ยวที่ประเทศไทยมีศักยภาพควรได้รับการสนับสนุนเป็นอย่างมาก เนื่องด้วยประเทศไทยมี
แหล่งท่องเที่ยวเชิงวัฒนธรรมที่สร้างขึ้นมาในอดีตจำนวนมาก เช่น วัด โบราณสถาน เป็นต้น สอดคล้องกับ
ความต้องการของนักท่องเที่ยวทั้งชาวไทยและชาวต่างชาติในการท่องเที่ยวเชิงวัฒนธรรมในประเทศไทย (ราช
กิจจานุเบกษา, 2566: 46)

การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ จัดเป็นอีกรูปแบบหนึ่งของการจัดการท่องเที่ยวที่เกี่ยวข้องกับ
ประเพณี วัฒนธรรม วิถีชีวิต ภูมิปัญญาท้องถิ่น และเอกลักษณ์เฉพาะท้องถิ่นที่เกี่ยวโยงกับพระพุทธศาสนา
ดังที่พระอธิการธีรศักดิ์ จกฺกวโร (เวียงสมุทร) ที่ให้คำนิยามความหมาย การจัดการท่องเที่ยววิถีพุทธ หมายถึง
กระบวนการท่องเที่ยวที่เป็นไปตามแนวทางพระพุทธศาสนา โดยแหล่งท่องเที่ยวมีความเกี่ยวข้องกับ
พระพุทธศาสนา ประกอบด้วยแหล่งท่องเที่ยว การบริการการท่องเที่ยว การจัดการแหล่งท่องเที่ยว และตลาด
การท่องเที่ยว เป็นไปเพื่อประโยชน์ เพื่ออนุเคราะห์ส่งเสริมสัมมาทิฏฐิเพิ่มพูนกุศลธรรม ทำให้มีความศรัทธา
ลึกซึ้งในพระพุทธศาสนา (พระอธิการธีรศักดิ์ จกฺกวโร (เวียงสมุทร), 2562: 6) และนิยามความหมายของอร
สุชา สุจินพรัหม ที่ให้คำนิยามว่า การท่องเที่ยวเชิงสร้างสรรค์ หมายถึง การท่องเที่ยวที่มีจุดประสงค์สอดคล้อง
กับแนวทางการพัฒนาพื้นที่แหล่งผลิตเพื่อให้เกิดความยั่งยืน โดยจัดกิจกรรมการท่องเที่ยวอย่างกลมกลืนและ
สัมพันธ์กับกระบวนการดำเนินงานของผู้ประกอบการ ตลอดจนวิถีต่าง ๆ ของคนในชุมชนในรูปแบบของการ
เรียนรู้และการทดลองเพื่อให้ได้มาซึ่งประสบการณ์ตรงร่วมกับผู้ประกอบการหรือเจ้าของพื้นที่ (อรสุชา สุจิ
นพรัหม, 2558: 4)

จังหวัดนครศรีธรรมราช กล่าวได้ว่า เป็นจังหวัดหนึ่งในภาคใต้ของประเทศไทยที่มีแหล่งท่องเที่ยว
มากมายและมีความหลากหลายในรูปแบบของการจัดการท่องเที่ยว เป็นจังหวัดที่มีศักยภาพสูงที่สามารถดึงดูด
นักท่องเที่ยวให้เดินทางมาท่องเที่ยวเป็นจำนวนมากในแต่ละปี อีกทั้งยังเป็นเมืองท่องเที่ยวที่มีลักษณะ
ผสมผสานความสวยงามของธรรมชาติและร่องรอยความเป็นมาของประวัติศาสตร์ที่ยาวนานของชุมชน ศาสน
สถาน วัดวาอาราม ภูมิปัญญาท้องถิ่น วิถีชีวิตผู้คน รวมถึงการมีผลิตภัณฑ์ต่าง ๆ ของชุมชนอันเป็นสิ่งของที่
ระลึกคอยต้อนรับนักท่องเที่ยว จึงกล่าวได้ว่า จังหวัดนครศรีธรรมราช เป็นจังหวัดหนึ่งที่มีแหล่งท่องเที่ยวเชิง
สร้างสรรค์วิถีพุทธที่น่าสนใจศึกษาค้นคว้าเป็นอย่างยิ่ง

จากข้อมูลที่กล่าวมา คณะผู้วิจัยจึงเล็งเห็นถึงความสำคัญของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ
จังหวัดนครศรีธรรมราช และได้กำหนดวัตถุประสงค์ในการศึกษาเพื่อใช้เป็นกรอบทิศทางในการพัฒนาการ
ท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ ประกอบด้วย 1) เพื่อศึกษาองค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถี
พุทธ 2) เพื่อสำรวจแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช 3) เพื่อพัฒนาแผนที่การ
ท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ทั้งนี้ เพื่อเป็นประโยชน์ต่อการนำไปเป็นแนวทางการ
พัฒนาการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธอย่างยั่งยืนต่อไป

2. วัตถุประสงค์

      1. เพื่อศึกษาองค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ

      2. เพื่อสำรวจแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช

      3. เพื่อพัฒนาแผนที่การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช

3. วิธีดำเนินการวิจัย

      การศึกษาวิจัยครั้งนี้เป็นการวิจัยเชิงคุณภาพ (Qualitative Research) ผู้วิจัยได้รวบรวมข้อมูลจากเอกสารและข้อมูลจากการสำรวจ โดยมีวิธีดำเนินการวิจัย ดังนี้

      1) ขั้นตอนการศึกษาข้อมูล ได้แบ่งตามแหล่งข้อมูล ดังนี้

      (1) ศึกษาค้นคว้าและเก็บรวบรวมข้อมูลจากตำรา หนังสือ เอกสารต่าง ๆ ที่เกี่ยวข้องกับการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ

      (2) ศึกษาค้นคว้าและเก็บรวบรวมข้อมูลจากงานวิจัยอื่น ๆ ที่เกี่ยวข้องกับการท่องเที่ยวทางพระพุทธศาสนา

      2) ขั้นตอนการสำรวจ ในขั้นตอนนี้เป็นการศึกษาค้นคว้าและเก็บรวบรวมข้อมูลเกี่ยวกับแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ทั้ง 3 สถานที่ ได้แก่ วัดพระมหาธาตุวรมหาวิหาร วัดเจดีย์ (ไอ้ไข่) อำเภอสิชล และวัดธาตุน้อย อำเภอช้างกลาง จังหวัดนครศรีธรรมราช

      3) ขั้นตอนการประมวลผลและเรียบเรียง เป็นขั้นตอนสุดท้ายซึ่งเป็นการนำข้อมูลจากขั้นตอนต่าง ๆ ดังกล่าวข้างต้น มาทำการวิเคราะห์ประมวลผล เรียบเรียง และสรุป เพื่อเขียนงานวิจัยให้ถูกต้องและตอบวัตถุประสงค์ที่ต้องการทราบ

      4) จัดทำรายงานฉบับสมบูรณ์และนำเสนอผลการวิจัย

4. ผลการศึกษา

      การศึกษาวิจัยเรื่อง "การพัฒนาการท่องเที่เชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช" มีผลการศึกษาวิจัย ดังนี้

      1. องค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ จากการศึกษาสามารถสรุปผล ได้ ดังนี้

      การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ เป็นรูปแบบการท่องเที่ยวที่มีการผสมผสานความคิดสร้างสรรค์กับการท่องเที่ยวในรูปแบบวิถีพุทธ ที่มีทั้งการท่องเที่ยวและการได้ประกอบกรรมดีในรูปแบบต่าง ๆ ตามแบบชาวพุทธ เป็นการท่องเที่ยวเพื่อเยี่ยมชมความงดงามของศาสนสถานตามวัดวาอารามต่าง ๆ และการได้ร่วมทำกิจกรรมสำคัญทางพระพุทธศาสนา หรือการได้เข้าร่วมการปฏิบัติธรรมเพื่อเพิ่มพูนปัญญายกระดับจิตใจให้ดีงามผ่องใส

      การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ มีองค์ประกอบที่สำคัญที่ก่อให้เกิดประโยชน์ต่อชุมชนและนักท่องเที่ยว ได้แก่

1) พื้นที่สร้างสรรค์ (creative spaces) แหล่งท่องเที่ยวจะต้องเป็นพื้นที่แห่งความสร้างสรรค์โดย
เชื่อมโยงการพัฒนาในมิติต่าง ๆ ทั้งด้านการท่องเที่ยว เศรษฐกิจ และสังคมต่อชุมชนและนักท่องเที่ยวที่มา
เยี่ยมเยือน

2) งานสร้างสรรค์ (creative events) งานสร้างสรรค์เป็นกลไกของการจัดการพื้นที่ท่องเที่ยวให้
สอดคล้องกับยุคสมัย การจัดงานต่าง ๆ จะต้องมีการสื่อสารประชาสัมพันธ์เพื่อดึงดูดนักท่องเที่ยวให้มาร่วม
งาน เป็นพื้นที่ของการสร้างมิตรสัมพันธ์ระหว่างชุมชนกับนักท่องเที่ยว

3) ความสัมพันธ์เชิงสร้างสรรค์ (creative relationships) แหล่งท่องเที่ยวจะต้องเป็นพื้นที่แห่ง
การสร้างความสัมพันธ์ระหว่างชุมชนกับนักท่องเที่ยว ชุมชนสามารถนำเสนอรูปแบบประเพณีวิถีชีวิตของตนสู่
นักท่องเที่ยวและสามารถนำพานักท่องเที่ยวเยี่ยมชมสถานที่ท่องเที่ยวต่าง ๆ ด้วยจิตบริการจนนักท่องเที่ยว
เกิดความประทับใจและกลับมาเที่ยวซ้ำ

4) กิจกรรมสร้างสรรค์ (creative activities) แหล่งท่องเที่ยวจะต้องมีกิจกรรมสร้างสรรค์ต่าง ๆ
ไว้คอยต้อนรับนักท่องเที่ยวเพื่อการพักผ่อนหย่อนใจและเพิ่มพูนสติปัญญา

5) ผลิตภัณฑ์สร้างสรรค์ (creative products) ผลิตภัณฑ์ต่าง ๆ ที่วางจำหน่ายในพื้นที่ท่องเที่ยว
จะต้องมีความสร้างสรรค์ เกิดจากความคิดสร้างสรรค์ของชุมชน มีคุณค่าและเป็นประโยชน์ต่อนักท่องเที่ยว มี
ราคาที่ยุติธรรม ไม่เอาเปรียบนักท่องเที่ยว และรักษาสิ่งแวดล้อม

6) เครือข่ายสร้างสรรค์ (creative networks) แหล่งท่องเที่ยวจะต้องมีเครือข่ายที่เชื่อมโยงกันไม่
ว่าจะเป็นความเชื่อมโยงของแหล่งท่องเที่ยว หรือองค์กร หน่วยงานต่าง ๆ เกี่ยวกับการท่องเที่ยวระหว่างกัน
อาจเป็นความร่วมมือกันในด้านต่าง ๆ ที่ก่อให้เกิดประโยชน์ต่อกัน โดยเฉพาะเกิดประโยชน์ต่อนักท่องเที่ยว
ที่มาเยี่ยมเยือนแหล่งท่องเที่ยว

2. การสำรวจแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช จากการศึกษา
พบว่า แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ประกอบด้วย

1) วัดพระมหาธาตุวรมหาวิหาร อำเภอเมือง จังหวัดนครศรีธรรมราช เป็นแหล่งท่องเที่ยวเชิง
สร้างสรรค์วิถีพุทธที่สำคัญ เป็นแหล่งท่องเที่ยวที่มีชื่อเสียง มีประวัติศาสตร์ที่ยาวนาน มีสถานที่สำคัญมากมาย
ให้เยี่ยมชม มีกิจกรรมสำคัญต่าง ๆ ให้นักท่องเที่ยวได้ปฏิบัติ เส้นทางการเข้าถึงแหล่งท่องเที่ยวมีความ
สะดวกสบาย

2) วัดเจดีย์ (ไอ้ไข่) อำเภอสิชล จังหวัดนครศรีธรรมราช เป็นแหล่งท่องเที่ยวที่ได้รับความนิยมจาก
นักท่องเที่ยวเป็นจำนวนมาก ทั้งในและต่างประเทศ เป็นเป้าหมายสำคัญของนักท่องเที่ยวที่เดินทางมา
ท่องเที่ยวยังจังหวัดนครศรีธรรมราช เป็นแหล่งท่องเที่ยวที่มีทั้งประวัติศาสตร์ ความเชื่อความศรัทธา และความ
เป็นสิริมงคลและโชคลาภแก่ชีวิต

3) วัดธาตุน้อย อำเภอช้างกลาง จังหวัดนครศรีธรรมราช เป็นแหล่งท่องเที่ยวที่ได้รับความนิยมจาก
นักท่องเที่ยวไม่แพ้แหล่งท่องเที่ยวอื่น ๆ ของจังหวัดนครศรีธรรมราช เนื่องจากเป็นสถานที่ประดิษฐานสรีระ
ของพระครูพิศิษฐ์อรรถการ (พ่อท่านคล้ายวาจาสิทธิ์) พระเกจิอาจารย์ชื่อดังของภาคใต้

3. การพัฒนาแผนที่การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช จากการศึกษา
พบว่า การเดินทางสู่แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช นักท่องเที่ยวสามารถ

เดินทางไปยังแหล่งท่องเที่ยวทั้งสามที่ได้อย่างสะดวกสบาย โดยสามารถเลือกใช้รูปแบบการเดินทางที่เหมาะสมกับตนเอง อาจเป็นการเดินทางด้วยรถยนต์ส่วนตัว ด้วยรถประจำทาง (รถทัวร์) เดินทางโดยรถไฟ หรือโดยเครื่องบิน นักท่องเที่ยวสามารถเลือกใช้บริการได้อย่างสะดวกสบายตามความต้องการ

5. อภิปรายผล

    จากการศึกษาเรื่อง "การพัฒนาการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช" มีผลการศึกษาสามารถอภิปรายผล ได้ดังนี้

    1. องค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ พบว่า องค์ประกอบของการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ประกอบด้วย 1) พื้นที่สร้างสรรค์ 2) งานสร้างสรรค์ 3) ความสัมพันธ์เชิงสร้างสรรค์ 4) กิจกรรมสร้างสรรค์ 5) ผลิตภัณฑ์สร้างสรรค์ 6) เครือข่ายสร้างสรรค์ สอดคล้องกับการศึกษาของ ศิลาวัฒน์ ชัยวงศ์ และคณะ (2563) เรื่อง การพัฒนาเส้นทางการท่องเที่ยวเชิงศิลปะของกลุ่มจังหวัดล้านนา ผลการวิจัย พบว่า ศักยภาพการท่องเที่ยวศิลปะเชิงสร้างสรรค์ของกลุ่มจังหวัดล้านนา ด้านสิ่งดึงดูดใจทางการท่องเที่ยว (Attraction) พบว่า ประวัติความเป็นมาของศิลปกรรม ศิลปะพื้นบ้านและพุทธศิลปกรรมในล้านนา เช่น จิตรกรรม ประติมากรรม และสถาปัตยกรรม สามารถสะท้อนความเป็นเอกลักษณ์ของล้านนา ด้านสิ่งอำนวยความสะดวกทางการท่องเที่ยว (Amenities) พบว่า มีบริการร้านค้า ร้านอาหาร เพียงพอต่อความต้องการของนักท่องเที่ยวการจัดสถานที่นั่งพักผ่อนของนักท่องเที่ยวมีเพียงพอ ด้านการเข้าถึงแหล่งท่องเที่ยว (Accessibilities) พบว่า สภาพเส้นทางการเดินทางถึงแหล่งท่องเที่ยวมีความปลอดภัย การแสดงข้อมูลการเดินทางในระบบออนไลน์มีความชัดเจน ด้านกิจกรรมทางการท่องเที่ยว (Activities) พบว่า กิจกรรมทางการท่องเที่ยวสามารถก่อให้เกิดการสืบสานวัฒนธรรมประเพณีมีการจัดกิจกรรมบ่อยครั้งในแต่ละปี และกิจกรรมทางการท่องเที่ยวสามารถสะท้อนเอกลักษณ์เฉพาะตนทางวัฒนธรรม และด้านการบริหารจัดการท่องเที่ยว (Administration) พบว่า การมีส่วนร่วมระหว่างหน่วยงานภาครัฐ ภาคเอกชน ภาคชุมชน ในการกำหนดนโยบาย การพัฒนาแหล่งท่องเที่ยว และการสร้างโอกาสให้ชุมชนหารายได้จากกิจกรรมท่องเที่ยว
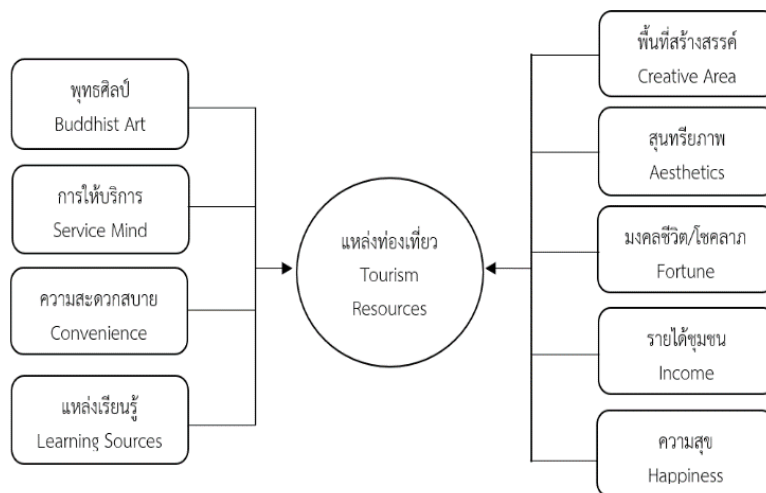
    2. การสำรวจแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช พบว่า แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ประกอบด้วย 1) วัดพระมหาธาตุวรมหาวิหาร อำเภอเมือง จังหวัดนครศรีธรรมราช 2) วัดเจดีย์ (ไอ้ไข่) อำเภอสิชล จังหวัดนครศรีธรรมราช 3) วัดธาตุน้อย อำเภอช้างกลาง จังหวัดนครศรีธรรมราช โดยทั้ง 3 วัด ล้วนเป็นแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธที่ได้รับความนิยมจากนักท่องเที่ยวเป็นจำนวนมากทั้งชาวไทยและชาวต่างประเทศ สอดคล้องกับศึกษาของพระอธิการธีรศักดิ์ จกฺกวโร (เวียงสมุทร) (๒๕๖๓) ที่ศึกษาเรื่อง การพัฒนาการบริหารจัดการท่องเที่ยววิถีพุทธของวัดในจังหวัดสมุทรปราการ ผลการศึกษาพบว่า การท่องเที่ยวเชิงสร้างสรรค์แยกออกมาจากการท่องเที่ยวเชิงวัฒนธรรม ซึ่งเป็นการท่องเที่ยวที่ให้ความสำคัญกับความผูกพันของนักท่องเที่ยวกับแหล่งท่องเที่ยว โดยการเข้าไปมีส่วนร่วมผ่านประสบการณ์ที่มาจากการเรียนรู้ในพื้นที่ท่องเที่ยว เปิดโอกาสให้กับนักท่องเที่ยวและบุคคล ในแหล่งท่องเที่ยวได้แลกเปลี่ยนเรียนรู้นักท่องเที่ยวมีส่วนร่วมในแหล่งท่องเที่ยวผ่านกิจกรรมการท่องเที่ยว และการแลกเปลี่ยนเรียนรู้ทักษะ ประสบการณ์โดยมีการออกแบบกิจกรรมขึ้นมารองรับให้สอดคล้องกับต้นทุนการท่องเที่ยวและบริบททางสังคมอย่างสร้างสรรค์ และแนวทางส่งเสริมการท่องเที่ยวเชิงสร้างสรรค์ของวัดกู่พระโกนา 5 ส่วน ดังนี้ 1) การส่งเสริมด้านการอนุรักษ์แหล่งท่องเที่ยว/ทรัพยากรธรรมชาติ

และสิ่งแวดล้อม 2) การส่งเสริมด้านกิจกรรมการท่องเที่ยว 3) ส่งเสริมการมีส่วนร่วมในการบริหารจัดการ
ท่องเที่ยว 4) การจัดการสิ่งอำนวยความสะดวกขั้นพื้นฐานและศูนย์บริการข้อมูล 5) ส่งเสริมบุคลากรและนัก
สื่อความหมายท้องถิ่น โดยออกแบบแต่ละส่วนให้สอดคล้องกับบริบทของแหล่งท่องเที่ยววัดกู่พระโกนา และไม่
ก่อให้เกิดปัญหาแก่แหล่งท่องเที่ยว โดยชุมชนมีส่วนร่วมในการจัดการท่องเที่ยว เพื่อแลกเปลี่ยนเรียนรู้และร่วม
สร้างสรรค์กิจกรรมในแหล่ง ท่องเที่ยว นอกจากนี้ยังมีการส่งเสริมปัจจัยการท่องเที่ยวเชิงสร้างสรรค์วัดกู่พระโก
นา 5 ด้าน ได้แก่ ส่งเสริมแหล่งท่องเที่ยวเชิงสร้างสรรค์ส่งเสริมผู้ประกอบการเชิงสร้างสรรค์ส่งเสริมชุมชนเชิง
สร้างสรรค์ ส่งเสริมสินค้าและบริการเชิงสร้างสรรค์และส่งเสริมการสื่อสารเชิงสร้างสรรค์ซึ่งเป็นปัจจัยที่หนุนส่ง
ให้เกิดการท่องเที่ยวเชิงสร้างสรรค์ในแหล่งท่องท่องเที่ยววัดกู่พระโกนาและชุมชนใกล้เคียง

           3. **การพัฒนาแผนที่การท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช**พบว่า การ
เดินทางสู่แหล่งท่องเที่ยวเชิงสรางสรรค์วิถีพุทธจังหวัดนครศรีธรรมราชทั้ง ๓ ที่ นักท่องเที่ยวสามารถเดินทาง
ไปเยี่ยมชมและประกอบกิจกรรมต่าง ๆ ได้อย่างสะดวกสบาย สอดคล้องกับการศึกษาของพระอธิการเวียง กิตฺ
ติวณฺโณ และพระปลัดวัชระ วชิรญาโณ (2564) ที่ได้ศึกษาเรื่อง การพัฒนาเส้นทางการท่องเที่ยวของชุมชน
ปราสาทขอมในจังหวัดสุรินทร์ ผลการศึกษาพบว่า จังหวัดสุรินทร์เป็นจังหวัดที่มีแหล่งอารยธรรมขอมขอม
โบราณที่สำคัญแห่งหนึ่งในอีสานใต้ โดยเฉพาะปราสาทขอมซึ่งเป็นโบราณสถานที่มีคุณค่าทางด้าน
ประวัติศาสตร์ชาติพันธุ์ คุณค่าทางด้านศิลปวัฒนธรรมและคุณค่าทางด้านเศรษฐกิจ ทำให้เกิดเส้นทางการ
ท่องเที่ยวทางศาสนาศาสนาและวัฒนธรรมคือที่สำหรับใช้สัญจรเที่ยวไปมาของมนุษย์ เพื่อการพักผ่อนหย่อนใจ
ในระยะเวลาสั้น ๆ จากสถานที่หนึ่งไปยังอีกสถานที่หนึ่ง โดยเส้นทางการท่องเที่ยวปราสาทขอมในงานวิจัยนี้มี
4 แห่ง คือปราสาทศีขรภูมิ ปราสาทช่างปี่ ปราสาทภูมิโปน และปราสาทตาเมือน ในการเดินทางเพื่อไปเยี่ยม
ชมหรือไปศึกษาปราสาทศีขรภูมินั้นสามารถเดินทางได้ทั้งรถยนต์ส่วนตัว รถไฟและรถโดยสารสาธารณะ
เส้นทางการเดินทาง มีดังนี้ เส้นทางหลัก รถยนต์ส่วนตัว ใช้ทางหลวงหมายเลข 226 การเดินทางมาเพื่อ
ท่องเที่ยวที่ปราสาทช่างปี่ มีเส้นทางการเดินทางดังนี้ เส้นทางหลัก การเดินทางมาปราสาทช่างปี่ ให้ใช้เส้นทาง
หมายเลข 226 สายสุรินทร์ – ศรีสะเกษ เมื่อเข้าเขตอำเภอศีขรภูมิประมาณกิโลเมตรที่ 19 แล้วเลี้ยวซ้ายเข้าไป
ประมาณ 1 กิโลเมตร การเดินทางไปปราสาทภูมิโปนนั้นสามารถเดินทางจากตัวจังหวัดสุรินทร์ซึ่งเป็นเส้นทาง
หลักหรือจะใช้เส้นทางรองโดยเมื่อเดินทางมาจากประโคนชัยใช้เส้นทางประโคนชัยเดชอุดมก็ได้ การเดินทางไป
ชมกลุ่มปราสาทตาเมือน สะดวกที่สุด คือ การเดินทางไปด้วยรถยนต์ส่วนตัว ส่วนรถยนต์สาธารณะนั้นไม่ค่อยมี
ให้บริการ การพัฒนาเส้นทางการท่องเที่ยวปราสาทขอมในจังหวัดสุรินทร์มีความเชื่อมโยงกับการท่องเที่ยว
ปราสาทขอมหรือการท่องเที่ยวเชิงศาสนาและวัฒนธรรมกับจังหวัดใกล้เคียงเช่นนครราชสีมา บุรีรัมย์ สุรินทร์
ศรีสะเกษและอุบลราชธานี

6. องค์ความรู้ใหม่

องค์ความรู้ใหม่จากการวิจัยเรื่อง "การพัฒนาการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัด นครศรีธรรมราช" สามารถสรุปเป็นโมเดล "Model : BSCL-TR-CAFIH" ดังนี้

ภาพที่ 1 : โมเดล "BSCL-TR-CAFIH"

จากการศึกษา เรื่อง "การพัฒนาการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช" ผู้วิจัย ได้รับองค์ความรู้จากการวิจัยที่สามารถนำไปประยุกต์ใช้ในการศึกษาและพัฒนาเส้นทางการท่องเที่ยวเชิง สร้างสรรค์วิถีพุทธ ภายใต้กรอบโมเดล "BSCL-TR-CAFIH" โดยสามารถอธิบายรายละเอียดได้ ดังนี้

TS = Tourism Resource (แหล่งท่องเที่ยว) หมายถึง แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัด นครศรีธรรมราชในงานวิจัยนี้ ประกอบด้วย วัดพระมหาธาตุวรมหาวิหาร อำเภอเมือง จังหวัดนครศรีธรรมราช วัดเจดีย์ (ไอ้ไข่) อำเภอสิชล จังหวัดนครศรีธรรมราช และวัดธาตุน้อย อำเภอช้างกลาง จังหวัดนครศรีธรรมราช อันเป็นสถานที่ท่องเที่ยวสำคัญทางพระพุทธศาสนาของจังหวัดนครศรีธรรมราช

B = Buddhist Art (งานพุทธศิลป์) หมายถึง แหล่งท่องเที่ยวทั้ง ๓ ที่ มีการนำเสนองานพุทธศิลป์ ของวัดอย่างหลากหลาย เป็นการนำเสนอความสวยงามทางสถาปัตยกรรม ประติมากรรม ศิลปกรรม รวมถึง งานจิตรกรรมที่ทำให้นักท่องเที่ยวรู้สึกประทับใจและซาบซึ้งใจเมื่อได้มาเยี่ยมชม

S = Service Mind (การบริการ) หมายถึง การให้บริการสิ่งต่าง ๆ ในพื้นที่ท่องเที่ยวที่มีต่อ นักท่องเที่ยวเป็นไปอย่างดียิ่ง ด้วยจิตใจที่เป็นมิตร หากนักท่องเที่ยวเกิดปัญหาหรือต้องการความช่วยเหลือ อะไร ก็จะมีเจ้าหน้าที่คอยให้ความช่วยเหลือและให้บริการอย่างเต็มความสามารถ

C = Convenience (ความสะดวกสบาย) หมายถึง แหล่งท่องเที่ยวมีความพร้อมในสิ่งอำนวยความ สะดวกสบายต่าง ๆ เช่น สถานที่จอดรถ ห้องน้ำ ที่สะอาดสะดวกและมีจำนวนที่เพียงพอ มีเจ้าหน้าที่ดูแลความ ปลอดภัย มีการบริการร้านอาหารที่ถูกสุขลักษณะ ราคายุติธรรม มีร้านค้าของที่ระลึกต่าง ๆ ที่มีคุณภาพ

L = Learning Resources (แหล่งเรียนรู้) หมายถึง แหล่งท่องเที่ยวมีสถานที่สำคัญมากมายเป็นที่รองรับการศึกษาเรียนรู้สำหรับนักท่องเที่ยวพร้อมทั้งมีข้อมูลต่าง ๆ เพื่อให้นักท่องเที่ยวศึกษาเรียนรู้และเกิดประสบการณ์ใหม่ ๆ

C = Creative Area (พื้นที่สร้างสรรค์) หมายถึง แหล่งท่องเที่ยวมีพื้นที่สร้างสรรค์ สร้างความสุขทางกายและทางใจ โดยนักท่องเที่ยวสามารถทำกิจกรรมหรือเข้าร่วมกิจกรรมต่าง ๆ ที่ทางวัดจัดขึ้นร่วมกับชุมชนหรือประชาชนทั่วไปที่เดินทางมายังวัดซึ่งเป็นแหล่งท่องเที่ยวสำคัญของจังหวัดนครศรีธรรมราช

A = Aesthetics (สุนทรียภาพ) หมายถึง ความสวยงามของแหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ ที่มีศาสนสถานต่าง ๆ แสดงให้เห็นถึงความสวยงามที่เป็นกายภาพ และเมื่อนักท่องเที่ยวได้เยี่ยมชมความงามก็จะเกิดความรู้สึกลึกซึ้งทางอารมณ์อันนำไปสู่ความสุขใจ

I = Income (รายได้ชุมชน) หมายถึง รายได้ของประชาชนในชุมชนหรือท้องถิ่นที่เป็นแหล่งท่องเที่ยวเชิงสร้างสรรค์ที่เพิ่มขึ้นจากการที่นักท่องเที่ยวได้เดินทางมาแหล่งท่องเที่ยว

F = Fortune (มงคลชีวิต/โชคลาภ) หมายถึง แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราชทั้ง ๓ ที่ เป็นสถานที่มีสิ่งศักดิ์สิทธิ์ที่ประชาชนหรือนักท่องเที่ยวมีความเคารพนับถือและศรัทธา ได้เดินทางมาเคารพสักการะบูชา ด้วยเชื่อว่าจะเป็นมงคลและเกิดความโชคดีแก่ชีวิต

H = Happiness (ความสุข) หมายถึง ความสุขที่เกิดขึ้นจากการได้เดินทางไปท่องเที่ยวยัง แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช และได้ร่วมประกอบกิจกรรมต่าง ๆ ทำให้เกิดความสุขกายสบายใจ

จากทุกองค์ประกอบที่กล่าวมา เกิดมีการประสานเชื่อมโยง และผู้มีส่วนเกี่ยวข้องทุกภาคส่วนได้ร่วมกันสร้างสรรค์แหล่งท่องเที่ยวทั้ง ๓ พื้นที่ที่กล่าวมา ก็สามารถนำไปสู่การพัฒนาพื้นที่ท่องเที่ยวให้เป็นพื้นที่สร้างสรรค์สู่ความสุขที่ยั่งยืน จนชุมชนรู้สึกตระหนักถึงความเป็นสมบัติสำคัญของชุมชน ผู้วิจัยเชื่อว่าการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราชทั้ง ๓ สถานที่ ประกอบด้วย วัดพระมหาธาตุวรมหาวิหาร วัดเจดีย์ (ไอ้ไข่) และวัดธาตุน้อย จะเป็นแหล่งท่องเที่ยวที่มีคุณค่าและสามารถสร้างรายได้ให้กับชุมชนอย่างยั่งยืน

7. สรุปผลและข้อเสนอแนะ

แหล่งท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธจังหวัดนครศรีธรรมราช ประกอบด้วยวัดพระมหาธาตุวรมหาวิหาร อำเภอเมือง วัดเจดีย์ (ไอ้ไข่) อำเภอสิชล และวัดธาตุน้อย อำเภอช้างกลาง จังหวัดนครศรีธรรมราช ทั้ง 3 สถานที่ล้วนมีความสำคัญและเป็นที่นิยมของนักท่องเที่ยวทั้งชาวไทยและชาวต่างประเทศ เป็นแหล่งท่องเที่ยวที่มีประวัติศาสตร์ที่ยาวนาน มีศาสนสถานที่มีความศักดิ์สิทธิ์ในบริบทความเชื่อความศรัทธาของผู้คน

ในแต่ละปีมีประชาชนและนักท่องเที่ยวได้เดินทางมานมัสการบูชาและเยี่ยมชมเป็นจำนวนมากและเพิ่มมากขึ้นตลอดเวลา

ในส่วนของข้อเสนอแนะ ผู้วิจัยมองว่า ทุกภาคส่วนที่เกี่ยวข้องกับการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธ จะต้องเข้ามามีส่วนช่วยสนับสนุนส่งเสริมการจัดการและการพัฒนาการท่องเที่ยวให้มีความเจริญรุ่งเรือง พัฒนาผลิตภัณฑ์ในท้องถิ่นให้มีคุณภาพและเกิดรายได้ต่อชุมชน พร้อมทั้งสร้างสรรค์กิจกรรมสำคัญต่าง ๆ ที่เกิดประโยชน์ต่อนักท่องเที่ยว และมีถ่ายทอดองค์ความรู้หรือภูมิปัญญาเกี่ยวกับการท่องเที่ยวเชิงสร้างสรรค์วิถีพุทธให้เกิดความเจริญรุ่งเรืองและยั่งยืนต่อไป

บรรณานุกรม

พระอธิการธีรศักดิ์ จกุกวโร (เวียงสมุทร). (2562). "แนวทางส่งเสริมการท่องเที่ยวเชิงสร้างสรรค์ของวัดกู่พระโกนา ตำบลสระคู อำเภอสุวรรณภูมิ จังหวัดร้อยเอ็ด", **วิทยานิพนธ์พุทธศาสตรมหาบัณฑิต สาขาวิชาพระพุทธศาสนา.** บัณฑิตวิทยาลัย: มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย.

พระอธิการธีรศักดิ์ จกุกวโร (เวียงสมุทร). (2563). "การพัฒนาการบริหารจัดการท่องเที่ยววิถีพุทธของวัดในจังหวัดสมุทรปราการ". **วิทยานิพนธ์พุทธศาสตรมหาบัณฑิต สาขาวิชาพระพุทธศาสนา.** บัณฑิตวิทยาลัย: มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย.

พระอธิการเวียง กิตติวณฺโณ และพระปลัดวัชระ วชิรญาโณ. (2564). "การพัฒนาเส้นทางการท่องเที่ยวของชุมชนปราสาทขอมในจังหวัดสุรินทร์". **รายงานการวิจัย.** สถาบันวิจัยพุทธศาสตร์: มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย.

ราชกิจจานุเบกษา. (2566). **ประกาศคณะกรรมการนโยบายการท่องเที่ยวแห่งชาติ เรื่อง แผนพัฒนาการท่องเที่ยวแห่งชาติ ฉบับที่ 3 (พ.ศ. 2566 - 2570),** (24 มีนาคม 2566), เล่ม 140 ตอนพิเศษ 70 ง.

ศิลาวัฒน์ ชัยวงศ์ และคณะ. (2563). "การพัฒนาเส้นทางการท่องเที่ยวเชิงศิลปะของกลุ่มจังหวัดล้านนา". **รายงานการวิจัย.** สถาบันวิจัยพุทธศาสตร์: มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย.

สุดแดน วิสุทธิลักษณ์ และคณะ. (2555). **ต้นแบบการท่องเที่ยวเชิงสร้างสรรค์ Creative Tourism Model.** กรุงเทพมหานคร: มหาวิทยาลัยธรรมศาสตร์.

อรสุชา สุจินพรัหม. (2558). "แนวทางการพัฒนาการท่องเที่ยวเชิงสร้างสรรค์ของไร่กาแฟ บริษัท ดอยช้างคอฟฟี่ ออริจินอล จำกัด", **ปริญญานิพนธ์บริหารธุรกิจบัณฑิต สาขาวิชาการจัดการอุตสาหกรรมเกษตร.** บัณฑิตวิทยาลัย: มหาวิทยาลัยเชียงใหม่.

การมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่น
ขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี
People's Participation in Local Development of Moo Mon Subdistrict
Administrative Organization Mueang Udon Thani District Udon Thani Province

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บทคัดย่อ

   การวิจัยครั้งนี้มีวัตถุประสงค์หลักเพื่อศึกษาการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นของ องค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี กลุ่มตัวอย่างที่ใช้ในการวิจัยคือ ประชาชนที่อยู่อาศัยและที่มีสิทธิ์เลือกตั้งในเขตองค์การบริหารส่วนตำบลหมูม่น คำนวณตามสูตรการคำนวณ ของทาโร ยามาเน่ 377 คน เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล คือแบบสอบถาม ประกอบไปด้วยเนื้อหา 3 ส่วน สถิติที่ใช้ในการวิเคราะห์ข้อมูล คือสถิติพรรณนา ได้แก่ จำนวน ร้อยละ ค่าเฉลี่ย และส่วนเบี่ยงเบน มาตรฐาน สถิติเชิงอนุมาน ได้แก่ T - test และ F - test ค่าความเชื่อมั่นของแบบสอบถามเท่ากับ 0.807

   ผลการวิจัยพบว่า

   การมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมือง อุดรธานี จังหวัดอุดรธานี โดยภาพรวมอยู่ในระดับมาก และเมื่อพิจารณารายด้าน พบว่า ด้านที่มีค่าเฉลี่ย สูงสุดคือด้านการมีส่วนร่วมตัดสินใจ ในการจัดทำโครงการกิจกรรม รองลงมาคือด้านการ มีส่วนร่วมใน ผลประโยชน์ ในการจัดทำงบประมาณรายจ่ายประจำปี และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านมีส่วนร่วมในการ ปฏิบัติการ ในการบริหารงาน

   ผลการเปรียบเทียบระดับการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วน ตำบลหมูม่น ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ โดยภาพรวมประชาชนในพื้นที่ขององค์การ บริหารส่วนตำบลหมูม่น ที่มีเพศต่างกัน มีส่วนร่วมในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น

แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ส่วนประชาชนในพื้นที่ขององค์การบริหารส่วนตำบลหมูม่น
ที่มีอายุ ระดับการศึกษา และอาชีพต่างกันมีส่วนร่วมในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น
ไม่แตกต่างกัน

      ข้อเสนอแนวทางการมีส่วนร่วมของประชาชนในการพัฒนาองค์การบริหารส่วนตำบลหมูม่น อำเภอ
เมืองอุดรธานี จังหวัดอุดรธานี ได้แก่ สนับสนุนการมีส่วนร่วมของประชาชน ในการตัดสินใจทางการเมือง การ
วางแผนพัฒนาทางเศรษฐกิจ และสังคม รวมทั้งการจัดทำบริการสาธารณะ

คำสำคัญ : การมีส่วนร่วม, การพัฒนาท้องถิ่น, องค์การบริหารส่วนตำบล

ABSTRACT

      The main objective of this research was to study people's participation in local development of Moo Mon Subdistrict Administrative Organization. Mueang Udon Thani District Udon Thani Province The samples used in this research were residents and eligible voters in Mu Mon Subdistrict Administrative Organization. Calculated according to the calculation formula of Taro Yamane, 377 people. The tool used for data collection was a questionnaire consisting of 3 parts. Statistics used to analyze the data. are descriptive statistics including number, percentage, mean and standard deviation. Inferential statistics were T - test and F - test, the questionnaire's reliability was 0.807.

      The results showed that:

      People's Participation in Local Development of Moo Mon Subdistrict Administrative Organization Mueang Udon Thani District Udon Thani Province Overall, it was at a high level. And when considering each aspect, it was found that the aspect with the highest average was the participation in decision-making. in the preparation of project activities Followed by the aspect of participation in benefits. in preparing the annual expenditure budget and the aspect with the lowest average was the participation in operations. in administration.

      Comparative results of people's participation in local development of Moo Mon Subdistrict Administrative Organization Classified by sex, age, education level and occupation by the overall population in the area of the Mu Mon Subdistrict Administrative Organization. with different sex Participation in local development of Mu Mon Sub-district Administrative Organization was significantly different at the 0.05 level. and different occupations participated in the local development of the Mu Mon Subdistrict Administrative Organization were not different.

      Proposals for guidelines for people's participation in the development of Mu Mon Subdistrict Administrative Organization Mueang Udon Thani District Udon Thani Province,

including supporting public participation in making political decisions economic and social development planning, including the preparation of public services.

Keywords: Participation, local development, subdistrict administrative organization

1. ความเป็นมาและความสำคัญของปัญหา

ความเป็นมาและความสำคัญของปัญหาการบริหารราชการเพื่อประโยชน์สุขของประชาชนตาม รัฐธรรมนูญแห่งราชอาณาจักรไทย พ.ศ.2550 และรัฐธรรมนูญแห่งราชอาณาจักรไทย พ.ศ.2560 พระราชบัญญัติระเบียบบริหารราชการแผ่นดิน (ฉบับที่ 5) พ.ศ. 2546 ให้ความสำคัญต่อการบริหารราชการ อย่างโปร่งใส สุจริต เปิดเผยข้อมูล และการเปิดโอกาสให้ประชาชนได้เข้ามามีส่วนร่วมในการกำหนดนโยบาย สาธารณะ การตัดสินใจทางการเมือง รวมถึงการตรวจสอบการใช้อำนาจรัฐในทุกระดับ การบริหารราชการงาน ณ ปัจจุบันได้เล็งเห็นถึงความสำคัญของการมีส่วนร่วมโดยให้ประชาชนเข้ามามีบทบาทในการแสดงความ คิดเห็น แสดงถึงความต้องการ เสนอปัญหาต่าง ๆ ที่เกิดขึ้น จะทำให้ผู้บริหารงานกับประชาชนได้ใกล้ชิด และ รับทราบปัญหา ความต้องการต่าง ๆ จากประชาชน หรือเรียกว่า การผลักดันให้เกิดการมีส่วนร่วมของ ประชาชน ซึ่งเป็นปัจจัยสำคัญต่อการพัฒนาประชาธิปไตยแบบมีส่วนร่วมตามหลักธรรมาภิบาลที่ภาครัฐจะเปิด โอกาสให้ประชาชนและผู้เกี่ยวข้องทุกภาคส่วนรับรู้ ร่วมคิด ร่วมตัดสินใจ และเป็นที่ยอมรับร่วมกันทุก ๆ ฝ่าย โดยการบริหารแบบมีส่วนร่วมจะเป็นรากฐานสำคัญที่ทำให้ประชาชนเกิดความสำนึกต่อการบริหารจัดการใน ท้องถิ่นของตน ซึ่งประชาชนจะรับรู้ถึงปัญหา และหนทางในการแก้ไขปัญหาในท้องถิ่น (กรมส่งเสริมส่วน ท้องถิ่น) องค์การบริหารส่วนตำบล เป็นหน่วยงานของรัฐรูปแบบปกครองท้องถิ่นรูปแบบที่ 6 และเป็นนิติ บุคคลภายใต้การกำกับดูแลของกระทรวงมหาดไทยซึ่งจัดตั้งโดยพระราชบัญญัติสภาตำบลและองค์การบริหาร ส่วนตำบล พ.ศ.2537 (แก้ไขเพิ่มเติมฉบับที่ 7 พ.ศ.2562) โดยมาตรา 69/1 บัญญัติให้การปฏิบัติงานตาม อำนาจหน้าที่ต้องเพื่อประโยชน์สุขของประชาชนโดยใช้การบริหารจัดการบ้านเมืองที่ดีคำนึงถึงการมีส่วนร่วม ของประชาชนในการจัดทำแผนพัฒนา และการจัดทำงบประมาณ

องค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี เมื่อพิจารณาจากเกณฑ์ด้าน เงินประมาณ โครงสร้างการบริหารบุคคล เศรษฐกิจสังคม ถือเป็นองค์การบริหารส่วนตำบลขนาดกลาง แบ่ง ลักษณะการปกครองด้านการเมืองแบบหมู่บ้านจำนวน 9 หมู่บ้าน คือบ้านหมูม่น หมู่ที่ 1 บ้านแวงหมู่ที่ 2 บ้านสูงแคน หมู่ที่ 3 บ้านทุ่งแร่ หมู่ที่ 4 บ้านท่าตูมหมู่ที่ 5 บ้านโนนบ่อหมู่ที่ 10 บ้านท่าตูมทองหมู่ที่ 11 บ้าน ดงเจริญหมู่ที่ 12 และบ้านหมูม่นพัฒนา หมู่ที่ 13

ผู้วิจัยเป็นประชาชนที่อาศัยอยู่และปฏิบัติงานในองค์กรปกครองส่วนท้องถิ่นดังกล่าวนี้เนื่องจากได้รับ ข้อเรียกร้องของประชาชนในพื้นที่ขอให้ดำเนินการโครงการพัฒนาต่าง ๆ ในเขตตำบลหมูม่นจึงเกิดปัญหาข้อ สงสัยว่าองค์กรปกครองส่วนท้องถิ่นดังกล่าวให้โอกาสประชาชนในท้องถิ่นนี้ได้มีส่วนร่วมในการร่วมทำกิจกรรม ต่าง ๆ มากน้อยเพียงไรโดยเฉพาะด้านการพัฒนาท้องถิ่น เช่น ทำโครงการกิจกรรม การบริหารงาน การจัดทำ งบประมาณรายจ่ายประจำปี และประชาชนที่อาศัยอยู่ในองค์กรปกครองส่วนท้องถิ่นดังกล่าวอยากมีส่วนร่วมต่อ การพัฒนาต่อท้องถิ่นดังกล่าวมากน้อยเพียงไร จึงเกิดคำถามและข้อสงสัยขึ้น จึงเป็นที่มาของการศึกษาการ วิจัย ค้นคว้า

2. วัตถุประสงค์ของการศึกษา

1. เพื่อศึกษาระดับ การมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบล หมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี

2. เพื่อศึกษาเปรียบ เทียบระดับการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การ บริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ

3. เพื่อนำข้อมูลที่ได้จากการศึกษาวิจัยไปใช้ในการเสนอแนวทางปรับปรุงแก้ไขพัฒนาองค์กรต่อไป

3. ขอบเขตของการวิจัย

1. ขอบเขตด้านเนื้อหา การศึกษาครั้งนี้ มุ่งศึกษาวิจัย การมีส่วนร่วมของประชาชนในการ พัฒนา ท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น ด้านเนื้อหา 4 ด้าน 1) ด้านการมีส่วนร่วมตัดสินใจ ในการจัดทำ โครงการกิจกรรม 2) ด้านมีส่วนร่วมในการปฏิบัติการ ในการบริหารงาน 3) ด้านการมีส่วนร่วมในผลประโยชน์ ในการจัดทำงบประมาณรายจ่ายประจำปี 4) ด้านการมีส่วนร่วมในการประเมินผล

2. ขอบเขตด้านประชาชากร ประชาชนที่มีอายุ 18 ปีขึ้นไป และเป็นผู้มีสิทธิ์เลือกตั้งในเขตองค์การ บริหารส่วนตำบลหมูม่น จำนวน 6,354 คน โดยกลุ่มตัวอย่างที่ใช้ในการศึกษาจำนวน 377 คน

3. ขอบเขตด้านพื้นที่ ประชาชนในเขตองค์การบริหารส่วนตำบลหมูม่น

4. ประโยชน์ของการวิจัย

1. เพื่อให้ทราบปัญหาและอุปสรรคในการมีส่วนร่วมของประชาชนการพัฒนาท้องถิ่นขององค์การ บริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี

2. เพื่อศึกษาถึงองค์ประกอบที่เสริมสร้างความสำเร็จของประชาชนในการเข้ามีส่วนร่วมในการพัฒนา ท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี

3. เพื่อเสนอแนวทางในการพัฒนาท้องถิ่นแบบมีส่วนร่วมมาประยุคใช้ในองค์กรปกครองส่วนท้องถิ่น และให้หน่วยงานอื่น ๆ และองค์กรเอกชน ใช้เป็นข้อมูลในการดำเนินงานพัฒนาการมีส่วนร่วมของประชาชน อย่างเหมาะสม

5. ประชากรและกลุ่มตัวอย่าง

ประชากร ประชาชนที่อยู่อาศัยและที่มีสิทธิ์เลือกตั้งในเขตองค์การบริหารส่วนตำบลหมูม่น จำนวน 6,354 คน (ข้อมูลผู้มีสิทธิ์เลือกตั้งองค์การบริหารส่วนตำบลหมูม่น ตุลาคม 2564)

การกำหนดกลุ่มตัวอย่าง ประชาชนในเขตองค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี โดยกลุ่มตัวอย่างที่ใช้ในการศึกษา จำนวน 6,354 คน จากสูตร ทาโร ยามาเน (Taro Yamane, 1973 : 125) กลุ่มตัวอย่างที่ใช้คือรวมทั้งสิ้น 377 คน

6. เครื่องมือที่ ใช้ในการรวบรวมข้อมูล

เครื่องมือที่ใช้ในการวิจัยเชิงปริมาณ ลักษณะของเครื่องมือมีรายละเอียด โดยแบ่งเป็น 3 ตอน คือดังนี้

ตอนที่ 1 ข้อมูลส่วนบุคคลของผู้ตอบแบบสอบถาม ได้แก่ เพศ อายุ ระดับการศึกษา อาชีพ มีจำนวน 4 ข้อ ลักษณะเป็นแบบเลือกตอบปลายปิด

ตอนที่ 2 การมีส่วนร่วม 4 ด้าน คือ 1.ด้านการมีส่วนร่วมตัดสินใจ ในการจัดทำโครงการกิจกรรม 2.ด้านมีส่วนร่วมในการปฏิบัติการ ในการบริหารงาน3.ด้านการมีส่วนร่วมในผลประโยชน์ ในการจัดทำงบประมาณรายจ่ายประจำปี 4. ด้านการมีส่วนร่วมในการประเมินผล เป็นแบบสอบถามปลายปิด ซึ่งเป็นคำถามที่มีคำตอบให้ ผู้ตอบเขียนเครื่องหมาย (/) ลงในช่องที่ตรงกับความเป็นจริงหรือความเห็นของตนเอง โดยแบบสอบถามที่ใช้เป็นชนิดเลือกตอบ ลักษณะมาตราส่วนประมาณค่า ตามแบบของไลเคิร์ท มีทั้งหมด 5 ระดับ

ตอนที่ 3 ความคิดเห็น/ข้อเสนอแนะของประชาชนเพื่อการมีส่วนร่วมของประชาชนต่อการพัฒนาองค์การบริหารส่วนตำบลหมูม่น เป็นแบบสอบถามปลายเปิดเป็นคำถามที่ไม่ได้กำหนดคำตอบไว้ให้เลือก แต่เปิดโอกาสให้ผู้ตอบแบบสอบถามตอบโดยใช้คำพูดของตนเอง

7. การเก็บรวบรวมข้อมูล

1. ผู้ศึกษาวิจัยทำหนังสือขอความอนุเคราะห์ในการเก็บรวบรวมข้อมูลจาก นายกองค์การบริหารส่วนตำบลหมูม่น

2. ผู้ศึกษาวิจัย ส่งแบบสอบถามด้วยตนเอง แจกแบบสอบถามและรับแบบสอบถามนำคืนมาด้วยตนเอง โดยทำการตรวจสอบความถูกต้องและความสมบูรณ์ของการตอบแบบสอบถามเพื่อใช้ในการวิเคราะห์ข้อมูล

3. สรุปผล อภิปรายผลและเขียนรายงานผล

8. การวิเคราะห์ข้อมูลและสถิติที่ใช้ในการวิจัยและสถิติที่ใช้ในการเคราะห์ข้อมูล

1. สถิติพื้นฐานได้แก่/ค่าร้อยละ/การหาค่าเฉลี่ย (Mean)และค่าเบี่ยงเบนมาตรฐาน (S.D.)

2. สถิติเชิงอนุมาน ใช้ในการวิเคราะห์ข้อมูล ดังนี้

2.1 แปรที่มี 2 กลุ่ม ได้แก่ เพศ ใช้การทดสอบที (Independent t – test)

2.2 ตัวแปรที่มี 3 กลุ่มขึ้นไป ได้แก่ อายุ สถานภาพสมรส ระดับการศึกษา อาชีพ ของผู้ตอบแบบสอบถาม ผู้วิจัยใช้การวิเคราะห์ความแปรปรวนแบบทางเดียว ถ้าพบว่ามีความแตกต่างกัน จะใช้การทดสอบรายคู่ตามวิธีการของเชฟเฟ่

9. ผลการวิจัย

สรุปผลการวิจัย เรื่องการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี สามารถสรุปออกเป็น 4 ส่วน ได้ดังนี้

1. ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม พบว่าผู้ตอบแบบสอบถามส่วนใหญ่เป็นเพศชาย จำนวน 221 คน คิดเป็นร้อยละ 58.62 และเป็นเพศหญิง จำนวน 156 คน คิดเป็นร้อยละ 41.38 อายุอยู่ระหว่าง 42 - 49

ปี จำนวน 114 คน คิดเป็นร้อยละ 30.24 มีระดับการศึกษาประถมศึกษา จำนวน 185 คน คิดเป็นร้อยละ และส่วนใหญ่ประกอบอาชีพเกษตรกรรม จำนวน 198 คน คิดเป็นร้อยละ 52.52

    2. การมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.05) และเมื่อพิจารณารายด้าน พบว่าด้านที่มีค่าเฉลี่ยสูงสุดคือด้านการมีส่วนร่วมตัดสินใจ ในการจัดทำโครงการกิจกรรม ($\overline{X}$ = 4.19) รองลงมาคือด้านการมีส่วนร่วมในผลประโยชน์ ในการจัดทำงบประมาณรายจ่ายประจำปี ($\overline{X}$ = 4.0) และด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านมีส่วนร่วมในการปฏิบัติการ ในการบริหารงาน ($\overline{X}$ = 3.97) และวิเคราะห์ข้อมูลออกเป็นแต่ละด้านได้ดังนี้

    2.1 ด้านการมีส่วนร่วมตัดสินใจ ในการจัดทำโครงการกิจกรรม โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.19, S.D.= 0.59) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 1. ได้รับทราบข่าวสารถึงรายละเอียดของ โครงการ กิจกรรม ($\overline{X}$ = 4.38, S.D.= 0.79) รองลงมาคือ ข้อ 3. มีส่วนร่วมในการประชุมรับฟังความคิดเห็นถึงรายละเอียดของ โครงการ กิจกรรม ($\overline{X}$ = 4.14, S.D.= 0.81) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 4. มีส่วนร่วมในการคิด ศึกษา และค้นคว้า หาปัญหาและสาเหตุโครงการ กิจกรรม ($\overline{X}$ = 4.09, S.D.= 0.71)

    2.2 ด้านมีส่วนร่วมในการปฏิบัติการ ในการบริหารงาน โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.97) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 6. มีส่วนร่วมในการปรึกษาหารือถึงการปฏิบัติการ การบริหารงานในสำนักงาน ($\overline{X}$ = 4.09) รองลงมาคือ ข้อ 7. มีส่วนร่วมในการประชุมรับฟังความคิดเห็นการปฏิบัติการการบริหารงานในสำนักงาน ($\overline{X}$ = 3.96) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 8. มีส่วนร่วมในการคิด ศึกษา และค้นคว้า หาปัญหาและสาเหตุการปฏิบัติการ การบริหารงานในสำนักงาน ($\overline{X}$ = 3.91)

    2.3 ด้านการมีส่วนร่วมในผลประโยชน์ ในการจัดทำงบประมาณรายจ่ายประจำปี โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.06) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 9. ได้รับทราบข่าวสาร ถึงรายละเอียดในการจัดทำงบประมาณรายจ่ายประจำปี ($\overline{X}$ = 4.13) รองลงมาคือ ข้อ 10. มีส่วนร่วมในการปรึกษาหารือในการจัดทำงบประมาณรายจ่ายประจำปี ($\overline{X}$ = 4.10) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 12. ส่วนร่วมในการคิด ศึกษา และค้นคว้า หาปัญหาและสาเหตุในการจัดทำงบประมาณรายจ่ายประจำปี ($\overline{X}$ = 3.94)

    2.4 ด้านการมีส่วนร่วมในการประเมินผล โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 3.99) และเมื่อพิจารณารายข้อ พบว่า ข้อที่มีค่าเฉลี่ยสูงสุดคือ ข้อ 15. มีส่วนร่วมในการประชุมประเมินผลการดำเนินงานประจำปี ($\overline{X}$ = 4.16) รองลงมาคือ ข้อ 16. มีส่วนร่วมในการคิด ศึกษา และค้นคว้า หาปัญหาและสาเหตุประกอบการประเมินผลการดำเนินงานประจำปี ($\overline{X}$ = 4.00) และข้อที่มีค่าเฉลี่ยน้อยที่สุดคือ ข้อ 14. มีส่วนร่วมในการปรึกษา หรือ การประเมินผลการดำเนินงานประจำปี ($\overline{X}$ = 3.87)

    3. ผลการเปรียบเทียบระดับการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ โดยภาพรวมประชาชนในพื้นที่ขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานีที่มีเพศต่างกัน มีส่วนร่วมในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่นแตกต่างกันอย่างมีนัยสำคัญทาง

สถิติที่ระดับ 0.05 ส่วนประชาชนในพื้นที่ขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัด
อุดรธานีที่มีอายุ ระดับการศึกษา และอาชีพต่างกันมีส่วนร่วมในการพัฒนาท้องถิ่นขององค์การบริหารส่วน
ตำบลหมูม่นไม่แตกต่างกัน

4. ข้อเสนอแนวทางการมีส่วนร่วมของประชาชนในการพัฒนาองค์การบริหารส่วนตำบลหมูม่น
อำเภอเมืองอุดรธานี จังหวัดอุดรธานี ได้แก่

1. ให้ประชาชนได้มีส่วนร่วมในการให้ข้อมูลที่เป็นประโยชน์ในการนำไปใช้ในการบริหารหรือ
การวางแผนงาน/โครงการต่าง ๆ รวมทั้งจัดให้มีกิจกรรมที่สนับสนุนการมีส่วนร่วมของประชาชนเพิ่มมากขึ้น

2. ควรจัดเวทีให้ประชาชนมีส่วนร่วมในการประเมินการทำงานของเจ้าหน้าที่ที่ เกี่ยวข้อง

3. หน่วยงานภาครัฐควรมีการกำหนดแผนการดำเนินงาน โดยให้ประชาชนเข้าไปมีส่วนร่วม
ในการดำเนินงานตั้งแต่กระบวนการกำหนดแนวทางและวางแผนการพัฒนาพื้นที่ร่วมกัน

4. สนับสนุนการมีส่วนร่วมของประชาชน ในการตัดสินใจทางการเมือง การวางแผนพัฒนา
ทางเศรษฐกิจ และสังคม รวมทั้งการจัดทำบริการสาธารณะ

10. อภิปรายผลการวิจัย

การมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมือง
อุดรธานี จังหวัดอุดรธานี โดยภาพรวมอยู่ในระดับมาก ($\overline{X}$ = 4.05) และเมื่อพิจารณารายด้าน พบว่า ด้านที่มี
ค่าเฉลี่ยสูงสุดคือด้านการมีส่วนร่วมตัดสินใจ ในการจัดทำโครงการกิจกรรม ($\overline{X}$ = 4.19) รองลงมาคือด้านการมี
ส่วนร่วมในผลประโยชน์ ในการจัดทำงบประมาณรายจ่ายประจำปี ($\overline{X}$ = 4.0) และด้านที่มีค่าเฉลี่ยน้อยที่สุด
คือด้านมีส่วนร่วมในการปฏิบัติการ ในการบริหารงาน ($\overline{X}$ = 3.97) ที่เป็นเช่นนี้อาจเป็นเพราะว่าทางองค์การ
บริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานีได้ให้ความสำคัญในเรื่องของการมีส่วนร่วมของ
ประชาชนในการพัฒนาท้องถิ่น เช่น มีการประชาสัมพันธ์ให้ประชาชนได้รับทราบถึงผลประโยชน์จากการ
ดำเนินการตามโครงการหรือกิจกรรมต่าง ๆ ที่ได้จัดขึ้น เช่น ติดป้ายประกาศ หรือจัดประชุมร่วมกัน ให้
ประชาชนมีส่วนร่วมในการเป็นคณะกรรมการประเมินโครงการ ควบคุมตรวจสอบการใช้ทรัพยากร ร่วมแสดง
ความคิดเห็นหรือเสนอแนะรวมทั้งมีส่วนร่วมในการตรวจสอบการบริหารงานของเทศบาลและร่วมในการรับรู้
รับทราบรายงานผลการดำเนินงานตามโครงการที่เกี่ยวเนื่องกับนโยบายสาธารณะ จึงทำให้ผลการวิจัยโดย
ภาพรวมออกมาอยู่ในระดับที่ดีสอดคล้องกับการศึกษาของ นาถนภา กอบวิยะกรณ (2560) ที่พบว่าปัจจัยใน
การจัดทำแผนชุมชนขององค์การบริหารส่วนตำบลหินเหล็กไฟ อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์ พบว่า
โดยรวมมีการปฏิบัติการอยู่ในระดับมาก และมีการปฏิบัติการอยู่ในระดับมากทุกด้าน เรียงตามลำดับดังนี้
ความรู้ความเข้าใจ การจัดเวทีประชาคม วิทยากรกระบวนการ การสื่อสาร และการวิเคราะห์ศักยภาพชุมชน
(SWOT) 3. การมีส่วนร่วมของประชาชนในการจัดทำแผนชุมชนขององค์การบริหารส่วนตำบลหินเหล็กไฟ
อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์ พบว่า โดยรวมมีส่วนร่วมอยู่ในระดับมาก เรียงตามลำดับดังนี้ การมีส่วน
ร่วมในการตัดสินใจ การมีส่วนร่วมในผลประโยชน์ และการมีส่วนร่วมในการปฏิบัติและมีส่วนร่วมอยู่ในระดับ
ปานกลาง ได้แก่ การมีส่วนร่วมในการติดตามและประเมินผล และยังสอดคล้องกับการศึกษาของบรรเจิด ฮุน
ตระกูล(2556) ที่พบว่าพบว่าระดับการมีส่วนร่วมของผู้นำชุมชนในการจัดทำแผนพัฒนาสามปีเทศบาลตำบล

ลานหอย อำเภอบ้านด่านลานหอย จังหวัดสุโขทัย โดยภาพรวมทั้ง 4 ด้านมีส่วนร่วมในระดับมากที่สุด เมื่อ
พิจารณาเป็นรายด้านพบว่า ด้านที่อยู่ในอันดับที่ 1 คือ ด้านการมีส่วนร่วมในการลงทุนและปฏิบัติงาน อันดับ
รองลงมา คือ ด้านการมีส่วนร่วมในการติดตามและประเมินผลงาน ด้านการมีส่วนร่วมในการค้นหาปัญหาและ
สาเหตุของปัญหา และอันดับท้ายสุดคือ การมีส่วนร่วมในการวางแผนดำเนินกิจกรรม

ผลการเปรียบเทียบระดับการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วน
ตำบลหมูม่น อำเภอเมืองอุดรธานี ที่จำแนกตามเพศ อายุ ระดับการศึกษา และอาชีพ โดยภาพรวมประชาชน
ในพื้นที่ขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานีที่มีเพศต่างกัน มีส่วนร่วมในการพัฒนา
ท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่นแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ส่วนประชาชน
ในพื้นที่ขององค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานีที่มีอายุ ระดับการศึกษา และอาชีพต่างกันมี
ส่วนร่วมในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่นไม่แตกต่างกัน ซึ่งสอดคล้องกับการศึกษา
ของ พรรณี บุมี และพิชิต รัชตพิบุลภพ (2565) วิจัยเรื่องการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นของ
เทศบาลตำบลไทรม้าอำเภอเมืองนนทบุรี จังหวัดนนทบุรี พบว่าด้านเพศ ผลการศึกษาระดับระดับการมีส่วน
ร่วมของประชาชนในการพัฒนาท้องถิ่นของเทศบาลตำบลไทรม้า อำเภอเมืองนนทบุรี จังหวัดนนทบุรี จำแนก
ตามเพศ โดยภาพรวมเพศชาย และเพศหญิง มีความคิดเห็นแตกต่างกัน อย่างมีนัยสำคัญเพราะเพศชายและ
เพศหญิงมีความสนใจในเรื่องการพัฒนาท้องถิ่นที่แตกต่างกัน และยังซึ่งสอดคล้องกับสมบัติ ทัพธานี (2555) ได้
วิจัยเรื่อง การมีส่วนร่วมในการจัดทำแผนพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลในเขตอำเภอหนองหาน
จังหวัดอุดรธานี ผลจากการวิจัยพบว่า การมีส่วนร่วม ของประชาชนในการจัดทำแผนพัฒนาท้องถิ่นมีความ
แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ.01 เมื่อพิจารณาในแต่ละด้านพบว่าประชาชนมีส่วนร่วมในการ
จัดทำแผนพัฒนาท้องถิ่นแตกต่างกัน อย่างมีนัยสำคัญทางสถิติที่ระดับ .01 ทั้ง 4 ด้าน สอดคล้องกับงานวิจัย
ของลดาวรรณ์ มหาโชติ (2561) วิจัยเรื่องการมีส่วนร่วมของประชาชนในการพัฒนาชุมชนกรณีศึกษา ชุมชน
บ้านป่าดิบ ตำบลทุ่งทอง อำเภอท่าม่วง จังหวัดกาญจนบุรี พบว่าประชาชนในการพัฒนาชุมชนบ้านป่าดิบ
ตำบลทุ่งทอง อำเภอท่าม่วง จังหวัดกาญจนบุรี ในภาพรวมและรายด้านไม่แตกต่างกัน และด้านระดับ
การศึกษา พบว่า ประชาชนในการพัฒนาชุมชนบ้านป่าดิบ ตำบลทุ่งทอง อำเภอท่าม่วง จังหวัดกาญจนบุรี ใน
ภาพรวมและรายด้านไม่แตกต่างกัน

11. ข้อเสนอแนะ

1. ข้อเสนอแนะในการนำผลการวิจัยในครั้งนี้ไปใช้

จากผลการวิจัยการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่นขององค์การบริหารส่วนตำบลหมูม่น
อำเภอเมืองอุดรธานี จังหวัดอุดรธานี พบว่าด้านที่มีค่าเฉลี่ยน้อยที่สุดคือด้านมีส่วนร่วมในการปฏิบัติการ ใน
การบริหารงาน และควรมีการดำเนินการดังนี้

1. ส่งเสริมให้ประชาชนในองค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัด
อุดรธานี เข้ามามีส่วนร่วมในการดูแลสาธารณธูปโภคของชุมชน เช่น ถนน ไฟฟ้า ศาลาอเนกประสงค์รวมถึง
สมบัติและทรัพยากรในชุมชนให้สามารถใช้ประโยชน์ได้อย่างคุ้มค่า

     2. สนับสนุนการมีส่วนร่วมของประชาชนในการติดตามประเมินผลในด้านการปฏิบัติงาน การบริหารงาน การตรวจสอบและควบคุมการใช้ทรัพย์สินและงบประมาณ และการติดตามประเมินผลงบประมาณต่าง ๆ องค์การบริหารส่วนตำบลหมูม่นให้มากขึ้น

     3. สนับสนุนการมีส่วนร่วมของประชาชนในการเป็นกรรมการพิจารณางบประมาณตามโครงการต่าง ๆ และให้ประชาชนมีส่วนร่วมประสานงานกับหน่วยงานที่เกี่ยวข้อง เพื่อให้การดำเนินงานบรรลุผลสำเร็จ

     2. ข้อเสนอแนะในการวิจัยครั้งต่อไป

     2.1 ควรมีการศึกษาปัญหา อุปสรรค ปัจจัย ทัศนคติและแรงจูงใจที่ส่งผลต่อการมีส่วนร่วมของผู้นำชุมชนในการจัดทำแผนพัฒนา เพื่อเป็นแนวทางในการปรับปรุง พัฒนา และสามารถแก้ปัญหาได้อย่างมีประสิทธิภาพให้ดียิ่งขึ้น

     2.2 ควรมีการศึกษาเปรียบเทียบการมีส่วนร่วมของประชาชนในการพัฒนาท้องถิ่น ในจังหวัดอุดรธานี กับอำเภออื่น ๆ หรือเปรียบเทียบกันในแต่ละตำบล

บรรณานุกรม

ณัฐณิชา กงพะลี. (2552). **การมีส่วนร่วมของประชาชนในการจัดทำแผนพัฒนาองค์การบริหารส่วนตำบลแก่งเลิงจาน อำเภอเมืองจังหวัดมหาสารคาม**. ในวิทยานิพนธ์รัฐประศาสนศาสตรมหาบัณฑิต. มหาวิทยาลัยราชภัฏมหาสารคาม.

บุญชัย เกิดปัญญาวัฒน์. (2535). **การศึกษาความเหมาะสม ในการมีส่วนร่วมของประชาชน ต่อกระบวนการประเมินผลกระทบสิ่งแวดล้อม .** กรุงเทพฯ: มหาวิทยาลัยมหิดล.

ปาริชาติ วลัยเสถียร และคณะ. (2543). **กระบวนการและเทคนิคการทำงานนักพัฒนา.** กรุงเทพฯ : จุฬาลงกรณ์มหาวิทยาลัย.

ราชกิจจานุเบกษา เล่ม 111/ตอนที่ 53 ก/2 ธันวาคม 2537. พระราชบัญญัติสภาตำบลและองค์การบริหารส่วนตำบล พ.ศ. 2537.

ราชกิจจานุเบกษา เล่ม 114/ตอนที่ 55 ก/11 ตุลาคม 2540. รัฐธรรมนูญแห่งราชอาณาจักรไทย พุทธศักราช 2540.

สมบูรณ์ ธรรมลงกา. (2556). **รูปแบบการเสริมสร้างความเข้มแข็งของชุมชนโดยใช้ภูมิปัญญาท้องถิ่นเป็นฐานในจังหวัดเชียงราย**. ปริญญาดุษฎีบัณฑิต : สาขาการศึกษาและการพัฒนาสังคม คณะครุศาสตร์ มหาวิทยาลัยราชภัฏเชียงราย.

องค์การบริหารส่วนตำบลหมูม่น อำเภอเมืองอุดรธานี จังหวัดอุดรธานี. (2561). **ข้อมูลจำนวนประชากรและเขตการปกครอง.** อำเภอเมืองอุดรธานี จังหวัดอุดรธานี.

Cronbach, L.J. (1990). **Essentials of psychological testing.** (5th ed.). New York: Harper & Row.

Kaplan, R. S. and Norton, D. P. (1996). **The Balanced Scorecard: translating strategy in action.** Boston: Harvard Business School Publishing Corporation.

Taro Yama ne. (1973). **Statistics: An Introductory Analysis.** 3rdEd. New York. Harper and RowPublications.

รูปแบบการบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะ
เพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล
A Model of Integration of the Postmodern Philosophy and the Buddhist Teaching of Sappaya into the Development of Temples to Create Happiness in the Digital Society

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บทคัดย่อ

     บทความวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ศึกษามโนทัศน์เกี่ยวกับการพัฒนาวัดสร้างสุขในสังคมดิจิทัล 2) ศึกษาปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะ 3) บูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะเพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล 4) สร้างองค์ความรู้ใหม่และรูปแบบการบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะเพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล เป็นการวิจัยเชิงคุณภาพ ด้วยวิธีการวิจัยเชิงเอกสารและการศึกษาภาคสนาม ภายใต้กระบวนการศึกษาเชิงวิเคราะห์ วิจักษ์ และวิธาน เพื่อนำไปสู่การสร้างองค์ความรู้ใหม่ทางปรัชญาและศาสนา ผลการวิจัยพบว่า การพัฒนาวัดสร้างสุขเป็นการพัฒนาอย่างสอดคล้องระหว่างวัด บ้าน และชุมชน ผู้เกี่ยวข้องทุกฝ่ายจะต้องร่วมมือกันในการพัฒนาและแก้ปัญหาต่าง ๆ โดยเฉพาะพุทธบริษัททั้ง 4 ต้องร่วมกันพัฒนาในกิจกรรมทุกอย่าง สำหรับการพัฒนาวัดสร้างสุขในสังคมดิจิทัลนั้น เน้นการพัฒนาแบบบูรณาการให้เกิดความสมดุลใน 4 ด้าน ได้แก่ 1) ด้านกายภาพ 2) ด้านจิตภาพ 3) ด้านพฤติภาพ และ 4) ด้านปัญญาภาพ ด้วยการมีส่วนร่วมอย่างเข้มแข็งของทุกฝ่ายที่เกี่ยวข้อง ซึ่งจะนำไปสู่การพัฒนาวัดสร้างสุขในสังคมดิจิทัลอย่างยั่งยืน โดยแนวทางในการพัฒนาวัดสร้างสุข

นั้น ได้บูรณาการด้วยปรัชญาหลังนยุคของมิเชล ฟูโกต์ และหลักพุทธธรรมแห่งสัปปายะ ประกอบด้วย หลักอาวาสสัปปายะ หลักโคจรสัปปายะ หลักภัสสสัปปายะ หลักปุคคลสัปปายะ หลักโภชนสัปปายะ หลักอุตุสัปปายะ และหลักอิริยาปถสัปปายะ เป็นเครื่องมือการพัฒนาวัดสร้างสุขในสังคมดิจิทัล เพื่อปรับแก้ ปัญหาใน 4 ด้าน ได้แก่ ด้านกายภาพ ด้านจิตภาพ ด้านพฤติภาพ และด้านปัญญาภาพ ซึ่งจะก่อให้เกิดการ พัฒนาวัดให้เป็นพื้นที่สร้างสุขแก่ทุกคน องค์ความรู้ใหม่จากการวิจัย นี้คือ TCH Model : LS+BMBW

คำสำคัญ : การบูรณาการ, ปรัชญาหลังนวยุค, พุทธธรรมแห่งสัปปายะ, การพัฒนา, วัดสร้างสุข

ABSTRACT

The objectives of this dissertation were to: 1) study concepts regarding the development of temples that create happiness in a digital society, 2) study the post-Nova era philosophy and the Buddhist principles of Sappaya, 3) integrate the postmodern philosophy and the Buddhist principles of Sappaya for the development of temples to create happiness in a digital society, 4) Create new knowledge and a model for integrating postmodern philosophy and Buddhist principles of Sappaya for the development of temples to create happiness in a digital society. This research was a qualitative one based documentary research and field study upon the analytic, appreciative and applicative approach so as to lead to the creativity of new body of knowledge in philosophy and religion. The research findings suggest that the development of Temples to create Happiness requires cooperation between the temple, home, and community. All parties involved must work together to address various issues, with a particular emphasis on the four Buddhist companies working together in every activity. The goal is to achieve balance in four key areas: physical, mental, behavioral, and intellectual, with the active participation of all stakeholders. This approach will lead to sustainable development of Temples to create Happiness in the digital society. To achieve this, guidelines have been developed that integrate Michel Foucault's postmodern philosophy with the Buddhist principles of Sappaya. These principles include Avasa-sappaya, Gocara-Sappaya, Bhassa-sappaya, Puggala-sappaya, Bojana-sappaya, Utu-sappaya, and Iriyapatha-sappaya, and serve as a tool for developing temples that create happiness in a digital society. By addressing problems in the four key areas mentioned above, the temple can become a space that creates happiness for everyone. Finally, the research has resulted in the development of the **TCH Model: LS+BMBW**, which represents a new body of knowledge in this area.

Keywords: Integration, Postmodern Philosophy, Buddhist principles of Sappaya, Development, Temples to create Happiness

1. บทนำ

    สังคมดิจิทัล เป็นสังคมที่เกิดขึ้นบนโลกออนไลน์ (สามารถเชื่อมต่อกันได้) และโลกออฟไลน์ (ใช้โดยปราศจากการเชื่อมต่อ) ที่เชื่อมโยงกันอย่างลงตัว ผู้คนสามารถดำเนินกิจกรรมต่าง ๆ สอดคล้องกับไลฟ์สไตล์ของตนเองได้ทั้งในรูปแบบบุคคลและแบบเครือข่าย เมื่อใดก็ได้ (Whenever) และที่ไหนก็ได้ (Wherever) โดยอำนาจในการออกแบบอยู่ในมือของผู้บริโภคโดยสมบูรณ์ (ปิยะชาติ อิศรภักดี, 2559: 44) และเป็นสังคมแห่งการประยุกต์ใช้เทคโนโลยีในการดำเนินชีวิต สำหรับประเทศไทยนั้นได้มีพระราชบัญญัติการพัฒนาดิจิทัลเพื่อเศรษฐกิจและสังคม พ.ศ. 2560 มาตรา 6 นโยบายและแผนระดับชาติว่าด้วยการพัฒนาดิจิทัลเพื่อเศรษฐกิจและสังคม มีเป้าหมายและแนวทางอย่างชัดเจนเพื่อรองรับการพัฒนาในมิติต่าง ๆ อย่างสอดคล้อง

    วัด จัดเป็นสถานที่ทางศาสนาโดยปรกติมีโบสถ์ วิหาร และที่อยู่ของสงฆ์หรือนักบวช เป็นต้น (ราชบัณฑิตยสถาน, 2556 :1104) เป็นสถานที่อยู่จำพรรษาของพระภิกษุ สามเณร วัดเป็นสถานศึกษาให้ความรู้แก่กุลบุตรธิดาชาวพุทธมาตั้งแต่อดีตจนเข้าสู่สังคมปัจจุบัน วัดได้มีการเปลี่ยนแปลงบทบาทหน้าที่มากมาย เช่น วัดเป็นแหล่งเรียนรู้เรื่องราวทางประวัติศาสตร์ โบราณคดีทางพระพุทธศาสนา เป็นแหล่งท่องเที่ยวทางพระพุทธศาสนา หรือเป็นสถานที่จำหน่ายสินค้าของที่ระลึกต่าง ๆ เป็นต้น

    เมื่อสังคมโลกมีการเปลี่ยนแปลงไปในทุกมิติจนกลายเป็นสังคมดิจิทัล สำหรับสังคมดิจิทัลนั้น กล่าวได้ว่าเป็นสังคมที่ผู้คนใช้เทคโนโลยีสมัยใหม่ในการติดต่อสื่อสาร ทำธุรกิจการค้า หรือการทำธุรกรรมการเงินโดยผ่านระบบออนไลน์แทบทุกอย่าง ซึ่งส่วนหนึ่งก็ก่อให้เกิดปัญหาที่ส่งผลกระทบต่อกิจกรรมต่าง ๆ ภายในวัดด้วย เมื่อเป็นเช่นนี้ วัดจึงจำเป็นต้องมีการพัฒนาปรับปรุงในมิติต่าง ๆ เพื่อให้สอดคล้องกับสังคมภายนอก ต้องมีการพัฒนาวัดในรูปแบบต่าง ๆ ที่ทันสมัย หรือสอดคล้องกับวิถีชีวิตสมัยใหม่ของผู้คนอย่างหลีกเลี่ยงไม่ได้ การพัฒนาวัด คือ การดูแลรักษา และการปรับปรุงวัดให้เจริญขึ้น หรือเป็นไปในทิศทางที่ดีขึ้น โดยการบริหารจัดการให้วัดมีความเป็นระเบียบเรียบร้อย สะอาด ร่มรื่น ดูโปร่ง สบายตา และเป็นสถานที่สงบร่มเย็น ไม่มีเสียงอึกทึกครึกโครม เป็นที่เกิดศรัทธาแก่ผู้พบเห็น หากแต่การนี้ต้องอาศัยศักยภาพของวัดและพระภิกษุสามเณรภายในวัด รวมถึงศรัทธาความเลื่อมใสของสาธุชน จึงจะทำให้การพัฒนาวัดในรูปลักษณ์ธรรมดาทั่วไปให้กลายเป็นการพัฒนาวัดสร้างสุขในสังคมดิจิทัล ด้วยเหตุผลที่กล่าวมา ถือเป็นปัจจัยอันสำคัญยิ่งที่ทำให้ผู้วิจัยเกิดแรงบันดาลใจในการศึกษาและจัดทำการวิจัยเรื่องนี้

    การพัฒนาวัดสร้างสุขในสังคมดิจิทัลจำเป็นต้องอาศัยปัจจัยหลายอย่าง ไม่ว่าจะเป็นปัจจัยที่เป็นวัตถุหรือปัจจัยที่เป็นองค์ความรู้ด้านต่าง ๆ ดังนั้น ในการศึกษาครั้งนี้ ผู้วิจัยจึงต้องการนำเสนอปัจจัยที่เป็นองค์ความรู้เพื่อการพัฒนาวัดสร้างสุข ได้แก่ หลักปรัชญาหลังนวยุค และหลักพุทธธรรมแห่งสัปปายะเข้ามาบูรณาการปรับใช้ในการพัฒนาวัดสร้างสุขเพื่อให้เกิดความสอดคล้องกับการพัฒนาด้านวัตถุและด้านอื่น ๆ โดยผู้วิจัยมองว่า หลักปรัชญาหลังนวยุคที่น่าจะนำมาเป็นแนวทางในการพัฒนาวัดสร้างสุขในสังคมดิจิทัล ได้แก่ แนวคิด

สำคัญของมิเชล ฟูโกต์ เรื่องเทคโนโลยีทางการตลาด และเทคโนโลยีแห่งตน ควบคู่ไปกับหลักพุทธธรรมแห่ง
สัปปายะทางพระพุทธศาสนา

ในการพัฒนาวัดให้เป็นวัดสร้างสุขนั้นจะสามารถทำได้อย่างไร อันนี้ถือเป็นประเด็นคำถามที่สำคัญที่ทาง
วัดจะต้องแสวงหาแนวทางการพัฒนาเพื่อให้วัดเป็นพื้นที่สร้างสุขให้กับทุกคน วัดจะต้องแสดงบทบาทความ
เป็นพื้นที่สร้างความสุขให้ทุกคนที่เดินทางมายังวัดเกิดความสุขกายสบายใจ จะต้องสร้างพื้นที่ภายในวัดให้มี
ความแตกต่างจากพื้นที่ภายนอก แต่ประเด็นปัญหาของวัดจำนวนมากในสังคมปัจจุบันนั้น ยังไม่สามารถสร้าง
พื้นที่ภายในวัดให้เป็นพื้นที่สร้างสุขอย่างที่ผู้คนในสังคมปัจจุบันต้องการได้ โดยยังมีปัญหาต่าง ๆ มากมายที่วัด
จะต้องรีบดำเนินการพัฒนาให้สอดคล้องกับความต้องการของผู้คนในสังคมสมัยใหม่ ได้แก่ ปัญหาการบริหาร
จัดการวัด ปัญหาการจัดการพื้นที่ภายในวัด เช่น สถานที่จอดรถ ที่นั่งพักผ่อนหย่อนใจ ห้องน้ำที่สะอาดและ
เพียงพอ ปัญหาการจัดการสภาพแวดล้อมภายในวัด ปัญหาการจัดการเกี่ยวกับสัตว์ เช่น สุนัข แมว ปัญหาการ
ให้ข้อมูลข่าวสารเกี่ยวกับสิ่งสำคัญภายในวัด หรือปัญหาด้านกิจกรรมต่าง ๆ ที่วัดควรมีไว้เพื่อรองรับผู้สนใจ
เช่น กิจกรรมการปฏิบัติธรรม การให้ทาน รักษาศีล เป็นต้น โดยในการพัฒนาวัดสร้างสุขนั้น ผู้เกี่ยวข้อง
จำเป็นต้องพัฒนาวัดให้ได้มาตรฐานด้วย โดยแนวทางการพัฒนาวัดให้เป็นวัดได้มาตรฐานนั้น สำนักงาน
พระพุทธศาสนาแห่งชาติได้จัดทำหนังสือ "แนวทางการพัฒนาวัดสู่ความเป็นมาตรฐาน" โดยมีเกณฑ์มาตรฐาน
การพัฒนาวัด หมายถึง ระดับการปรับปรุงสภาพวัดและการดำเนินกิจกรรมต่าง ๆ ของวัดจนกระทั่งมีความ
เจริญรุ่งเรืองเป็นศูนย์รวมจิตใจของประชาชนและเป็นศูนย์กลางของชุมชนโดยดำเนินงานตามแนวทางการ
พัฒนาวัด ดังนี้

1. มาตรฐานการพัฒนาวัดให้เกิดความรู้สึกแก่ชุมชนในท้องถิ่นนั้นว่า วัดเป็นของ ๆ ตนมีความรู้สึก
หวงแหนและช่วยกันดูแลรักษา

2. มาตรฐานการสร้างวัดให้มีความหมายใน 5 ประการ คือ

- เป็นที่พักอาศัยของพระภิกษุสามเณร
- เป็นที่บวชเรียนศึกษาปฏิบัติธรรม
- เป็นที่ทำบุญบำเพ็ญกุศลของชาวบ้าน
- เป็นที่ที่ชาวบ้านได้เข้ามาหาความสงบทางกายทางใจ
- เป็นศูนย์กลางสำหรับทำกิจกรรมทางสังคมร่วมกันของชาวบ้าน

3. มาตรฐานการสร้างความสัมพันธ์ระหว่างวัดกับประชาชนในท้องถิ่นวัดต้องสะอาดร่มรื่นมีการ
จัดกิจกรรมเพื่อประชาชนที่เข้าวัดเพื่อบำเพ็ญกุศลศึกษาพระธรรมวินัยและหลักพระพุทธศาสนา

4. มาตรฐานการสร้างความเป็นอันหนึ่งอันเดียวกันระหว่างวัดกับประชาชนในท้องถิ่นในการติดต่อ
กับหน่วยงานอื่น ๆ การจัดกิจกรรมเพื่อการสาธารณูปโภคสาธารณูปการ

มาตรฐานการยอมรับว่า วัดกับชุมชนนั้น ๆ เป็นหน่วยงานเดียวกันให้ความช่วยเหลือ เกื้อกูลซึ่งกันและ
กัน (กองพุทธศาสนสถาน สำนักงานพระพุทธศาสนาแห่งชาติ, 2553: 1-6)

ในการพัฒนาวัดสร้างสุขในสังคมดิจิทัล เมื่อมองในมิติทางปรัชญา การเปลี่ยนแปลงทางสังคมโดยใช้ความเจริญก้าวหน้าทางเทคโนโลยีและกลไกการตลาดที่ก่อให้เกิดการเติบโตขนาดใหญ่ การเพิ่มผลผลิตในเชิงอุตสาหกรรมและการบริโภคเป็นตัวขับเคลื่อน จนกระทั่งเป็นผลเสียต่อสิ่งแวดล้อม ชีวิตมนุษย์ สัตว์ รวมถึงธรรมชาติแวดล้อม โดยไม่คำนึงถึงข้อจำกัดด้านกายภาพ ศักยภาพในการผลิต ความสามารถที่จะรองรับการบริโภคและการใช้ประโยชน์จากการพัฒนา จนทำให้เกิดกระแสต่อต้านสังคมแบบสมัยใหม่ โดยนักปรัชญาได้พยายามเสนอแนวคิดต่าง ๆ เพื่อหวังให้คนในสังคมได้เกิดความรู้ความเข้าใจอย่างถูกต้อง และพร้อมที่จะปฏิบัติไปในทิศทางเดียวกันเพื่อความสงบสุขของสังคม โดยเฉพาะอย่างยิ่งในเรื่องการพัฒนาทรัพยากรธรรมชาติและสิ่งแวดล้อมที่ต้องพยายามแสดงให้เห็นคุณค่าของสิ่งแวดล้อม ให้คนในสังคมเห็นตามความจริงของคุณค่าทรัพยากรธรรมชาติและสิ่งแวดล้อมนั้น ๆ และรู้จักปกป้องหวงแหนทรัพยากรธรรมชาติและสิ่งแวดล้อมให้เกิดความยั่งยืนด้วยการพยายามคิดแนวทางการพัฒนาที่ยั่งยืน

แนวความคิดปรัชญาหลังนวยุค เป็นแนวคิดที่เกิดขึ้นในโลกตะวันตก มีแนวคิดในการสร้างบรรทัดฐานทางสังคมให้เกิดการยอมรับในอัตลักษณ์ความเป็นตัวตน ยอมรับแนวคิดการเสวนาปรึกษาหารือปรองดอง ซึ่งนำไปสู่การสร้างสรรค์สังคมให้ทุกคนอาศัยอยู่อย่างมีความสุข รวมไปถึงการใช้เทคโนโลยีอันล้ำสมัยในการดำเนินชีวิตในสังคมปัจจุบันอย่างมีความสมดุลระหว่างมนุษย์กับการพัฒนา ซึ่งสอดคล้องกับแนวคิดของ มิเชล ฟูโกต์ (Michel Foucault) (อภิภา ปรัชญพฤทธิ์, 2554: 57-58) ที่พยายามให้สังคมยอมรับข้อเท็จจริงในความเป็นมนุษย์ที่เป็นเพียงส่วนหนึ่งของการพัฒนา ปฏิเสธพฤติกรรมที่ถูกปรุงแต่งขึ้นอย่างจารีตประเพณี ที่ขาดหลักการของความเป็นธรรมชาติ แนวคิดของมิเชล ฟูโกต์นั้น หากมองในแง่ของการพัฒนาแล้ว ก็สามารถกล่าวได้ว่า การยอมรับความเป็นจริงของการพัฒนานั้น เป็นแนวทางที่มนุษย์ในสังคมโลกควรยึดถือ และตั้งเป็นบรรทัดฐานที่เป็นอันหนึ่งอันเดียวกัน เพื่อลดทอนอำนาจแห่งบุคคลที่จะสามารถแสวงหาประโยชน์จากธรรมชาติ จนเกิดความเลื่อมล้ำของสังคมหลังนวยุค และเมื่อมองกระบวนทรรศน์แห่งพุทธธรรมแล้ว หลักพุทธธรรมแห่งสัปปายะมีความสอดคล้องกับปรัชญาหลังนวยุค ที่พยายามมุ่งเน้นให้มนุษย์สำนึกถึงความเป็นส่วนหนึ่งของธรรมชาติและการพัฒนาที่ไม่สามารถแยกออกจากกันได้ และพยายามปรับตัวและเรียนรู้ถึงการอิงอาศัยกันระหว่างมนุษย์กับโลกหรือสิ่งแวดล้อม ซึ่งในมุมมองของผู้วิจัยนั้น เชื่อว่าหลักพุทธธรรมได้มุ่งเน้นให้มนุษย์สามารถอยู่ร่วมในสังคมแห่งการพัฒนาในสังคมดิจิทัล

หลักพุทธธรรมแห่งสัปปายะ ถือเป็นแนวคิดทางพระพุทธศาสนาที่พระพุทธเจ้าตรัสถึงหลักสัปปายะ (ม.อุ.อ. (ไทย) 3/189/117) โดยผู้วิจัยมองว่า เป็นแนวคิดสำคัญพื้นฐานที่มีความเหมาะสมสำหรับการนำมาเป็นเครื่องมือบูรณาการในการพัฒนาวัดให้เกิดความเจริญรุ่งเรืองในมิติต่าง ๆ อย่างยั่งยืน ซึ่งในงานวิจัยนี้ ผู้วิจัยพิจารณาเห็นว่า หลักพุทธธรรมดังกล่าว สามารถนำมาเป็นกรอบแนวทางของการพัฒนาวัดสร้างสุขในสังคมดิจิทัล โดยการบูรณาการปรับแก้ปัญหาที่เกิดขึ้นในการพัฒนาวัดสร้างสุข โดยสรุปปัญหาเป็น 4 ประเด็น ได้แก่ 1) ปัญหาด้านกายภาพ เช่น ปัญหาการจัดการพื้นที่ภายในวัด การแบ่งเขตพื้นที่ภายในวัด การตกแต่งสถานที่ต่าง ๆ ภายในวัดให้น่าสนใจ การใช้ประโยชน์ที่ดินข้างเคียง (สถานที่จอดรถ ตลาด แผงลอย ร้านค้าขายอาหารเครื่องดื่ม ร้านสินค้าที่ระลึก ศาลาที่นั่งพัก และห้องสุขา เป็นต้น 2) ปัญหาด้านจิตภาพ เช่น ปัญหาการตระหนักรู้ในเรื่องต่าง ๆ ของผู้เกี่ยวข้องทุกฝ่ายในการพัฒนาวัดสร้างสุข 3) ปัญหาด้านพฤติภาพ เช่น ปัญหา

เกี่ยวกับพฤติกรรม ของบุคคลต่าง ๆ ที่เกี่ยวข้องกับการพัฒนาวัดสร้างสุข และ 4) ปัญหาด้านปัญญาภาพ เช่น ปัญหาเกี่ยวกับการสร้างองค์ความรู้ การถ่ายทอดองค์ความรู้ต่าง ๆ สู่บุคคลทั่วไป ปัญหาเหล่านี้ ล้วนส่งผล กระทบต่อการเปลี่ยนแปลงและการพัฒนาวัดสร้างสุข และผู้วิจัยมองว่า การนำหลักปรัชญาหลังนวยุคและ หลักพุทธธรรมแห่งสัปปายะมาบูรณาการเพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล จะเป็นเครื่องมือสำคัญของ การพัฒนาวัดสร้างสุขได้

จากเหตุผลที่กล่าวมา ผู้วิจัยได้เห็นถึงความสำคัญของการพัฒนาวัดสร้างสุข จึงเกิดความสนใจศึกษาเรื่อง นี้ โดยการนำหลักปรัชญาหลังนวยุค โดยเฉพาะการนำแนวคิดว่าด้วยเทคโนโลยีทางการตลาดของมิเชล ฟูโกต์ และหลักพุทธธรรมแห่งสัปปายะ อันเป็นหลักคำสอนทางพระพุทธศาสนามาบูรณาการเป็นแนวทางการพัฒนา วัดสร้างสุขในสังคมดิจิทัล ที่มีความสอดคล้องกับแผนพัฒนาเศรษฐกิจและสังคมแห่งชาติ ฉบับที่ 13 เพื่อเป็น อีกหนึ่งทางเลือกของการพัฒนาเชิงพื้นที่ให้เกิดประโยชน์กับประชาชนและแก่ผู้เกี่ยวข้องทุกภาคส่วนในสังคม ดิจิทัลอย่างสมดุลและยั่งยืน

2. วัตถุประสงค์การวิจัย

1. เพื่อศึกษามโนทัศน์เกี่ยวกับการพัฒนาวัดสร้างสุขในสังคมดิจิทัล

2. เพื่อศึกษาปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะ

3. เพื่อบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะเพื่อการพัฒนาวัดสร้างสุขในสังคม ดิจิทัล

4. เพื่อสร้างองค์ความรู้ใหม่และรูปแบบการบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่ง สัปปายะเพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล

3. วิธีดำเนินการวิจัย

การวิจัยนี้เป็นการวิจัยเชิงคุณภาพ (Qualitative research) ด้วยวิธีการวิจัยเชิงเอกสาร (Documentary research) และการศึกษาภาคสนาม (Field study) ภายใต้กระบวนการวิจัยทางปรัชญาแบบวิภาษวิธี (Dialectic method) และการใช้เหตุผลแบบมีวิจารณญาณ (Discursive method) ผู้วิจัยจะศึกษาค้นคว้า และรวบรวมข้อมูลจากเอกสารสำคัญต่าง ๆ เพื่อการวิเคราะห์วิจารณ์ โดยมีขั้นตอนการดำเนินการศึกษา ดังนี้

1. เอกสารชั้นปฐมภูมิ (Primary source) จะค้นคว้าจากคัมภีร์พระไตรปิฎก 45 เล่ม โดยเฉพาะ พระไตรปิฎกภาษาไทย ฉบับมหาจุฬาลงกรณราชวิทยาลัย พ.ศ.2539 รวมทั้งคัมภีร์อรรถกถา ฎีกา และอนุฎีกา ที่เกี่ยวข้องกับหัวข้อวิจัยที่ศึกษา

2. เอกสารชั้นทุติยภูมิ (Secondary source) จะศึกษาค้นคว้า รวบรวมข้อมูลจากหนังสือ ตำรา วิทยานิพนธ์ งานวิจัย บทความ ข้อเขียน บทวิจารณ์ เอกสารต่าง ๆ ทั้งที่เป็นภาษาไทยและภาษาอังกฤษที่ได้ กล่าวถึงเรื่อง แนวคิด ทฤษฎีเกี่ยวกับการพัฒนา การพัฒนาวัด ความสุข และสังคมดิจิทัล

3. การสัมภาษณ์กลุ่มบุคคลที่ได้รับการคัดเลือกแล้วว่า เป็นผู้มีความรู้และประสบการณ์เกี่ยวกับการพัฒนาวัด การพัฒนาพื้นที่ โดยตรงและสามารถให้ข้อมูลตรงตามวัตถุประสงค์ของการวิจัยครั้งนี้ได้ จำนวน 15 รูป/คน

4. ผู้วิจัยทำการตรวจสอบความถูกต้อง ความสอดคล้องและความสมบูรณ์ครบถ้วนของข้อมูลที่ได้จากการศึกษา นำข้อมูลที่ได้มาทำการวิเคราะห์และอภิปรายผลตามวัตถุประสงค์ของการวิจัยที่ตั้งไว้ จึงถูกนำเสนอออกมาในรูปแบบของการเขียนอภิปรายแบบพรรณนาวิเคราะห์ (Analytical description) ด้วยการบูรณาการ (integration) แนวคิดเกี่ยวกับการพัฒนาวัดสร้างสุขให้มีความเชื่อมโยงเป็นเนื้อเดียวกันภายใต้การศึกษาเชิงวิเคราะห์ (analysis) วิจักษ์ (appreciation) และวิธาน (application) เพื่อนำไปสู่การสร้างองค์ความรู้ใหม่ทางปรัชญาและศาสนา

4. ผลการวิจัย

1. มโนทัศน์เกี่ยวกับการพัฒนาวัดสร้างสุขในสังคมดิจิทัล

มโนทัศน์เกี่ยวกับการพัฒนา เป็นวิสัยทัศน์ของการพัฒนาสิ่งต่าง ๆ ทั้งในปัจจุบันและในอนาคต ทุกภาคส่วนต้องเข้ามามีบทบาทร่วมกันและมีการพัฒนาไปพร้อมกันอย่างสมดุล การพัฒนาที่แท้จริงในทางพุทธธรรมจะต้องเอื้ออำนวยให้แต่ละคนตระหนักถึงสายสัมพันธ์ที่ตนมีต่อสังคมและธรรมชาติ อันตนจะต้องเกื้อกูลปัจจัยแวดล้อม (พระไพศาล วิสาโล (2533: 18-19) การที่จะพัฒนาสิ่งใดสิ่งหนึ่งหรือด้านใดด้านหนึ่งจะต้องดำเนินการพัฒนาไปพร้อมกัน ดังนั้น การพัฒนา เป็นการทำให้ดีขึ้นเจริญขึ้น ทำให้เปลี่ยนแปลงไปในทิศทางที่ดีขึ้น หรือเป็นกระบวนการของการเปลี่ยนแปลงของสิ่งใดสิ่งหนึ่งไปสู่แนวทางที่ดีขึ้นกว่าเดิม ตลอดจนเพื่อทำให้สังคมดีขึ้นและทุกคนได้รับประโยชน์และความสุขร่วมกัน

แนวคิดการพัฒนาวัด เป็นแนวคิดที่เกิดขึ้นจากการที่ทุกฝ่ายเล็งเห็นว่า โลกมีการเปลี่ยนแปลงอยู่ตลอดเวลา วัดซึ่งเป็นสถานที่ประกอบกิจกรรมสำคัญต่าง ๆ ทางพระพุทธศาสนา เป็นสถานที่ที่ชาวพุทธอาศัยเป็นที่ประกอบกิจกรรมต่าง ๆ จึงมีความจำเป็นที่จะต้องได้รับการพัฒนาให้มีความสะดวกสบาย ให้มีความเหมาะสมตามสมควรที่ควรจะเป็น ซึ่งจะเป็นสถานที่ปลูกฝังความดีงามและเป็นสถานที่แห่งความสุขสำหรับทุกคน

การพัฒนาวัดสร้างสุข เป็นการพัฒนาอย่างสอดคล้องระหว่างวัด บ้าน และชุมชน ผู้เกี่ยวข้องทุกฝ่ายจะต้องร่วมด้วยช่วยกัน ไม่ใช่เป็นหน้าที่ของใครฝ่ายใดฝ่ายหนึ่งเป็นผู้ดำเนินการพัฒนาโดยส่วนเดียว ทั้งหมดทุกฝ่ายโดยเฉพาะพุทธบริษัททั้ง 4 ต้องมีการร่วมด้วยช่วยกัน ร่วมคิดร่วมทำในกิจกรรมทุกอย่าง ทั้งนี้เพื่อให้บรรลุวัตถุประสงค์หรือเป้าหมายที่ตั้งไว้ คือ การพัฒนาวัดสร้างสุขให้เกิดแก่ชุมชนและประชาชนทั่วไป

ในการพัฒนาวัดสร้างสุขในสังคมดิจิทัลนั้น เน้นการพัฒนาแบบบูรณาการให้เกิดความสมดุลใน 4 ด้าน ได้แก่ 1) ด้านกายภาพ 2) ด้านจิตภาพ 3 ด้านพฤติภาพ และ 4) ด้านปัญญาภาพ ด้วยการมีส่วนร่วมอย่างเข้มแข็งของทุกฝ่ายที่เกี่ยวข้อง ซึ่งจะนำไปสู่การพัฒนาวัดสร้างสุขในสังคมดิจิทัลอย่างยั่งยืน

2. ปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะ

ปรัชญาหลังนวยุค ได้แก่ แนวคิดปรัชญาของมิเชล ฟูโกต์ เรื่อง เทคโนโลยีทางการตลาด ประกอบด้วยแนวคิดหลัก ได้แก่ เทคโนโลยีของความปรารถนา เทคโนโลยีของอัตลักษณ์ และเทคโนโลยีกำกับตนเอง โดยแต่ละแนวคิดมีอิทธิพลทางความคิดและมีความเหมาะสมที่สามารถนำมาประยุกต์ใช้ในการบูรณาการพัฒนาวัดสร้างสุข ในพื้นที่จังหวัดพัทลุง ด้วยเหตุนี้ จึงได้นำแนวคิดเกี่ยวกับเทคโนโลยีทางการตลาดมาประยุกต์ใช้บูรณาการปรับแก้ปัญหาของการพัฒนาวัดสร้างสุขในด้านต่าง ๆ เพื่อนำไปสู่การพัฒนาวัดสร้างสุขอย่างยั่งยืน

หลักพุทธธรรมแห่งสัปปายะว่าด้วยการพัฒนา ประกอบด้วย 1) หลักอาวาสสัปปายะ 2) หลักโคจรสัปปายะ 3) หลักภัสสสัปปายะ 4) หลักบุคคลสัปปายะ 5) หลักโภชนสัปปายะ 6) หลักอุตุสัปปายะ 7) อิริยาปถสัปปายะ (พจนานุกรมพุทธศาสตร์ฉบับประมวลธรรม, 2528: 243-244) ถือเป็นหลักคำสอนที่สำคัญทางพระพุทธศาสนาที่สามารถนำมาใช้เป็นเครื่องมือการบูรณาการเพื่อปรับแก้ปัญหาของการพัฒนาในด้านต่าง ๆ ประกอบด้วย 1) ด้านกายภาพ 2) ด้านจิตภาพ 3) ด้านพฤติภาพ และ 4) ด้านปัญญาภาพ ได้อย่างสอดคล้องลงตัว ทั้งในการพัฒนากายภาพ จิตใจ พฤติกรรม และปัญญา เพื่อการพัฒนาวัดให้เป็นพื้นที่แห่งการสร้างสุขให้เกิดกับประชาชน ชุมชน และสังคมอย่างยั่งยืน

3. บูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะเพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล

การบูรณาการปรัชญาหลังนวยุคในการพัฒนาวัดสร้างในสังคมดิจิทัล

การนำเอาแนวคิดปรัชญาหลังนวยุคมาบูรณาการพัฒนาวัดสร้างสุขในสังคมดิจิทัล จังหวัดพัทลุงนั้น ผู้วิจัยได้นำเสนอแนวคิดปรัชญาหลังนวยุคของมิเชล ฟูโกต์ ว่าด้วยแนวคิดเรื่องเทคโนโลยีการตลาด (Technology of market) ที่ฟูโกต์อธิบายให้เห็นเกี่ยวกับความเป็นตัวตน หรืออัตบุคคลผ่านเทคโนโลยีของการตลาดที่เกี่ยวข้องเชื่อมโยงกับเทคโนโลยีของความปรารถนา (technology of desire) และเทคโนโลยีของอัตลักษณ์ (technology of identity) อันทำให้เห็นถึงความเป็นตัวตนของอัตบุคคลที่ชัดเจนขึ้น โดยสอดคล้องกับการใช้กลยุทธ์การตลาดของโลกธุรกิจปัจจุบันที่ต้องอาศัยเครื่องมือการสื่อสารการตลาดแบบบูรณาการ (IMC Tools) มีการกระตุ้นพฤติกรรมความต้องการของทุกภาคส่วน โดยเฉพาะในการวิจัยนี้ มุ่งที่การบูรณาการการพัฒนาวัดสร้างสุข ผู้วิจัยเชื่อว่า หากมีการนำแนวคิดนี้มาเป็นเครื่องมือในการบูรณาการพัฒนาวัดได้อย่างสมดุล การพัฒนาวัดสร้างสุขในสังคมดิจิทัล ในพื้นที่จังหวัดพัทลุง จะเกิดการพัฒนาอย่างยั่งยืน

การบูรณาการหลักพุทธธรรมแห่งสัปปายะในการพัฒนาวัดสร้างสุขด้านกายภาพ

การนำหลักพุทธธรรมแห่งสัปปายะมาบูรณาการเป็นเครื่องมือปรับแก้ปัญหาของการพัฒนาวัดสร้างสุขในสังคมดิจิทัล จะช่วยให้เกิดการพัฒนาวัดด้านกายภาพของวัดได้เป็นอย่างดี โดยผู้วิจัยเห็นว่า หลักพุทธธรรมแห่งสัปปายะที่นำมาบูรณาการในการพัฒนาวัดด้านกายภาพนั้น ประกอบด้วยหลักอาวาสสัปปายะ หลักโคจรสัปปายะ หลักอุตุสัปปายะ และหลักโภชนสัปปายะ อันเป็นหลักพุทธธรรมที่เหมาะสมกับการแก้ปัญหาที่เกี่ยวข้องกับองค์ประกอบด้านกายภาพของวัด ถือเป็นการนำหลักพุทธธรรมที่เหมาะสมมาบูรณาการปรับแก้ปัญหาของการพัฒนาวัดสร้างสุขที่เกิดขึ้นได้

การบูรณาการหลักพุทธธรรมแห่งสัปปายะในการพัฒนาวัดสร้างสุขด้านจิตภาพ

การนำหลักพุทธธรรมแห่งสัปปายะมาบูรณาการเป็นเครื่องมือปรับแก้ปัญหาของการพัฒนาวัดสร้างสุข
ในสังคมดิจิทัล จะช่วยให้เกิดการพัฒนาวัดด้านจิตภาพของบุคคลที่เกี่ยวข้องได้เป็นอย่างดี โดยผู้วิจัยเห็นว่า
หลักพุทธธรรมแห่งสัปปายะที่นำมาบูรณาการในการพัฒนาวัดด้านจิตภาพนั้น ประกอบด้วยหลักภัสสสัปปายะ
และหลักปุคคลสัปปายะ อันเป็นหลักพุทธธรรมที่เหมาะสมกับการแก้ปัญหาที่เกี่ยวข้องกับจิตใจและความรู้สึก
นึกคิดในการพัฒนาวัด ถือเป็นการนำหลักพุทธธรรมที่เหมาะสมมาบูรณาการปรับแก้ปัญหาของการพัฒนาวัด
สร้างสุขที่เกิดขึ้นได้

การบูรณาการหลักพุทธธรรมแห่งสัปปายะในการพัฒนาวัดสร้างสุขด้านพฤติภาพ

การนำหลักพุทธธรรมแห่งสัปปายะมาบูรณาการเป็นเครื่องมือปรับแก้ปัญหาของการพัฒนาวัดสร้างสุข
ในสังคมดิจิทัล จะช่วยให้เกิดการพัฒนาวัดด้านพฤติภาพของวัดได้เป็นอย่างดี โดยผู้วิจัยเห็นว่า หลักพุทธธรรม
แห่งสัปปายะที่นำมาบูรณาการในการพัฒนาวัดด้านพฤติภาพนั้น ประกอบด้วยหลักภัสสสัปปายะ และหลัก
อิริยาบถสัปปายะ อันเป็นหลักพุทธธรรมที่เหมาะสมกับการแก้ปัญหาที่เกี่ยวข้องกับองค์ประกอบด้านพฤติภาพ
ของการพัฒนาวัด ถือเป็นการนำหลักพุทธธรรมที่เหมาะสมมาบูรณาการปรับแก้ปัญหาของการพัฒนาวัดสร้าง
สุขที่เกิดขึ้นได้

การบูรณาการหลักพุทธธรรมแห่งสัปปายะในการพัฒนาวัดสร้างสุขด้านปัญญาภาพ

การนำหลักพุทธธรรมแห่งสัปปายะมาบูรณาการเป็นเครื่องมือปรับแก้ปัญหาของการพัฒนาวัดสร้างสุข
ในสังคมดิจิทัล จะช่วยให้เกิดการพัฒนาวัดด้านปัญญาภาพของการพัฒนาวัดได้เป็นอย่างดี โดยผู้วิจัยเห็นว่า
หลักพุทธธรรมแห่งสัปปายะที่นำมาบูรณาการในการพัฒนาวัดด้านปัญญาภาพนั้น ประกอบด้วยหลักภัสสสัป
ปายะ และหลักปุคคลสัปปายะ อันเป็นหลักพุทธธรรมที่เหมาะสมกับการแก้ปัญหาที่เกี่ยวข้องกับองค์ประกอบ
ด้านปัญญาภาพของการพัฒนาวัด ถือเป็นการนำหลักพุทธธรรมที่เหมาะสมมาบูรณาการปรับแก้ปัญหาของการ
พัฒนาวัดสร้างสุขที่เกิดขึ้นได้ การพัฒนาวัดสร้างสุขก็จะประสบความสำเร็จและช่วยให้เกิดการพัฒนาวัดที่
ยั่งยืน

โดยสรุป การพัฒนาวัดสร้างสุขในสังคมดิจิทัล ในพื้นที่จังหวัดพัทลุง โดยใช้แนวคิดปรัชญาหลังนวยุค
ของมิเชล ฟูโกต์ ได้แก่ แนวคิดเรื่องเทคโนโลยีทางการตลาดและหลักพุทธธรรมแห่งสัปปายะ ประกอบด้วย
หลักอาวาสสัปปายะ หลักโคจรสัปปายะ หลักภัสสสัปปายะ หลักปุคคลสัปปายะ หลักโภชนสัปปายะ หลัก
อุตุสัปปายะ และหลักอิริยาปถสัปปายะ เป็นเครื่องมือการพัฒนาวัดสร้างสุขในสังคมดิจิทัล เพื่อปรับแก้ปัญหา
ใน 4 ด้าน ได้แก่ ด้านกายภาพ ด้านจิตภาพ ด้านพฤติภาพ และด้านปัญญาภาพ ซึ่งจะก่อให้เกิดการพัฒนาวัดที่
เป็นพื้นที่สร้างสุขแก่ทุกคนโดยเฉพาะประชาชนและชุมชนบริเวณพื้นที่ของการพัฒนาในจังหวัดพัทลุง

5. อภิปรายผลการวิจัย

จากผลการวิจัย สามารถอภิปรายได้ว่า

1. มโนทัศน์เกี่ยวกับการพัฒนาวัดสร้างสุขในสังคมดิจิทัล

มโนทัศน์เกี่ยวกับการพัฒนานั้น เป็นวิสัยทัศน์ของการพัฒนาสิ่งต่าง ๆ ทั้งในปัจจุบันและในอนาคต ทุกภาคส่วนต้องเข้ามามีบทบาทร่วมกันและมีการพัฒนาไปพร้อมกันอย่างสมดุล ดังนั้น การพัฒนาวัดจะต้องมี การพัฒนาไปพร้อมกันในทุกด้านได้แก่ ด้านกายภาพ ด้านจิตภาพ ด้านพฤติภาพ และด้านปัญญาภาพ ในเชิง บูรณาการเข้าด้วยกันอย่างสมดุล อันจะนำไปสู่การพัฒนาวัดสร้างสุขในสังคมดิจิทัลอย่างแท้จริง ซึ่งสอดคล้อง กับพระวีระศักดิ์ ชยธมฺโม (สุวรรณวงศ์) (2557) การวิจัยเรื่อง " แนวทางการจัดการวัดสันติสุขตามหลักสัปปา ยะ 7 : กรณีศึกษา วัดธารน้ำไหล (สวนโมกขพลาราม) ตำบลเลม็ด อำเภอไชยา จังหวัดสุราษฎร์ธานี " ผลการวิจัยพบว่า วัดธารน้ำไหล (สวนโมกขพลาราม) ได้มีการจัดระบบการบริหารและการจัดการวัดตาม หลักสัปปายะ 7 ทั้งนี้ทางวัดได้ดำเนินการทั้ง 7 แนวทาง กล่าวคือ ด้านอาวาส วัดได้เน้นสร้างเสนาสนะที่แฝง ไปด้วยปริศนาธรรม มีรูปภาพ เป็นต้น ด้านโคจร วัดอยู่ติดกับถนนสายหลัก การสัญจรไปมาสะดวกสบาย ด้าน บุคคล วัดมีหลวงพ่อพุทธทาสเป็นผู้นำในการพัฒนาตนเองให้เข้าถึงหลักธรรมทางพระพุทธศาสนา ด้านการ พูดคุย วัดยึดหลักการพูดน้อย ๆ ปฏิบัติเยอะ ๆ และมีการเผยแผ่ธรรมะหลายรูปแบบ ด้านอาหาร วัดมีโรงครัว ที่จัดการเรื่องอาหาร ด้านอากาศ วัดมีลักษณะอากาศเหมาะสมแก่นักปฏิบัติธรรม ด้านอิริยาบถ วัดมีที่สำหรับ ปฏิบัติธรรมแบบธรรมชาติตามความเหมาะสมของแต่ละบุคคล แนวทางการจัดการวัดสันติสุขควรจัดการด้วย หลักสัปปายะ 7 ให้เหมาะสมแก่การเป็นอยู่ร่วมกันและเหมาะสมแก่การประพฤติปฏิบัติธรรม ทั้งนี้ควรมีการ วางแผน ควรมีการควบคุมดูแลและสั่งการ ควรกำหนดเป้าหมายและความคุ้มค่า และเหตุปัจจัยอื่น ๆ เพื่อ เสริมสร้างการจัดการวัดให้เกิดสันติสุขต่อไป

2. ปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะ

1) ปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะ ในงานวิจัยนี้ ผู้วิจัยมุ่งเน้นแนวคิดปรัชญา หลังนวยุคของมิเชล ฟูโกต์ เน้นแนวคิดเรื่องเทคโนโลยีการตลาด และหลักพุทธธรรมแห่งสัปปายะ อัน ประกอบด้วยหลักอาวาสสัปปายะ หลักโคจรสัปปายะ หลักภัสสสัปปายะ หลักปุคคลสัปปายะ หลักโภชนสัป ปายะ หลักอุตุสัปปายะ และหลักอิริยาปถสัปปายะโดยนำมาเป็นเครื่องมือการบูรณาการการพัฒนาวัดสร้างสุข ให้มีการพัฒนาเป็นพื้นที่แห่งความสุขสอดคล้องกับพระมหาเสี่ยม สุวโจ (มณีวงษ์) (2561) การวิจัยเรื่อง "รูปแบบการพัฒนาวัดสร้างสุขด้วยสัปปายะตามแนวพุทธจิตวิทยา" ผลการวิจัย พบว่า สภาพปัญหาของวัด และแนวคิดการพัฒนาวัดสร้างสุขด้วยสัปปายะตามแนวพุทธ จิตวิทยาในจังหวัดสระบุรี จากการวิเคราะห์ SWOT พบว่า จุดแข็งของวัดในจังหวัดสระบุรี มีวัตร ปฏิบัติมุ่งสู่วิธีการปฏิบัติธรรม มีความสงบ ปราศจากการ รบกวน โดยสภาพบริเวณรอบ ๆ ถือเป็นเขตเมือง มีความเจริญ ไปมาสะดวก สามารถหาพาหนะเดินทางได้ง่าย บรรยากาศในวัดสะอาด สงบ ร่มรื่น โปร่ง ลมพัดเย็นสบาย โคจรคามรอบ ๆ บริเวณวัดพระพุทธบาทและมี ชุมชนอาศัยอยู่อย่าง หนาแน่น จุดอ่อน คือ การจัดสภาพแวดล้อมมีสภาพไม่เอื้อต่อความเป็นสัปปายะและบ้าน ชุมชนรอบ วัด มีความกลัวการเปลี่ยนแปลงและการทำลายความเป็นโบราณสถานของวัด

2) สร้างรูปแบบการพัฒนาวัดสร้างสุขด้วยสัปปายะตามแนวพุทธจิตวิยาในจังหวัดสระบุรี ประกอบด้วย 1) ด้านสภาพแวดล้อมภายในวัด คือ จัดมุมรมณียสถานในวัด มีป้ายประชาสัมพันธ์ มีมุมเก็บ ภาพที่ระลึก ต้นไม้พูดได้ มีป้ายปริศนาธรรมนำชีวิต 2) ด้านกิจกรรมบุญสร้างสุข คือ รับบาตรในศาลา การสวด

มนต์ การฟังธรรม การจัดค่ายคุณธรรม ชีวิตพัฒนาได้ถ้าใจมีศีล 3) ด้านกิจกรรมชุมชนสร้างสุข คือ แจกทานผู้ ยากไร้รอบวัด จิตอาสาพัฒนาวัด ทักษะชีวิต เกมชีวิตพิชิตทุกสิ่งและพัฒนาชีวิตพลิกวิกฤติเป็นโอกาส

3) จากการประเมินความพึงพอใจของผู้มาทำบุญที่วัด พบว่า มีความพึงพอใจต่อรูปแบบ การ พัฒนาวัดสร้างสุขด้วยสัปปายะตามแนวพุทธจิตวิทยาอยู่ในระดับมาก เป็นการยืนยันการพัฒนา วัดตาม โมเดล ACCG Wat Model เป็นรูปแบบการพัฒนาวัดสร้างสุขที่สามารถทำให้ผู้เข้ามาทำบุญ ที่วัดมีความสุขตามกรอบ สุขภาวะ 4 ด้าน คือ กาย อารมณ์ สังคม และปัญญา

3. การบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะในการพัฒนาวัดสร้างสุข ในสังคมดิจิทัล

การพัฒนาวัดสร้างสุขในสังคมดิจิทัล โดยใช้แนวคิดปรัชญาหลังนวยุคของมิเชล ฟูโกต์ เน้นเฉพาะ แนวคิดเรื่องเทคโนโลยีทางการตลาดและหลักพุทธธรรมแห่งสัปปายะ ประกอบด้วย หลักอาวาสสัปปายะ หลัก โคจรสัปปายะ หลักภัสสสัปปายะ หลักปุคคลสัปปายะ หลักโภชนสัปปายะ หลักอุตุสัปปายะ และหลักอิริยา ปถสัปปายะ เป็นเครื่องมือการพัฒนาวัดสร้างสุข เพื่อปรับแก้ปัญหาได้ในทุกด้าน ได้แก่ ด้านกายภาพ ด้านจิต ภาพ ด้านพฤติภาพ และด้านปัญญาภาพ อันก่อให้เกิดการพัฒนาวัดสร้างสุขแก่ทุกคน โดยเฉพาะประชาชน และชุมชนในพื้นที่ของการพัฒนา
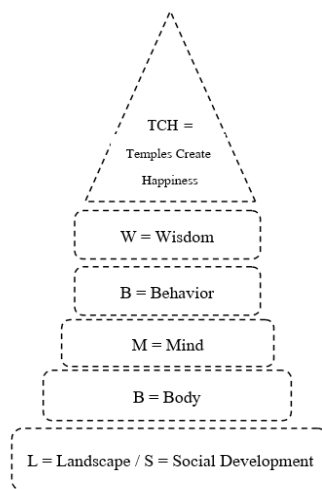
การนำปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะมาเป็นเครื่องมือการประยุกต์ใช้ใน การบูรณาการพัฒนาวัดสร้างสุขในสังคมดิจิทัล สามารถสรุปได้ ดังนี้

การนำปรัชญาหลังนวยุคมาบูรณาการพัฒนาวัดสร้างสุขในสังคมดิจิทัล ผู้วิจัยมุ่งเน้นที่แนวคิด ปรัชญาหลังนวยุคของมิเชล ฟูโกต์ว่าด้วยแนวคิดเรื่องเทคโนโลยีการตลาด ที่ฟูโกต์ได้อธิบายให้เห็นเกี่ยวกับการ เชื่อมโยงความเป็นตัวตนกับเทคโนโลยีทางการตลาดที่ครอบคลุมถึงความปรารถนา เทคโนโลยีของอัตลักษณ์ และเทคโนโลยีกำกับตนเอง โดยสัมพันธ์กับกลยุทธ์การตลาดของโลกปัจจุบันที่ต้องอาศัยเครื่องมือการสื่อสาร การตลาดแบบบูรณาการที่กระตุ้นพฤติกรรมความต้องการความพึงพอใจของชุมชน โดยการวิจัยนี้ มุ่งที่การบูร ณาการการพัฒนาวัดสร้างสุข ซึ่งผู้วิจัยเชื่อว่า หากผู้เกี่ยวข้องมีการนำแนวคิดนี้มาเป็นเครื่องมือในการบูรณา การพัฒนาวัดได้อย่างสมดุล การพัฒนาวัดสร้างสุข ก็จะเกิดการพัฒนาได้อย่างแน่นอน

ในส่วนของการนำหลักพุทธธรรมแห่งสัปปายะ ประกอบด้วย หลักอาวาสสัปปายะ หลักโคจร สัปปายะ หลักภัสสสัปปายะ หลักปุคคลสัปปายะ หลักโภชนสัปปายะ หลักอุตุสัปปายะ และหลักอิริยาปถ สัปปายะ มาบูรณาการเป็นเครื่องมือปรับแก้ปัญหาของการพัฒนาวัดสร้างสุขในสังคมดิจิทัล ในพื้นที่จังหวัด พัทลุง ให้เป็นพื้นที่แห่งการสร้างความสุขของประชาชน ชุมชน และสังคม สอดคล้องกับพระมหาสมถวิล ปภาโส (อิหนิม) (2561) การวิจัยเรื่อง "การบริหารจัดการสำนักปฏิบัติธรรมในเขตกรุงเทพมหานคร ตามหลัก สัปปายะ 7" ผลการวิจัยพบว่า การบริหารจัดการสำนักปฏิบัติธรรมในเขตกรุงเทพมหานคร ตามหลักสัปปายะ 7 พบว่า โดยภาพรวม อยู่ในระดับมาก และรายด้านทุกด้าน อยู่ในระดับมาก ผลการเปรียบเทียบความคิดเห็น ต่อการบริหารจัดการสำนักปฏิบัติธรรม ในเขตกรุงเทพมหานคร ตามหลักสัปปายะ 7 จำแนกตามปัจจัยส่วน บุคคล พบว่า ผู้ปฏิบัติธรรมที่มีเพศ อายุ การศึกษา อาชีพ และจำนวนครั้งที่ปฏิบัติต่างกัน มีความคิดเห็นต่อ การบริหารจัดการสำนักปฏิบัติธรรม ในเขตกรุงเทพมหานคร ตามหลักสัปปายะ 7 โดยรวม ไม่แตกต่างกัน

ข้อเสนอแนะต่อการบริหารจัดการสำนักปฏิบัติธรรม ในเขตกรุงเทพมหานคร ตามหลักสัปปายะ 7 จากการสัมภาษณ์สรุปได้ว่า 1) ด้านอาวาสสัปปายะ ที่อยู่เหมาะสม ควรเป็นที่สบาย สงบ ปราศจากผู้คนสัญจรไปมา ปลอดภัย 2) ด้านโคจรสัปปายะ การเดินทางเหมาะสม ต้องมีทางโคจร หรือทางเดินไปมาได้สะดวก 3) ด้านภัสสสัปปายะ การพูดคุยเหมาะสม ควรมีการสนทนา พูดคุยกันแต่สิ่งที่เป็นประโยชน์ต่อการปฏิบัติได้ฟังสิ่งที่จะทำให้จิตใจเกิดสัทธา วิริยะ อุตสาหะ ความสงบระงับในการที่จะทำความเพียร 4) ด้านปุคคลสัปปายะ บุคคลเหมาะสม ควรมีบุคคลที่อยู่ร่วมกัน เป็นผู้ตั้งมั่นในศีลธรรม มีความสันโดษ มักน้อย ชักจูงแนะนำไปในทางที่จะเป็นประโยชน์ต่อการทำความเพียร 5) ด้านโภชนสัปปายะ อาหารเหมาะสม ควรเป็นอาหารที่สบายต่อความเป็นอยู่ในอัตภาพ 6) ด้านอุตุสัปปายะ อากาศเหมาะสม ควรมีอากาศที่เหมาะสม 7) ด้านอิริยาปถสัปปายะ อิริยาบถเหมาะสม ควรมีอิริยาบถทั้ง 4 ยืน เดิน นั่ง นอน เหมาะสมแก่การปฏิบัติธรรม

6. องค์ความรู้ใหม่

แผนภาพ : เมเดลการพัฒนาวัดสรางสุขเนส่งคมดิจิทัล

TCH Model: LS+BMBW

จากภาพข้างต้น ผู้วิจัยได้ตกผลึกเป็นองค์ความรู้ใหม่และรูปแบบการพัฒนาวัดสร้างสุขในสังคมดิจิทัล จากการทำวิจัย เรื่อง การบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะเพื่อการพัฒนาวัดสร้างสุขในสังคมดิจิทัล ซึ่งมีโมเดล คือ TCH Model : LS+BMBW โดยมีคำอธิบาย ดังนี้

TCH Model มาจากคำว่า **Temples Create Happiness** คือ รูปแบบการพัฒนาวัดสร้างสุข เป็นแนวคิดที่เกิดจากการนำปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะมาบูรณาการพัฒนาวัดสร้างสุขในสังคมดิจิทัล จึงได้การบูรณาการใน 2 ส่วน คือ ภูมิทัศน์ และสังคมทัศน์ คือ LS + BMBW

L = Landscape Development (การพัฒนาทางภูมิทัศน์) หมายถึง การสร้างบรรยากาศของพื้นที่ในการพัฒนา ได้แก่ วัดในพื้นที่จังหวัดพัทลุง ให้เกิดความพร้อมในการพัฒนาในด้านต่าง ๆ ประกอบด้วยด้านกายภาพ ด้านจิตภาพ ด้านพฤติภาพ และด้านปัญญาภาพ เพื่อนำไปสู่การพัฒนาพื้นที่วัดให้มีความเจริญด้านภูมิทัศน์และสภาพแวดล้อม

S = Social Development (**การพัฒนาทางสังคม**) หมายถึง การพัฒนาสภาพทางสังคมในยุคดิจิทัล การดำรงชีวิตของแต่ละสถานที่ และวิธีการดำรงชีวิตของแต่ละชุมชนในแต่ละท้องถิ่น ก่อให้เกิดการสร้างสรรค์ความสุขร่วมกัน ประกอบด้วยปัจจัยสำคัญ คือ

B = Body (**กายภาพ**) หมายถึง การพัฒนาวัดด้านกายภาพของผู้มีส่วนเกี่ยวข้องทุกฝ่าย

M = Mind (**จิตภาพ**) หมายถึง การพัฒนาวัดผ่านการตระหนักรู้และความรู้สึกนึกคิดในการพัฒนาวัดให้เป็นพื้นที่แห่งการสร้างความสุขของบุคคลผู้เกี่ยวข้อง

B = Behavior (**พฤติภาพ**) หมายถึง การพัฒนาวัดผ่านการแสดงออกทางพฤติกรรมของบุคคลต่าง ๆ ที่เกี่ยวข้องในการพัฒนาวัดให้เป็นพื้นที่แห่งการสร้างความสุขของประชาชน ชุมชน และสังคม

W = Wisdom (**ปัญญาภาพ**) หมายถึง การพัฒนาวัดผ่านการสร้างองค์ความรู้ การจัดการความรู้และการถ่ายทอดองค์ความรู้ของบุคคลต่าง ๆ ที่เกี่ยวข้องกับการพัฒนาวัดให้เป็นพื้นที่แห่งการสร้างความสุขของประชาชน ชุมชน และสังคม

TCH = Temples Create Happiness (**วัดสร้างสุข**) คือ วัด พื้นที่สร้างสุขที่ได้รับการพัฒนา

โดยการบูรณาการพัฒนาวัดสร้างสุขในสังคมดิจิทัลนั้น เริ่มต้นจากการจัดการด้านภูมิทัศน์ คือ พื้นที่ที่ต้องการพัฒนา และสังคมทัศน์ คือ การจัดเกี่ยวกับบุคคลที่เกี่ยวข้องให้เกิดความพร้อมเพื่อการพัฒนา จากนั้นนำหลักปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะมาเป็นเครื่องมือผสมผสานในการบูรณาการร่วมกัน ซึ่งจะนำไปสู่การพัฒนาวัดสร้างสุขในสังคมดิจิทัล

จากผลการศึกษาวิจัย แสดงให้เห็นว่า การบูรณาการปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะในการพัฒนาวัดสร้างสุขในสังคมดิจิทัล มีความสอดคล้องกับโมเดลที่ผู้วิจัยสร้างขึ้น โดยสรุปเป็นตัวย่อว่า "TCH Model : LS+BMBW" จัดเป็นโมเดลองค์ความรู้ใหม่ที่สามารถนำมาปฏิบัติให้เกิดผลจริงได้ในพื้นที่ต่าง ๆ

7. บทสรุปและข้อเสนอแนะ

จากวัตถุประสงค์การวิจัย สามารถสรุปได้ว่า การพัฒนาวัดสร้างสุขในสังคมดิจิทัลนั้น เป็นรูปแบบหนึ่งของการพัฒนาเชิงพื้นที่โดยเฉพาะพื้นที่วัดให้เป็นพื้นที่ที่มีคุณค่าและมีความสุขของประชาชนและชุมชน ไม่เฉพาะบุคคลในพื้นที่ แต่เพื่อบุคคลทั่วไปที่ได้รับรู้และได้เดินทางมายังพื้นที่วัด จากการได้ศึกษาเรียนรู้ในงานวิจัยชิ้นนี้ ทำให้เกิดแนวคิดและแนวทางของการนำเอาแนวคิดหลังสมัยใหม่ที่เรียกว่า ปรัชญาหลังนวยุคและหลักพุทธธรรมแห่งสัปปายะมาผสมผสานในการบูรณาการการพัฒนาวัด ให้เกิดคุณค่าและเป็นพื้นที่แห่งการสร้างความสุขที่มากขึ้นอันก่อให้เกิดการพัฒนาทรัพยากรในพื้นที่ให้เป็นแหล่งท่องเที่ยวพร้อมทั้งนำไปสู่การสร้างรายได้แก่ประชาชนและชุมชนรอบข้างอย่างทั่วถึง อย่างไรก็ตาม ในการพัฒนาวัดสร้างสุขนั้น มีความจำเป็นที่จะต้องแสวงหาความร่วมมือจากทุกฝ่ายให้เข้ามาร่วมมือกันพัฒนาวัดในชุมชนของตนให้เป็นพื้นที่สร้างความสุขให้กับทุกคน ซึ่งจะมีส่วนสำคัญในการเป็นแนวทางหนึ่งของการนำรูปแบบไปบูรณาการประยุกต์ใช้ในการพัฒนาวัดในพื้นที่อื่น ๆ ต่อไป

บรรณานุกรม

กองพุทธศาสนสถาน สำนักงานพระพุทธศาสนาแห่งชาติ. (2553). **แนวทางการพัฒนาวัดสู่ความเป็น
  มาตรฐาน**กรุงเทพมหานคร: โรงพิมพ์การศาสนา.

ปิยะชาติ อิศรภักดี. (2559). BRANDING 4.0. กรุงเทพมหานคร: อมรินทร์ฮาวทู อมรินทร์พริ้นติ้งแอนด์พัลลิชชิ่ง.

พระไพศาล วิสาโล. (2533). **พุทธธรรมกับการพัฒนาสังคม.** กรุงเทพมหานคร: มูลนิธิโกมลคีมทอง.

พระมหาสมถวิล ปภาโส (อิหนิม). (2561). การบริหารจัดการสำนักปฏิบัติธรรมในเขตกรุงเทพมหานคร ตาม
  หลักสัปปายะ 7. **วิทยานิพนธ์พุทธศาสตรมหาบัณฑิต สาขาวิชาพุทธบริหารการศึกษา**. บัณฑิต
  วิทยาลัย: มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย.

พระมหาเสงี่ยม สุวโจ (มณีวงษ์). (2561). รูปแบบการพัฒนาวัดสร้างสุขด้วยสัปปายะตามแนวพุทธจิตวิทยา.
  ดุษฎีนิพนธ์พุทธศาสตรดุษฎีบัณฑิต สาขาวิชาพุทธจิตวิทยา. บัณฑิตวิทยาลัย: มหาวิทยาลัยมหา
  จุฬาลงกรณราชวิทยาลัย.

พระราชวรมุนี (ประยุทธ์ ปยุตฺโต). **พจนานุกรมพุทธศาสตร์ ฉบับประมวลธรรม.** พิมพ์ครั้งที่ 4.
  กรุงเทพมหานคร: สำนักพิมพ์มหาจุฬาลงกรณราชวิทยาลัย.

พระวีระศักดิ์ ชยธมฺโม (สุวรรณวงศ์) (2557*).* แนวทางการจัดการวัดสันติสุขตามหลักสัปปายะ 7 : กรณีศึกษา
  วัดธารน้ำไหล (สวนโมกขพลาราม) ตำบลเลม็ด อำเภอไชยา จังหวัดสุราษฎร์ธานี. **วิทยานิพนธ์
  พุทธศาสตรมหาบัณฑิต สาขาวิชาสันติศึกษา**. บัณฑิตวิทยาลัย: มหาวิทยาลัยมหาจุฬาลงกรณ
  ราชวิทยาลัย.

มหาจุฬาลงกรณราชวิทยาลัย. (2539). **พระไตรปิฎกภาษาไทย ฉบับมหาจุฬาลงกรณราชวิทยาลัย เล่มที่ 3.**
  กรุงเทพมหานคร: มหาจุฬาลงกรณราชวิทยาลัย.

ราชบัณฑิตยสถาน. (2556). **พจนานุกรม ฉบับราชบัณฑิตยสถาน พ.ศ. 2554**. พิมพ์ครั้งที่ 2.
  กรุงเทพมหานคร: ราชบัณฑิตยสถาน.

อภิภา ปรัชญพฤทธิ์. (2554). **หลังสมัยใหม่นิยมและการอุดมศึกษา.** กรุงเทพมหานคร: สำนักพิมพ์อินทภาษ.

The Effect of Dance Movement Activities for Reducing Mental Health Problems Among elementary school Students

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ABSTRACT

The purposes of this research were as follows: 1) to compare mental health problems among elementary school students in the experimental group, before and after using dance movement activities, and 2) to compare mental health problems among elementary school students between the experimental group and control group. The scope of research: in an elementary school in Chongqing of the Republic of China. The subjects of this research were elementary school students grade 5 in Class 2 among 60 students, and 14 students with mental health problems from high scores. They were selected by the purposive sampling methods and were divided into two groups, 7 students in the control group and 7 students in the experimental group.

The results of this research were as follow: 1) After the experiment, the students who joined dance movement activities had lower mental health score than before the experiment with a statistically significant difference at the level of .05, and 2) the mental health scores of the experimental group who joined dance movement activities were lower than the control group with a statistically significant difference at the level of .05. In conclusion, dance movement activities can reduce mental health problems among elementary school students.

Keyword: Dance movement activities, Mental health, Elementary school student

1. Introduction

The purpose of dance movement activities is not to teach skills, but to guide elementary school students to improve mental health, improve the experience and feeling of dance art, and improve mental health problems (Bai, 2021). Dance movement activities encourage the learning quality of elementary school students to explore, to experience some

experiment, to be willing to imagine and create something, and to lay a foundation for dance movement activities to improve the development of their mental health (Cui, 2021). Targeted dance movement activities will have a positive effect on the development of elementary school students' mental health as they can vent their emotions, exercise the mind and improve themselves (Tan, 2021).

Dance movement activities can improve physical ability of elementary school students and enhance the coordination ability of limbs (Zhao, 2021). Dance movement activity is also a kind of art with special expression and lyricism. It can improve the mental health problems of elementary school students (Qu, 2011). In recent years, more schools have opened dance movement activities courses to improve elementary school student mental health (Zhu, 2015). Dance movement activities enhance overall physical and mental development. These activities allow the improvement of artistic accomplishment of teenagers, the use of imagination and also enhance their patriotism, edifying noble sentiments of great significance to cultivate good conduct, will and good dance artistic accomplishment (Miao, 2008).

Based to my years of teaching experience and a large number of literature reading, I found that elementary school students' mental health problems are mainly manifested in the following conditions:

Personal factors: being self-centered, having confusion and not sharing when they are depressed, difficulty integrating into the collective life, being isolated from peers, self-inferior, and timidness.

Family factors: parenting style and attitude; parents help children solve everything in life, as a consequence they tend to form psychological characteristics of cowardice. Parents excessively limit children's words and actions which leads to the lack of critical thinking. This educational method may make the psychological lack of independent ability.

School factors: lack of attention in class, fear of homework, worry about exams, and improper method of teacher education. Teachers do not understand that elementary school students take simple and punitive methods to deal with problems so it makes them feel wrong, depressed and dissatisfied which leads to psychological disorders.

Social factors: the development of modern science and technology, and modern media information such as TV, Internet and film have also brought a negative impact on elementary school students' mental health. More attention is needed to adopt effective solutions. After conducting literature research, these people have also proposed that dance movement activities can be a good improvement of elementary school students' mental

health (Zhang, 2019). Positive thoughts through dance movement activities create good living habits and learning atmosphere, and they also let the students feel full of thought dynamic which can provide good support for their own mental health.

In conclusion, dance movement activities are very beneficial ways to improve elementary school students' mental health problems, enabling them to produce good emotional experiences and establish positive ideas. Such activities can also mobilize enthusiasm, allowing students to overcome shyness and tension in public performance and increase self-confidence. Moreover, dance movement activities can strengthen abilities in logical thinking, innovation, and imagination. Having a positive experience in learning and life will enhance mental health in the long run. It can also improve the quality of elementary school students. The mental health problems of elementary school students have finally achieved a positive improvement.

2. Research questions

Can dance movement activities improve the mental health of elementary school students?

3. Research Objectives

1. To compare mental health problems of elementary school students in the experimental group, before and after using dance movement activities.

2. To compare the mental health problem of elementary school students between the experimental group and control group.

4. Research Hypotheses

1. After the experiment, the mental health problems scores were lower than before the experiment.

2. After the experiment, the experimental group had lower mental health problems scores than the control group.

5. Research Method

The study used a quasi-experimental design, and the study design divided the samples into two groups: experimental group and control group. Following the pre-test, the

experimental group engaged in dance movement activities, while the control group utilized the traditional teaching method, and posttest results were then compared.

Population: This study mainly aimed at the fifth grades students of a elementary school in Chongqing, with a total of 60 students.

Participants: A elementary school in Chongqing. Grade 5 students from 2 classes, and 14 students with prominent mental health problems from high to low from the 2 classes, with 7 in the control group and 7 in the experimental group respectively.

Data analysis: The obtained data will be collected and sorted for the first time. SPSS 22.0 and Excel software systems are used to process the obtained data, design, inspection, and differential analysis, and draw the table according to the data.

1) Compare the mental health of elementary school students in the experimental group before and after using dance movement activities. Contrast between groups, then the dependent variables t-test dependent.

2) Compare the mental health of elementary school students between the experimental group and control group through group contrast, then the independent variables t-test independent.

6. Research result

The data analysis for this study included descriptive data and by using t-test both dependent and independent. The results of this study are divided into 3 parts.

The first table indicates that there is no significant difference between the experimental group and the control group before the experiment.

The second table shows the comparison between before and after the experiment of the experimental group.

The third table shows the comparison between the experimental group and the control group.

Area range: A elementary school in Chongqing. Study object: Elementary school students from two classes in Grade 5 in elementary school, totaling 60 students. Additionally, 14 students with prominent mental health problems from high to low in 2 classes, with 7 students each for the control group and the experimental group.

variable	Group	n	M	S. D	t	p
Mental health problem	Experimental group	7	27.8	14.960	-0.213	0.852
	Control group	7	27.2	13.238		

Note: p <0.05, significant difference:

From the above table, we can intuitively see that the average sum of the experimental group is 27.8, and the average sum of the control group is 27.2. The comparison shows that the sum of the average score of the two classes is very close. It can be seen that p=0.852 > 0.05 indicates that the difference between the measurement data of the two classes is not obvious, which meets the requirements of the experiment.

Objective research 1 Compare before and after using dance movement activities.

variable	Group	n	M	S. D	t	p
Mental health problem	Pre-test	7	27.8	14.960	-1.818*	0.043
	Post-test	7	23.4	8.302		

Note: p <0.05, significant difference;

Through dance movement activity training, as can be seen from the analysis of Table 2, the scale test data comparison found that the experimental group after the experiment and the total score and each scale have changed. The average score before the experiment is 27.8, and the average score after the experiment is 23.4. The average score after the experiment dropped significantly compared to before.

Objective: Compare after using dance movement activity between the experimental group and the control group.

variable	Group	n	M	S. D	t	p
Mental health problem	Experimental group	7	23.4	8.302	2.818*	0.033
	Control group	7	27.2	13.238		

Note: p <0.05, significant difference;

Through the control experiment, the experimental group adopted the content and methods of dance movement activity to attend the class, while the control group adopted the conventional health standard syllabus to attend the class. We compiled the data and analyzed the following data for comparison and reference. As can be seen from the table, we can clearly obtain, according to the data analysis, the average score of the experimental group is 23.4 the average score of the control group is 27.2, and the P-value of the T-test is 0.033. The significant difference indicates that dance movement activity has a great impact on the improvement of elementary school students' mental health.

7. Conclusion, Discussion and Implications

The research results are consistent with the hypothesis. The dance movement activities improved the mental health of elementary school students, and the data of the experimental group was lower than that of the control group.

The results of this study showed a significant improvement of dance movement activity on small elementary school students' mental health. After receiving five group activities, the experimental group scores were significantly reduced. Having accomplished our goals, dance movement activity has a significant improvement that affects the small elementary school students' mental health. Dance movement activity, compared with traditional teaching, the content is more novel and diversified, bringing physical exercise to improve dysthymic disorder, character defects, bad habits, and behavioral disorders in elementary school students. It also leads to a better emotional experience. This is well enough to offset and eliminate the negative emotions of elementary school students, making their emotions more stable. This research can enable students to treat and adjust their emotions correctly, stimulate their self-potential, actively overcome difficulties, and realize their self-worth.

The results of this study have implications for conducting dance movement activities to improve elementary school students' mental health. First, improving the psychology of elementary school students also improves mental health in fifth-grade students. Therefore, educators can incorporate dance movement activities into teaching methods to address mental health problems.

Second, using dance movement activities can help create a more interactive and collaborative environment. This may increase engagement in elementary school students, which, in turn, may address questions about mental health and better improve elementary school students.

Finally, the use of dance movement activities can help bridge the gap between theory and practice. Using dance movement activities for learning, educators can create simulations enabling elementary school students to apply theoretical concepts in real-world settings. This can help elementary school students better understand and appreciate their own advantages to improve mental health.

In conclusion, it can be said that the use of dance movement activities has a positive effect on the mental health of elementary school students. Educators should consider including dance movement activities as motivation in their teaching to create a more attractive and interactive learning environment, develop important skills, and bridge the gap between theory and practice. The result of conform with study of the research group of Tianjin Institute of Education Science investigated the ideological and moral status of elementary and middle school students for the fourth time, among which the mental health of elementary and middle school students is one of the important contents of the ideological and moral status of elementary and middle school students (Meng, 2021). Moreover, with the transformation of society, the change of marriage concept, and the impact of multiculturalism, the number of single-parent families in China is increasing year by year, and the children of single-parent families are also increasing. Entering elementary school is a sign of children's beginning to receive education and also an important turning point for the rapid development of children's individual physical and mental health. The change of family structure will make children have many social and psychological adaptation problems. It is urgent to fully understand the mental health status of elementary school students in single-parent families, improve their personality, and give them comprehensive psychological assistance and intervention (Zhu, 2018).

At the same time, dance movement activity can also improve elementary school students' daily learning energy, so that they have full enthusiasm to participate in learning and leisure activities and cultivate their sentiment. It can also help them deal well with emergencies, all of which enhance the personality stability of elementary school students to a certain extent (Wang, 2019) and Zhang (2017) suggested dance movement activity, through the training of some group projects, allows students to share with others, no longer being self-centered. The study of Zhang (2014) revealed to understand the sense of collective honor, dance movement activity enhances elementary school students' respect for rules, enjoyment of rule habits, and at the same time, cultivates their hard work perseverance, helping them understand the meaning of perseverance.

The results of this study indicate that this, to elementary school students in the future, abiding by the rules, allows a literate person to lay the foundation. This study attempts to prove this statement by using the experimental validation method. The study scale showed that dance movement activities for elementary school students significantly increased the improvement of mental health among them, and this factor significantly enhanced elementary school students' mental health.

Students' mental health, meanwhile, in the present study, compares the mental health of elementary school students in the experimental group before and after using dance movement activities. To compare the mental health of elementary school students between the experimental group and the control group, the normal learning activity on elementary school students' mental health contributed less. However, using the dance movement activities intervention for elementary school students, there was a significant improvement in mental health. Therefore, exercising dance movement activities on elementary school students marked improvement in mental health.

BIbliography

Cui, J. (2018). **Research on the mental health status of rural pupils in grades 4-6.** Rural Staff Officer, (21), 165.

He, J., Zhang, T., Yang, X., Gao, Y., Hu, M., & Chen, R. (2014). **Survey on the mental health status of students in grades 4~6 in Lu Zhou Suburban elementary school.** Medical Theory and Practice, 27(6), 721-723.

He, M. N., & Zhu, S. L. (2016). **Investigation on the effects of dance therapy on mental health of college students.** Asia Pacific Education, (24), 250.

Lei, Y. H., Pu, X. C., Zhang, Q., & Zhou, G. Q. (2022). **The influence of nutritional status and muscle strength in oligopatients.** Chinese Journal of Practical Nursing, 38(7),

Wang, W. H., & Yang, J. (2016). **The current situation of mental health among elementary and middle school students and their educational countermeasures —— Based on the survey of grade 4~9 students in Chongqing.** Modern and Secondary School Education, (9), 77-81.

Wang, W. W. (2018). **Dance aesthetic education and quality education —— A On the ontological value of dance education.** Northern Music, 38(9), 249.

Wang, X. X. (2005). **Survey on the mental health status of senior students in urban elementary schools.** The Journal of Clinical Psychosomatic Diseases, 11(4), 331-332.

Zhang, Y. (2016). **Study on the influence of cheerleading on physical and mental indexes of second grade students -- A case study of two elementary schools in Kunming City (Master's thesis).** Yunnan Normal University, Kunming.

Zhang, Y. (2017). **The influence of dance education on the physical and mental development of elementary and secondary school students.** Art Review, (23), 147-148 ,167.

Zhu, F. J. (2013). **Research on the current situation and countermeasures of mental health in elementary school students.** China Today Forum, (21), 351.

Zhu, Q. (2003). **Teachers 'problem behaviors and their impact on students' mental health.** Educational Exploration, (5), 85-86.

การสร้างภาวะผู้นำบนพื้นฐานฆราวาสธรรม 4
Creating Leadership Based on The Foundation of
The Gharavasa-Dhamma Principles

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บทคัดย่อ

บทความวิจัยนี้เป็นการวิจัยเชิงคุณภาพโดยการวิเคราะห์เอกสาร มีวัตถุประสงค์เพื่อวิเคราะห์การสร้าง
ภาวะผู้นำบนพื้นฐานฆราวาสธรรม 4 ผลการวิจัยพบว่า ฆราวาสธรรม 4 เป็นหลักธรรมพื้นฐานของมนุษย์ที่
สมบูรณ์ ได้แก่ 1) มีสัจจะ คือ ความจริงใจ ความตรงต่อธรรมหรือความจริง 2) ทมะ มีการฝึกฝนอบรมตนเอง
อยู่เสมอ 3) มีขันติ คือ ความอดทนต่อความยากลำบากทั้งกาย และใจ 4) จาคะ คือ ความเสียสละ จากความ
ยึดมั่นถือมั่นในกิเลส อคติ และความเห็นแก่ตัว ธรรมะทั้ง 4 ข้อนี้ เสริมสร้างภาวะผู้นำให้เกิดขึ้นได้ เมื่อผู้นำมี
ความเข้าใจและนำไปปฏิบัติ จะทำให้ผู้นำเกิดความน่าเชื่อถือ เพราะเป็นคนมีสัจจะ มีความจริงใจ ผู้ตามจะให้
ความเคารพรักเพราะมีความถ่อมตัว รู้จักยอมรับข้อผิดพลาดและปรับปรุงพัฒนาตัวเองอยู่สม่ำเสมอ
นอกจากนี้ ขันติธรรมยังช่วยสร้างความมั่นคงทางด้านจิตใจซึ่งมีผลทำให้ขวัญกำลังใจของผู้ร่วมงานมีความหนัก
แน่นมั่นคงไปด้วย และที่สำคัญที่สุด ผู้นำที่ยอมเสียสละความรู้สึกที่เป็นอคติส่วนตัวเพื่อประโยชน์สุขส่วนร่วม
ย่อมสามารถหลอมรวมจิตใจคนให้เกิดความรู้รักสามัคคีได้ เพราะผู้นำให้ความยุติธรรมแก่ทุกฝ่ายอย่าง
สมเหตุสมผล มีใจเป็นกลาง มีธรรมเป็นวิถีและเป้าหมาย

คำสำคัญ: ฆราวาสธรรม 4, ภาวะผู้นำ, ผู้นำ

ABSTRACT

This research is a qualitative study that analyzes documents with the objective of
examining the development of leadership based on the foundation of the Four Noble Truths.

The research findings indicate that the Four Noble Truths serve as fundamental moral principles for a complete human, including: 1. Saccadhamma (Truthfulness): This involves being honest and true to oneself, adhering to righteousness, and embracing authenticity. 2. Tapa (Self-discipline): It emphasizes continuous self-training and self-development. 3. Khanti (Patience): This refers to enduring difficulties both physically and mentally with perseverance. 4. Caga (Generosity): It involves self-sacrifice and giving up attachment to possessions, views, and opinions. These four principles of Dhamma contribute to the development of leadership. When leaders understand and practice these principles, they become trustworthy individuals who are sincere and truthful. Followers respect them for their integrity, and they inspire confidence by being disciplined, admitting mistakes, and consistently working on self-improvement. Furthermore, the cultivation of patience and moral righteousness helps establish emotional stability, leading to the strengthening of the team's morale. Most importantly, leaders who willingly sacrifice personal biases for the common good can foster a sense of unity among team members. This is achieved through the leader's impartiality, a balanced and righteous approach, and a shared goal of promoting harmony.

Keywords: Gharavasa-dhamma Principles, leadership, leader

1. บทนำ

ผู้นำที่แท้จริงจะเป็นบุคคลที่มีภาพทางบวกเกี่ยวกับความมีมโนทัศน์แห่งตนที่จริงใจ (Truthful self-concepts) และเปิดเผย (Openness) เพื่อสร้าง ความไว้วางใจ (Trust) และสนับสนุนอย่างกระตือรือร้น (Enthusiastic support) จากผู้ตาม เพื่อผลการปฏิบัติงานที่สูงขึ้นของบุคคลหรือกลุ่ม (Gardner, 2011) หรือเป็นผู้ที่รู้และเข้าใจตนเอง รับหลักการและปฏิบัติตามค่านิยมทางจริยธรรมระดับสูงอย่างสม่ำเสมอ และให้อำนาจและบันดาลใจผู้อื่น ด้วยความเปิดเผยตรงไปตรงมาและแท้จริง การเป็นของแท้ หมายถึง เป็นของจริง อยู่กับความจริงของความเชื่อและค นิยม ของตน และปฏิบัติการด้วยความจริงของตนเองมากกว่า ที่จะเลียนแบบสิ่งที่ผู้อื่นทำ ผู้นำที่แท้จริงบันดาล ความไว้วางใจ และพันธะผูกพัน เพราะว่าเขายอมรับความเห็นที่หลากหลาย ส่งเสริมการร่วมไม้ร่วมมือ และช่วยให้ผู้อื่นเรียนรู้ เติบโต และพัฒนา (พิพัฒน์ นนทนาธรณ์, 2558)

ภาวะผู้นำ คือ ความสัมพันธ์ซึ่งบุคคลหนึ่งเรียกว่าผู้ใช้อิทธิพลต่อบุคคลอื่นให้ทำงานร่วมกันอย่างเต็มใจ ทั้งนี้เพื่อให้ผลงานตามที่องค์กรหรือกลุ่มมุ่งหมายให้สำเร็จลุล่วงไปด้วยดี (Terry, G. R., 1972, p. 493) การที่ผู้นำจะสามารถมีอิทธิพลต่อจิตใจของผู้อื่นได้นั้น สิ่งสำคัญมาจากความจริงใจ ผู้นำจะต้องมีการฝึกฝนตนอยู่ตลอดเวลา โดยเฉพาะในเรื่องสติปัญญา ความดีงาม ความรู้ความสามารถ คำนิยามดังกล่าวนี้แสดงให้เห็นเป็นนัยว่า "ภาวะผู้นำต้องเกี่ยวข้องกับบุคคลอื่น ผู้ตามหรือผู้อยู่ใต้ บังคับบัญชา ถ้าหากว่าปราศจากผู้ตามหรือ

ผู้อยู่ใต้บังคับบัญชาแล้ว คุณสมบัติของภาวะผู้นำของบุคคลจะไม่มี ความหมายเลย" (Ralph M., 1974, pp. 110-115) ภาวะผู้นำ คือ คุณสมบัติ เช่น "สติ ปัญญา ความดีงาม ความรู้ความสามารถของบุคคลที่ชักนำให้ คนทั้งหลายมาประสานกัน และพากันไปสู่จุดหมายที่ดีงาม" (พระ ธรรมปิฎก (ประยุทธ์ ปยุตฺโต), 2540, หน้า 5) พระพุทธองค์ตรัสไว้ในโคปาลสูตร โดยการเปรียบเทียบ ฝูงโค และโคจ่าฝูง เกี่ยวกับผู้นำและผู้ตามดังนี้ "เมื่อฝูงโคว่ายข้ามน้ำ ถ้าโคจ่าฝูงไปคด โคหมดทั้งฝูงนั้นก็ไปคดตาม กัน เพราะมีผู้นำที่ไปคด ฉันใด ในหมู่ มนุษย์ก็ฉันนั้นบุคคลผู้ใดได้สมมุติให้เป็นใหญ่หากบุคคลผู้นั้นประพฤติไม่ เป็นธรรม หมู่ประชาชนนอกนั้นก็จะ ประพฤติเสียหาย แว่นแคว้นทั้งหมดก็จะยากเข็ญ หากผู้ปกครองเป็นผู้ไร้ ศีลธรรม เมื่อฝูงโคว่ายข้ามน้ำ ถ้าโค จ่าฝูงไปตรงโคหมดทั้งฝูงนั้นก็ไปตรงตามกันเพราะมีผู้นำที่ไปตรง ฉันใด ใน หมู่มนุษย์ก็ฉันนั้น บุคคลผู้ใดได้รับ สมมุติให้เป็นใหญ่ หากผู้นั้นประพฤติชอบธรรม หมู่ประชาชนนอกนั้นก็ พลอยดำเนินตาม ทั้งแว่นแคว้น ก็จะ อยู่เป็นสุขหากผู้ปกครองตั้งใจอยู่ในธรรม" (องฺ.จตุกฺก. 21/70/98)

หลักฆราวาสธรรม 4 คือ หลักธรรมสำหรับการครองเรือน เป็นหลักธรรมสำหรับของผู้ครองเรือนที่ ประสบความสำเร็จในการดำเนินชีวิตทางโลก มีองค์ประกอบ 4 ประการ ได้แก สัจจะ ทมะ ขันติ จาคะ (ส.ส. (ไทย), 15/845/316) พระพรหมคุณาภรณ์ (ป.อ.ปยุตฺโต) ได้ให้ความหมายไว้ว่า ฆราวาสธรรม หมายถึง ธรรม สำหรับ ฆราวาส ธรรมสำหรับการครองเรือน หรือการครองชีวิตของคฤหัสถ์ ได้แก่ 1)สัจจะ หมายถึง ความจริง ซื่อสัตย์ จริงใจ พูดจริง ทำจริง 2) ทมะ หมายถึง การฝึกฝน การข่มใจ ฝึกนิสัย ปรับตัว รู้จักควบคุมจิตใจ ฝึกหัดดัดนิสัย แก้ไขข้อบกพร่อง ปรับปรุงตนให้เจริญก้าวหน้าด้วยสติปัญญา 3) ขันติ หมายถึงความอดทน ตั้ง หน้าทำหน้าที่การงานด้วยความขยันหมั่นเพียร เข้มแข็ง ทนทาน ไม่หวั่นไหว มั่นในจุดหมาย ไม่ท้อถอย 4) จาคะ หมายถึง ความเสียสละ สละกิเลส สละความสุขสบาย และผลประโยชน์ส่วนตน ได้ ใจกว้างพร้อมที่จะ รับฟังความทุกข์ ความคิดเห็นและความต้องการของคนอื่น พร้อมที่จะร่วมมือ ช่วยเหลือเอื้อเฟื้อเผื่อแผ่ ไม่คับ แคบ เห็นแก่ตนหรือเอาแต่ใจตัว (พระพรหมคุณาภรณ์ (ป.อ.ปยุตฺโต), 2559)

หากมีการนำเอาหลักภาวนา 4 มาสร้างภาวะผู้นำก็จะเกิดการนำเอาหลักฆราวาสธรรมมาศึกษา วิเคราะห์วิจัย เพื่อนำเอาส่วนที่เป็นคุณค่าของสัจจะ ทมะ ขันติ และจาคะ พัฒนาศักยภาพของภาวะผู้นำให้ เป็นไปในทางที่สร้างสรรค์ เกิดกุศล เกิดประโยชน์สุขส่วนรวม ดังนั้น ผู้วิจัยจึงสนใจวิเคราะห์การสร้างภาวะ ผู้นำบนพื้นฐานฆราวาสธรรม 4 เพื่อให้ได้คำตอบสำหรับนำไปเป็นข้อเสนอแนะที่สมเหตุสมผลและเป็น ประโยชน์ต่อไป

2. วัตถุประสงค์ของการวิจัย
เพื่อวิเคราะห์การสร้างภาวะผู้นำบนพื้นฐานฆราวาสธรรม 4

3. วิธีดำเนินการวิจัย
การศึกษาครั้งนี้เป็นการวิจัยเชิงปรัชญา โดยใช้ระเบียบวิธีการวิจัยเอกสาร ซึ่งแบ่งเอกสารเป็นเอกสาร ปฐมภูมิและเอกสารทุติยภูมิ

3.1 เอกสารปฐมภูมิ ได้แก่ พระไตรปิฎกภาษาไทย ฉบับหลวง ตีพิมพ์ปี พ.ศ. 2525 โดย กรมการศาสนา กรุงเทพมหานคร

3.2 เอกสารทุติยภูมิ ประกอบด้วย เอกสารและงานวิจัยที่เกี่ยวข้องกับภาวะผู้นำและหลักฆราวาสธรรม 4

เมื่อรวบรวมเอกสารเสร็จสิ้นแล้ว นำเอกสารมาเรียบเรียง จากนั้นวิเคราะห์เพื่อนำไปสรุปผล อภิปรายผล และเสนอแนะในบทสุดท้าย

4. สรุปผลการวิจัย

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อวิเคราะห์การสร้างภาวะผู้นำบนพื้นฐานฆราวาสธรรม 4 ผลการวิเคราะห์พบว่า ฆราวาสธรรม 4 เป็นหลักธรรมพื้นฐานของมนุษย์ที่สมบูรณ์ ได้แก่ 1) มีสัจจะ คือ ความจริงใจ ความตรงต่อธรรมหรือความจริง 2) ทมะ มีการฝึกฝนอบรมตนเองอยู่เสมอ 3) มีขันติ คือ ความอดทนต่อความยากลำบากทั้งกาย และใจ 4) จาคะ คือ ความเสียสละ จากความยึดมั่นถือมั่นในกิเลส อคติ และความเห็นแก่ตัว ธรรมะทั้ง 4 ข้อนี้ เสริมสร้างภาวะผู้นำให้เกิดขึ้นได้ เมื่อผู้นำมีความเข้าใจและนำไปปฏิบัติ จะทำให้ผู้นำเกิดความน่าเชื่อถือ เพราะเป็นคนมีสัจจะ มีความจริงใจ ผู้ตามจะให้ความเคารพรักเพราะมีความถ่อมตัว รู้จักยอมรับข้อผิดพลาดและปรับปรุงพัฒนาตัวเองอยู่สม่ำเสมอ นอกจากนี้ ขันติธรรมยังช่วยสร้างความมั่นคงทางด้านจิตใจซึ่งมีผลทำให้ขวัญกำลังใจของผู้ร่วมงานมีความหนักแน่นมั่นคงไปด้วย และที่สำคัญที่สุด ผู้นำที่ยอมเสียสละความรู้สึกที่เป็นอคติส่วนตัวเพื่อประโยชน์สุขส่วนร่วมย่อมสามารถหลอมรวมจิตใจคนให้เกิดความรู้รักสามัคคีได้ เพราะผู้นำให้ความยุติธรรมแก่ทุกฝ่ายอย่างสมเหตุสมผล มีใจเป็นกลาง มีธรรมเป็นวิถีและเป้าหมาย

5. อภิปรายผล

จากผลการวิเคราะห์ สามารถอภิปรายผลได้ว่า การสร้างภาวะผู้นำบนพื้นฐานฆราวาสธรรม 4 ทำให้เกิดภาวะผู้นำที่แท้จริง ซึ่งสอดคล้องกับแนวคิดของกัญชพร ปานเพ็ชร (2566) สรุปไว้ว่า ภาวะผู้นำที่แท้จริง คือ ผู้ที่สร้างแรงบันดาลใจ สื่อความหมาย ถึงความเป็นตัวตนที่แท้จริง ไม่เสแสร้งตั้งแต่ แนวคิด ค่านิยม พฤติกรรมที่แสดงออกความรัก และความมั่นใจ เกิดขวัญกำลังใจแก่บุคคลที่เป็นผู้ตาม โดยผู้นำที่มีภาวะผู้นำที่แท้จริงจะต้องมีความตระหนักรู้ในตนเองสูง สามารถควบคุม พฤติกรรมของตนเอง ตลอดจนช่วยกระตุ้นบุคลากรในองค์กรให้มีการพัฒนาตนเองให้มีความก้าวหน้ายิ่ง ๆ ขึ้นไป นอกจากนี้ การสร้างภาวะผู้นำบนพื้นฐานฆราวาสธรรม 4 ยังส่งผลให้เกิดอิทธิพลต่อการจิตใจของผู้อื่น ซึ่งมาจากความจริงใจ อันเกิดจากการฝึกฝนตนอยู่ตลอดเวลา โดยเฉพาะในเรื่องสติปัญญา ความดีงาม ความรู้ความสามารถ ซึ่งสอดคล้องกับแนวคิดของ ชิสา กันยาวิริยะ เมธา หริมเทพาธิป และ กีรติ บุญเจือ (2563) สรุปว่า ผู้นำกับหลักคุณธรรม จริยธรรมเป็นสิ่งที่แยกกันไม่ออก ผู้นำที่มีประสิทธิภาพย่อมสามารถกระตุ้นให้กลุ่มคนดำเนินงานเพื่อบรรลุถึง เป้าหมายได้ เป้าหมายและวิธีการที่ดำเนินไปถึงนั้นต้องเป็นไปด้วยความชอบธรรม คือ ดำรงอยู่ตามทำนองคลองธรรม

ผู้นำที่ปฏิบัติเช่นนี้ได้ย่อมได้รับการยอมรับในสังคม และสอดคล้องกับ พระปลัดพิพัฒน์พงษ์ ภทฺทวโส (2566) กล่าวว่า ผู้นำต้องมีลักษณะเฉพาะตัวในการทำงานให้เกิดผลประโยชน์สูงสุดในองค์กรที่รับผิดชอบ สามารถ กำหนดการบทบาทการทำงานตามแนวหลักธรรมได้ แสดงออกมาหลายรูปแบบไม่ตายตัว แต่ได้อาศัยหลัก สำคัญเสมือนเป็นเป้าหมายโดยรวมนำ หลักธรรมบางประการมาพิจารณาเปรียบเทียบทางวิชาการที่ได้ศึกษา ในพระพุทธศาสนา เช่น ความซื่อสัตย์สุจริต (Integrity) คือการซื่อตรง มั่นคงอยู่ในศีลธรรม รักษาสัจจะ และ เกียรติยศ ตลอดจนเป็นที่เชื่อถือ ไว้วางใจได้ (Dependability) ในเรื่องการทำงานและ มีความภักดี (Loyalty) ตรงกับ อาชชว์ คือความซื่อตรงต่อตนเอง ต่อการงาน และต่อ บุคคลอื่น ลักษณะท่าทาง (Bearing) คือการ วางตัวเหมาะสม ทั้งในด้านการปกครองและ ในด้านความพระพฤติ ตลอดจนมีความสงบเสงี่ยม (Humility) คือการไม่อวดดี ไม่หยิ่ง ตรง กับมทฺทว คือ สุภาพอ่อนโยน ทั้งกายและวาจาไม่แข็งกระด้าง ความอดทน (Endurance) คือ ทนต่อความเคร่งเครียดต่างๆ ทั้งกายและใจ เช่น ความอดทนต่อความเจ็บปวด เหนื่อยอ่อน ทนต่อความทุกข์ เดือดร้อนไม่ยอมแพ้ รวมทั้ง ความกล้าหาญ (Courage) ทั้งกายและทางใจ คือตระหนักถึง ความกลัวแต่ก็ยังสามารถ เผชิญกับอันตรายได้ด้วยตนเอง มั่นคง ควบคุมตัวเองได้ ทังยังสำนึกในความ รับผิดชอบที่ ต้องทำการในเหตุการณ์นั้นด้วย ตรงกับหลักขนฺติ คือความอดทนอดกลั้นรู้จักข่มใจและห้าม ใจ ตนเอง ทนทานต่อกิเลสและความทุกข์ มีสติ ควบคุมจิตใจให้คงที่อยู่ตามปกติ ความยุติธรรม (Justice) คือ มี ความเสมอภาค ไม่ลำเอียงในการปฏิบัติต่อ ผู้ใต้บังคับบัญชา เช่น การให้รางวัลหรือการลงโทษ ความไม่เห็นแก่ ตัว (Unselfishness) คือการไม่ฉวยโอกาสเอาเปรียบเพื่อ ความสุข ผลประโยชน์ หรือความปลอดภัยเฉพาะ ส่วนตัว ซึ่งตรงกับหลักธรรมทางพุทธ ศาสนา คือ ทาน การให้ หรือการเสียสละเพื่อส่วนรวม เป็นต้น และ สอดคล้องกับแนวคิดของ มาลัย สาแก้ว (2566) กล่าวว่า การที่จะเป็นผู้นำได้อย่างยั่งยืนนั้น จะต้องประกอบ ไปด้วยภาวะความเป็นผู้นำ คุณลักษณะของผู้นำได้แก่ ความรับผิดชอบ ความเสียสละ พฤติกรรมควร ไม่ควร โดยสิ่งซึ่งควบคุมการกระทำของตนเองก็คือคุณธรรมและจริยธรรม

6. ข้อสรุปและข้อเสนอแนะ

ข้อเสนอแนะเพื่อการนำผลการวิจัยไปใช้งาน

ผู้วิจัยเสนอแนะให้มีการนำเอาเนื้อหาของบทความวิจัยนี้ไปออกแบบร่วมกัน เน้นการมีส่วนร่วมในการ แสดงความเห็น วิพากษ์ วิเคราะห์ สังเคราะห์เพื่อให้ได้มาซึ่งรูปแบบหรือแนวทางในการนำไปสู่การจัดกิจกรรม ต่างๆ เช่น ในรูปแบบของการอบรมทั้งในหลักสูตรระยะสั้น หรือในรายวิชาที่เกี่ยวข้องกับภาวะผู้นำ หรือหลัก ฆราวาสธรรม 4 หรือการนำไปออกแบบเพื่อการเผยแพร่ในสื่อต่าง ๆ เพื่อสร้างองค์ความรู้และแรงบัลดาลใจ ให้กับประชาชนที่สนใจในการรับสื่อเพื่อนำไปปฏิบัติในชีวิตประจำวัน

ข้อเสนอแนะเพื่อการวิจัยต่อไป

ผู้วิจัยเสนอแนะให้มีการศึกษาวิจัยเกี่ยวกับการสร้างภาวะผู้นำบนพื้นฐานของหลักธรรมอื่น ๆ ดังต่อไปนี้

1. การสร้างภาวะผู้นำบนพื้นฐานทศพิธราชธรรม

2. การสร้างภาวะผู้นำบนพื้นฐานพรหมวิหารธรรม

3. การสร้างภาวะผู้นำบนพื้นฐานอิทธิบาทธรรม

บรรณานุกรม

การศาสนา, กรม. (2525). **พระไตรปิฎกภาษาไทย ฉบับหลวง**. กรุงเทพฯ : กรมการศาสนา.

ชิสา กันยาวิริยะ เมธา หริมเทพาธิป และ กีรติ บุญเจือ. (2563). **ภาวะผู้นำตามหลักพุทธปรัชญาเถรวาท**. วารสารการวิจัยการพัฒนา. 10(3), 57-64.

พระปลัดพิพัฒน์พงษ์ ภทฺทวโส. (2566). **ผู้นำที่พึงประสงค์ในยุควิถีใหม่**. วารสารพุทธนวัตกรรมและการจัดการ. 6(1), 128-139.

พระพรหมคุณาภรณ์ (ป.อ.ปยุตฺโต). (2559). **พจนานุกรมพุทธศาสนา ฉบับประมวลธรรม**. พิมพ์ครั้งที่ 34. กรุงเทพฯ : ธรรมสภา.

พิพัฒน์ นนทนาธรณ์. (2558). **ภาวะผู้นำเชิงปฏิบัติการ: LIFE Model Operational Leadership: LIFE Model**. กรุงเทพฯ : มหาวิทยาลัยเกษตรศาสตร์.

มาลัย สาแก้ว. (2566). **ภาวะผู้นำตามหลักปาปณิกธรรมของผู้นำสตรีในการพัฒนาท้องถิ่นไทย**. วารสารสหวิทยาการนวัตกรรมปริทรรศน์. 6(2), 115-126.

Gardner, W. L, Cogliser, C. C., Davis, K. M. and Dickens M.P. (2011). **Authentic Leadership: A review of the literature and research agenda**. The Leadership Quarterly. 2011(22), 1120-1145.

Stogdill, R. M. (1974). **Handbook of Leadership: A Survey of Theory and Research**. New York: Free Press.

Terry, G. R. (1972). **Principle of Management**. (6th ed.). Home Wood.Il: Richard D. Irwin.

การทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย "ช้างคู่"
สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1
Teamwork of the School Administrators in the Network "Chang Koo"
Suratthani Primary Educational Service Area Office 1

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บทคัดย่อ

       การวิจัยครั้งนี้มีวัตถุประสงค์ เพื่อ (1) ศึกษาการทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 และ (2) เปรียบเทียบการทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 จำแนกตามประสบการณ์และระดับการศึกษา

       การวิจัยครั้งนี้เป็นการวิจัยเชิงสำรวจ ประชากรประกอบด้วย ครูในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 จำนวน 125 คน กลุ่มตัวอย่างสุ่มโดยวิธีการสุ่มอย่างง่าย จำนวน 91 คน วิธีดำเนินการวิจัยมี 4 ขั้น ได้แก่ (1) ศึกษา ปัญหาการวิจัย (2) การออกแบบการวิจัย (3) การเก็บรวบรวมข้อมูลและวิเคราะห์ข้อมูล (4) การเขียนรายงานการวิจัย เครื่องมือที่ใช้ในการวิจัยคือ แบบสอบถามมาตราส่วนประมาณค่า 5 ระดับ สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการทดสอบค่าที

       ผลการวิจัย พบว่า (1) การทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 โดยรวมทุกด้านอยู่ในระดับมาก เมื่อพิจารณาเป็นรายด้านพบว่า ด้านที่มีค่าเฉลี่ยมากที่สุด คือ การมีเป้าหมายเดียวกัน ส่วนด้านที่มีค่าเฉลี่ยต่ำสุด คือ การ

สื่อสารอย่างเปิดเผย และ (2) เปรียบเทียบการทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 จำแนกตามประสบการณ์และระดับการศึกษา ภาพรวมและรายด้านไม่แตกต่างกัน

คำสำคัญ : การทำงานเป็นทีม, ผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่, สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1

ABSTRACT

This research objective were: (1) to study the teamwork of school administrators in Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1; and (2) to compare the teamwork of school Administrators in Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1 as classified by education level and work experience.

This research was a survey. Population was 125 teachers of Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1. The sample was 91 teachers in Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1. Research procedure consisted of 4 steps: (1) studying research problems; (2) research design; (3) data collection and data analysis; (4) research paper writing. The research instrument was a five-point rating scale questionnaire. Data were analyzed by frequency, percentage, mean, Standard Deviation, and t-test.

The results showed that: (1) the teamwork of school administrators in Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1, overall was at the highest level. As the highest-level aspect was having common goals and the lowest-level aspect was an open communication; (2) the comparison of the teamwork of school administrators in Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1, classified by education level and work experience as a whole and each aspect were not different.

Keywords: Teamwork, School Administrators in Chang Khu Network Group, under the Surat Thani Primary Educational Service Area Office 1

1. บทนำ

ความเปลี่ยนแปลงที่รวดเร็วในยุคโลกาภิวัฒน์ ได้ส่งผลกระทบต่อการดำเนินงานขององค์กร จึงทำให้องค์กรต้องวางแผนเพื่อปรับปรุงและเปลี่ยนแปลงองค์กรให้มีประสิทธิผล ซึ่งนักวิชาการบางคนได้ยืนยันว่าการสร้างทีมงานเป็นเทคนิคการพัฒนาองค์กรที่นิยมมากที่สุด เพราะเป็นความพยายามที่จะช่วยกลุ่มให้แก้ปัญหาตนเองโดยการเรียนรู้และสามารถเพิ่มประสิทธิผลขององค์กรได้จริง ซึ่งความสำคัญการทำงานเป็นทีมส่งผลให้เกิดการมีปฏิสัมพันธ์ในการทำกิจกรรมของกลุ่มหรือทีมงาน มีการประสานความร่วมมือร่วมใจในการทำงาน การทำงานเป็นทีมที่ไม่สมบูรณ์ จึงพบปัญหาการสื่อสารไม่ตรงกัน ส่งผลให้บุคลากรไม่อยากมีส่วนร่วมในการทำงานกลุ่ม อาจจะเกิดความขัดแย้ง ขาดปฏิสัมพันธ์ที่ดีต่อกัน สุดท้ายอาจจะเลิกคบหา และเป้าหมายสำคัญสถานศึกษาขาดการทำงานเป็นทีมที่มีประสิทธิภาพ ทำให้เกิดปัญหา อุปสรรค การทำงาน บางอย่างดำเนินงานไม่สำเร็จ งานบางอย่างไม่มีคุณภาพและประสิทธิภาพ งานบางอย่างเกิดความล่าช้ากว่า กำหนด ส่งผลเสียต่อการจัดการศึกษาของสถานศึกษาที่ไม่สามารถทำให้เป็นไปตามเป้าหมายตามที่กำหนดได้ โรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ซึ่งแต่ละโรงเรียนนั้นมีเป้าหมายเดียวกัน คือ การพัฒนาการศึกษาให้มีคุณภาพตามแนวนโยบาย การพัฒนาการศึกษาให้มีคุณภาพนั้น การทำงานเป็นทีมจึงเป็นส่วนที่จะทำให้องค์การประสบผลสำเร็จในการพัฒนาการศึกษาของโรงเรียน ยังพบปัญหาเกี่ยวกับระบบการทำงานเป็นทีม พบว่าการทำงานภายในองค์การ บุคลากรยังมีการประสานงานไม่ดีเท่าที่ควร เพราะต่างคนต่างทำงานเฉพาะหน้าที่ความรับผิดชอบของตน การปรึกษาหรือการวางแผนในการร่วมกันทำงานยังมีน้อย บุคลากรบางคนไม่ให้ความร่วมมือในการทำงานส่วนรวม จึงส่งผลให้งานไม่ประสบผลสำเร็จเท่าที่ควร การสื่อสารในการทำงาน ความไว้วางใจ ความเชื่อถือซึ่งกันและกันในการทำงานยังมีน้อยส่งผลให้การทำงานในระบบทีมไม่มีประสิทธิภาพเท่าที่ควร ดังนั้น ผู้บริหารจึงมีความจำเป็นต้องทำความเข้าใจเกี่ยวกับรายละเอียดต่างๆ ของกระบวนการในการบริหาร ทีมงานให้กระจ่างชัดในทุกแง่มุม เพื่อให้ทีมงานได้ช่วยกันทำงานให้บรรลุวัตถุประสงค์องค์การ หากผู้บริหารสามารถเรียนรู้และนำมาใช้ประโยชน์ได้อย่างเต็มที่ จะส่งผลดีต่อองค์การเป็นอย่างมาก ทั้งในด้านเพิ่มขีดความสามารถในการแข่งขันให้แก่องค์การ และในด้านการสร้างความแข็งแกร่งขององค์การ ทำให้องค์การเจริญก้าวหน้าอย่างยั่งยืน จากความสำคัญดังกล่าว ผู้วิจัยจึงสนใจที่จะศึกษาการทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ประกอบด้วย 1.การมีปฏิสัมพันธ์ 2.การมีส่วนร่วม 3.การสื่อสารอย่างเปิดเผย 4.การมีเป้าหมายเดียวกัน 5.การยอมรับนับถือ 6.ความไว้วางใจซึ่งกันและกัน เพื่อนำไปใช้เป็นข้อมูลในการวางแผนการบริหารสถานศึกษาของผู้บริหารสถานศึกษาให้มีประสิทธิภาพต่อไป

2. วัตถุประสงค์การวิจัย

2.1 ศึกษาการทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1
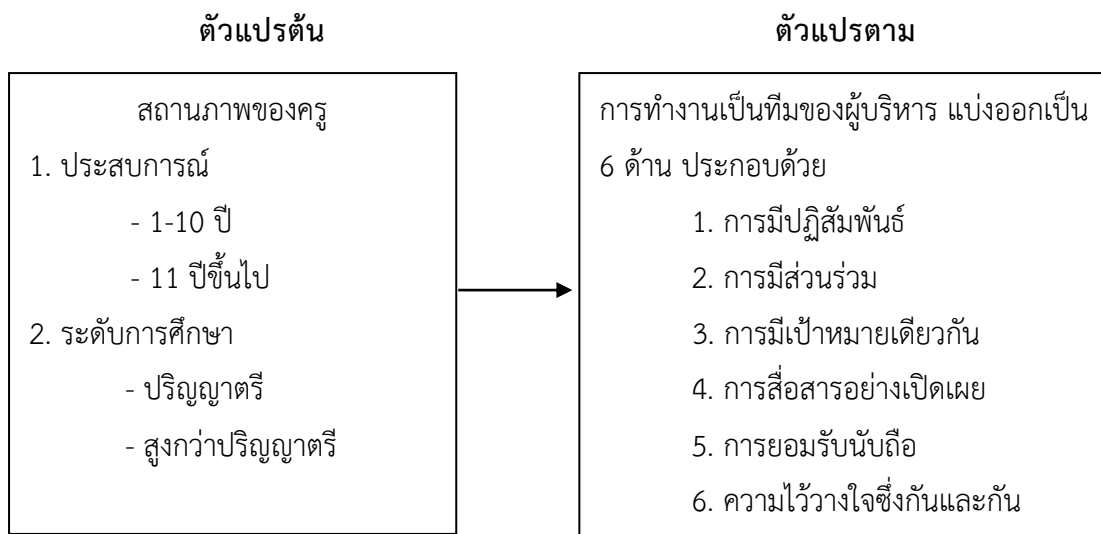
2.2 เปรียบเทียบการทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัด สำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 จำแนกตามประสบการณ์และระดับ การศึกษา

3. การทบทวนวรรณกรรมและกรอบแนวคิดในการวิจัย

ความสำคัญของการรวมตัวกันเพื่อทำงานเป็นทีมด้วยกันนั้น เป็นเพราะความเชื่อที่ว่ามนุษย์แต่ ละคน มีความรู้ความสามารถแตกต่างกัน อีกทั้งความรู้ความสามารถและศักยภาพในตัวบุคคลมี ขอบเขตที่จำกัดจึงต้องมารวมกลุ่มกันเพื่อนำจุดดี จุดด้อย ความรู้ความสามารถที่แตกต่างกัน ในส่วนที่ดี ที่สุดของแต่ละคนมาร่วมกันทำงานให้บรรลุตามเป้าหมายของทีม วราภรณ์ ตระกูลสฤษดิ์ (2550) กล่าว สรุปสาระสำคัญของการทำงานเป็นทีม ประกอบด้วย 1) เพื่อร่วมกันแก้ปัญหา 2) เพื่อประโยชน์ทั้งส่วน บุคคลและส่วนรวม 3) เพื่อความรู้สึกปลอดภัยและมั่นคง และ 4) เพื่อตอบสนองความต้องการทาง จิตใจ Thassopon, T. and Songyu, C. (2024) ได้กล่าวถึงความสำคัญของการทำงานเป็นทีมด้วย การมอบพลังอำนาจให้กับผู้ใต้บังคับบัญชาในการทำงานเป็นทีมเป็นการรวมตัวของบุคคลตั้งแต่ 2 คน ขึ้นไป เข้ามาทำงานเพื่อให้งานสำเร็จตามจุดมุ่งหมาย เป้าหมายที่ตั้งไว้มีปฏิสัมพันธ์ต่อกัน มีเป้าหมาย ร่วมกัน มีภารกิจที่ต้องทำเช่นเดียวกัน โดยคิด โดยร่วมตัดสินใจร่วมปฏิบัติและพึ่งพาอาศัยช่วยเหลือ แนะนำกัน มีการแลกเปลี่ยนความคิดซึ่งกันและกัน มีการติดต่อสื่อสาร การประสานงานต่อกัน และมี ความรับผิดชอบต่อความสำเร็จของงานที่ได้รับมอบหมายร่วมกัน โดย วรชัย วิภูอุปรโคตร (2564) นำเสนอความสำคัญของการทำงานเป็นทีมมีความสำคัญต่อการจัดการศึกษาเชิงพื้นที่ในการบริหารแบบ มีส่วนร่วมของผู้บริหารสถานศึกษาเพื่อการปฏิบัติงานเป็นไปในทิศทางหรือแนวทางเดียวกัน การทำงาน เป็นทีมมีลักษณะเป็นกระบวนการ ประกอบด้วยการกำหนดโครงสร้างที่แบ่งภาระหน้าที่และความ รับผิดชอบ มีผู้นำกลุ่ม สมาชิกกลุ่ม ร่วมกันวางแผน และกำหนดระยะเวลาในการปฏิบัติงานที่แน่นอน มีการติดตามประเมินผลการทำงานอย่างสม่ำเสมอ ทำให้บรรลุผลตามเป้าหมายขององค์กรซึ่งการ ทำงานในทีมจะช่วยเพิ่มความแข็งแกร่งให้กับองค์กรอีกด้วย ขณะที่ สุนทร พลวงศ์ (2551) ได้กล่าวถึง แนวคิดเกี่ยวกับการทำงานเป็นทีมว่า การทำงานเป็นทีมให้เกิดประสิทธิภาพและเกิดประสิทธิผลนั้น ต้องมีการแบ่งงานหน้าที่และความรับผิดชอบให้บุคลากรตามความรู้ความสามารถ รวมทั้งความถนัด ของแต่ละบุคคลผู้บริหารต้องตระหนักว่าบุคลากรมีความสามารถแตกต่างกันถนัดหรือเชี่ยวชาญคนละ ด้าน การประสานความร่วมมือร่วมใจการทุ่มเทกำลังความคิดและสติปัญญา ย่อมนำมาซึ่งความสำเร็จ ของงานการทำงานเป็นทีม จึงเกิดขึ้นผู้บริหารจะต้องสร้างเงื่อนไขให้กลุ่มบุคคลภายในองค์กรตระหนัก ว่า พวกตนต้องปฏิบัติงานร่วมกันต้องพึ่งพาอาศัยประสบการณ์ความสามารถ และความยินยอมพร้อม ใจของทุกคน และสมาชิกของกลุ่มต้องยอมรับความคิดเรื่องการทำงานร่วมกันเป็นกลุ่ม หรือเป็นทีมจึง สามารถบรรลุวัตถุประสงค์ร่วมกันได้ ขณะที่ มัลลิกา วิชชุกรอิงครัต (2553) กล่าวว่า การทำงานเป็น ทีมมีความสำคัญมากต่อความสำเร็จขององค์การ ที่ต้องอาศัยความทุ่มเท ความรู้ความสามารถ อย่าง เต็มที่ของผู้ปฏิบัติงานและมีบทบาทสำคัญในการปฏิบัติภารกิจที่มีประสิทธิภาพ ในช่วงเวลาของการ เปลี่ยนแปลงองค์การ จะต้องปรับปรุงอย่างรวดเร็วเพื่อการแข่งขัน เพื่อส่งผลให้องค์การเจริญก้าว หน้า

และร่วมกันทำงานอย่างเต็มความสามารถและมีการประสานงานอย่างดีเพื่อแก้ไขปัญหาต่าง ๆ และพัฒนาองค์การให้บรรลุเป้าหมายสูงสุดของทีมได้

        การวิจัยครั้งนี้ผู้วิจัยได้นำทฤษฎีและแนวคิดของ Woodcock & Francis (1994), McGregor (1960), Likert (1970),และ วราภรณ์ ตระกูลสฤษดิ์ (2550) เกี่ยวกับการบริหารงานเป็นทีมซึ่งแบ่งเป็น 6 ด้าน ได้แก่ 1) การมีปฏิสัมพันธ์ 2) การมีส่วนร่วม 3) การสื่อสารอย่างเปิดเผย 4) การมีเป้าหมายเดียวกัน 5) การยอมรับนับถือ 6) ความไว้วางใจซึ่งกันและกัน นำมาเป็นแนวทางในการกำหนดกรอบแนวคิดในการวิจัย ดังนี้

ภาพที่ 1.1 กรอบแนวคิดในการวิจัย

4. วิธีการวิจัย

        1. ครู ที่มีประสบการณ์ต่างกัน ประเมินการทำงานเป็นทีมแตกต่างกัน ของโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1

        2. ครูที่มีการศึกษาต่างกัน ที่มีระดับการศึกษาต่างกัน ประเมินการทำงานเป็นทีมแตกต่างกันในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1

5. ผลการวิจัย

        ตารางแสดงค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐานระดับการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1โดยรวมและรายด้าน

(n = 91)

การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1	$\bar{X}$	S.D.	ระดับ
1. การมีปฏิสัมพันธ์	4.36	0.75	มาก
2. การมีส่วนร่วม	4.36	0.74	มาก
3. การมีเป้าหมายเดียวกัน	4.51	0.69	มากที่สุด
4. การสื่อสารอย่างเปิดเผย	4.24	0.76	มาก
5. การยอมรับนับถือ	4.35	0.73	มาก
6. ความไว้วางใจซึ่งกันและกัน	4.32	0.76	มาก
รวม	4.35	0.73	มาก

จากตาราง พบว่าการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 โดยภาพรวมอยู่ในระดับมาก ($\bar{X}$=4.35, S.D.= 0.73) เมื่อพิจารณาเป็นรายด้านพบว่า ด้านการมีเป้าหมายเดียวกัน ($\bar{X}$= 4.51, S.D.= 0.69) อยู่ในระดับมากที่สุด และน้อยที่สุดคือ การสื่อสารอย่างเปิดเผย ($\bar{X}$= 4.24, S.D.= 0.76) ส่วนในข้ออื่นๆ นั้นอยู่ในระดับมาก เมื่อพิจารณารายด้าน สรุปได้ดังนี้

1) การมีปฏิสัมพันธ์ พบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ตามการประเมินของครูการมีปฏิสัมพันธ์ โดยรวมอยู่ในระดับมาก เมื่อพิจารณารายข้อ พบว่า ข้อที่อยู่ในระดับมากที่สุด ได้แก่ ผู้บริหารมีความเข้าใจซึ่งกันและกัน สำหรับข้อที่เหลือทุกข้ออยู่ในระดับมาก

2) การมีส่วนร่วม พบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ตามการประเมินของครูการมีส่วนร่วม โดยรวมอยู่ในระดับมาก เมื่อพิจารณารายข้อ พบว่า ข้อที่อยู่ในระดับมากที่สุด ได้แก่ ผู้บริหารมีส่วนร่วมในการตรวจสอบข้อบกพร่องในการทำงาน สำหรับข้อที่เหลือทุกข้ออยู่ในระดับมาก

3) การมีเป้าหมายเดียวกัน พบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ตามการประเมินของครูการมีเป้าหมายเดียวกันโดยรวมอยู่ในระดับมากที่สุดเมื่อพิจารณารายข้อพบว่า ข้อที่อยู่ในระดับมากที่สุด ได้แก่ ผู้บริหารมีส่วนร่วมในการกำหนดเป้าหมายงานและผู้บริหารให้ความสนใจกับเป้าหมายส่วนรวมมากกว่าส่วนตัวข้อที่เหลือทุกข้ออยู่ในระดับมาก

4) การสื่อสารอย่างเปิดเผย พบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ตามการประเมินของครูการสื่อสารอย่างเปิดเผยโดยรวมอยู่ในระดับมาก เมื่อพิจารณารายข้อพบว่า ข้อที่อยู่ในระดับมาก

ที่สุด ได้แก่ เมื่อมีปัญหาอุปสรรคในโรงเรียนผู้บริหารสามารถแสดงความคิดเห็นได้อย่างเปิดเผย สำหรับ
ข้อที่เหลือทุกข้ออยู่ในระดับมาก

        5) การยอมรับนับถือ พบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้าง
คู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ตามการประเมินของครูการ
ยอมรับนับถือโดยรวมอยู่ในระดับมาก เมื่อพิจารณารายข้อพบว่า ข้อที่อยู่ในระดับมากที่สุด ได้แก่
ผู้บริหารร่วมมือกันในการทำผานด้วยความเต็มใจและผู้บริหารยอมรับความรู้ความสามารถในการ
ทำงานของกันและกัน สำหรับข้อที่เหลือทุกข้ออยู่ในระดับมาก

        6) ความไว้วางใจซึ่งกันและกัน พบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่ม
เครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1ตามการประเมิน
ของครู ความไว้วางใจซึ่งกันและกันโดยรวมอยู่ในระดับมากที่สุด เมื่อพิจารณารายข้อพบว่า ข้อที่อยู่ใน
ระดับมากที่สุด ได้แก่ ผู้บริหารมีอิสระในการทำงานที่รับผิดชอบ สำหรับข้อที่เหลือทุกข้ออยู่ในระดับ
มาก

        3. เปรียบเทียบการประเมินการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่
สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ของครู จำแนกตามระดับ
การศึกษาและประสบการณ์การทำงาน สรุปผลได้ดังนี้

(n = 91)

สถานภาพครู	จำนวน	
	(n=91)	ร้อยละ
1. ระดับการศึกษา		
ปริญญาตรี	68	74.76
สูงกว่าปริญญาตรี	23	25.24
รวม	**91**	**100.00**
2. ประสบการณ์ทำงาน		
1 - 10 ปี	39	42.86
11 ปีขึ้นไป	52	57.14
รวม	**91**	**100.00**

        1) ครูที่มีระดับการศึกษาต่างกันประเมินการทำงานเป็นทีมของผู้บริหารโรงเรียนใน
กลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 โดยรวมไม่
แตกต่างกัน ซึ่งไม่เป็นไปตามสมมติฐานที่ตั้งไว้ เมื่อพิจารณารายด้าน พบว่า ครูที่มีระดับการศึกษา
ต่างกันประเมินการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่
การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ไม่แตกต่างกันทุกด้าน

        2) ครูที่มีประสบการณ์การทำงานต่างกันประเมินการทำงานเป็นทีมของผู้บริหาร
โรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1

โดยรวมไม่แตกต่างกัน ซึ่งไม่เป็นไปตามสมมติฐานที่ตั้งไว้ เมื่อพิจารณารายด้าน พบว่า ครูที่มี
ประสบการณ์การทำงานต่างกันประเมินการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่
สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ไม่แตกต่างกันทุกด้าน

6. อภิปรายผล

　　　1. การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่
การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ตามการประเมินของครู พบว่า อยู่ในระดับมาก เมื่อ
พิจารณาเป็นรายด้าน พบว่า การทำงานเป็นทีมของผู้บริหาร การมีเป้าหมายเดียวกัน มีค่าเฉลี่ยอยู่ใน
ระดับมากที่สุด และด้านที่มีค่าเฉลี่ยอยู่ในระดับมาก ได้แก่ การมีปฏิสัมพันธ์ อยู่ลำดับสูงสุด รองลงมา
ได้แก่ การมีส่วนร่วม การยอมรับนับถือ ความไว้วางใจซึ่งกันและกัน และการสื่อสารอย่างเปิดเผย
ตามลำดับ ได้ตระหนักถึงการทำงานเป็นทีมของผู้บริหารโรงเรียนว่าเป็นสิ่งที่สำคัญ ที่จะทำให้เกิด
คุณภาพทางการศึกษา จึงได้มีการอบรม สัมมนาผู้บริหารโรงเรียนอย่างสม่ำเสมอ ทำให้ผู้บริหาร
โรงเรียนมีการทำงานเป็นทีมในการปฏิบัติงานที่จะส่งผลสู่การบริหารที่มีประสิทธิภาพ มีประสิทธิภาพ
ประสิทธิผลของโรงเรียน และเมื่อพิจารณาเป็นรายด้านสามารถสรุปได้ดังนี้

　　　1) การมีปฏิสัมพันธ์ ผลการวิจัยพบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่ม
เครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 อยู่ในระดับมาก
อาจเป็นเพราะผู้บริหารตระหนักถึงการปฏิบัติงานของครู เพื่อมุ่งผลสัมฤทธิ์ในการปฏิบัติงาน และเป็น
สิ่งที่มีความจำเป็นสำหรับสถานศึกษา โดยผู้บริหารคำนึงถึงการปลูกฝังและส่งเสริมให้ครูปฏิบัติงาน
อย่างมีประสิทธิภาพ มีเป้าหมายในการทำงานที่ชัดเจน มีความรับผิดชอบในการทำงาน มีการสนับสนุน
เกื้อกูลซึ่งกันและกัน มีการนำเทคโนโลยี สมัยใหม่มาใช้ในการสื่อสารปฏิสัมพันธ์กัน เพื่อให้การ
ปฏิบัติงานในโรงเรียนเป็นไปตามแนวทางเดียวกัน ซึ่งจะเป็นการกระตุ้นให้ครูเกิดความรับผิดชอบงานที่
ตนเองทำอย่างเต็มที่เพื่อให้ได้ผลงานมีประสิทธิภาพและประสิทธิผลมากที่สุด ซึ่งสอดคล้องกับงานวิจัย
ของจริยา เห็นงาม ได้ศึกษา ความพึงพอใจในการทำงานเป็นทีมของข้าราชการครู โรงเรียนมัธยมศึกษา
ในจังหวัดระยอง สังกัดสำนักงานเขตพื้นที่การศึกษามัธยมศึกษา เขต 18

　　　2) การมีส่วนร่วม ผลการวิจัยพบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่ม
เครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 อยู่ในระดับมาก
อาจเป็นเพราะผู้บริหารตระหนักถึงการเปิดโอกาสให้บุคลากรเข้ามามีส่วนร่วมในการคิดริเริ่ม ตัดสินใจ
ในการปฏิบัติงานและการร่วมรับผิดชอบในเรื่องต่างๆ การที่จะสามารถทำให้บุคลากรเข้ามามีส่วนร่วม
ในการพัฒนาเพื่อ แก้ไขปัญหา เพื่อเสริมสร้างความเข้มแข็งและความเป็นผู้นำขององค์กร สอดคล้องกับ
งานวิจัยของ กมลชนก ศรีวรรณา (2561) ได้ศึกษา การบริหารแบบมีส่วนร่วมที่ส่งผลต่อการทำงานเป็น
ทีมในโรงเรียน สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษานครพนม เขต 2 พบว่า ความคิดเห็น
ของผู้บริหารโรงเรียนและครูผู้สอน โดยรวมอยู่ในระดับมาก

　　　3) การมีเป้าหมายเดียวกัน ผลการวิจัยพบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียน
ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1อยู่ในระดับ

มากที่สุด อาจเป็นเพราะผู้บริหารมีการวางแผนและกำหนดปฏิทิน ปฏิบัติงานประจำปี ให้กับบุคลากร ให้มีความเข้าใจตรงกัน เปิดโอกาสให้ผู้ใต้บังคับบัญชามีส่วนร่วม ในการกำหนดนโยบายและแผนพัฒนา โรงเรียน ซึ่งจะทำให้การดำเนินงานเป็นไปด้วยดีและบรรลุวัตถุประสงค์ที่กำหนดไว้ซึ่งสอดคล้องกับ งานวิจัยของ ประจวบ แจ้โพธิ์ (2556) วิจัยความคิดเห็นของครูตอบทบาทผู้บริหารในการพัฒนาการ ทำงานเป็นทีมของครูในโรงเรียนสำนักงานเขตบึงกุ่ม สังกัดกรุงเทพมหานคร พบว่า ผู้บริหารในการ พัฒนาการทำงานเป็นทีมของครูในโรงเรียนสำนักงานเขตบึงกุ่ม สังกัดกรุงเทพมหานคร ตามความ คิดเห็นของครูโดยรวมและรายด้านมีบทบาทอยู่ในระดับมากทุกด้าน ทั้งนี้การที่จะทำงานมี ประสิทธิภาพสูงนั้น ทีมงานทุกคนจะต้องมีความคิด มีทัศนคติที่ดีในการทำงานร่วมกัน ซึ่งรูมิก (Romig, 1996) ได้กล่าวว่า คุณลักษณะที่จำเป็นในการทำงานเป็นทีมจะต้องมีการร่วมมือช่วยเหลือซึ่งกันและกัน มีการติดต่อที่ดีทั้งสองทางเกิดการคิดใหม่ๆ ที่ สร้างสรรค์เพื่อมาพัฒนาปรับปรุงงานให้มีประสิทธิภาพ และประสิทธิผลตามเป้าหมายขององค์การ องค์ประกอบที่สำคัญที่จะทำให้ทีมงานทำงานอย่างมี ประสิทธิภาพและประสานกันได้ดีนั้นขึ้นอยู่กับคุณลักษณะที่จำเป็นในการทำงาน ซึ่งอยู่ในรูปแบบ 5C คือ การติดต่อสื่อสาร การร่วมมือ การประสานงาน มีความคิดสร้างสรรค์ และปรับปรุงงานอย่าง ต่อเนื่อง

4) การสื่อสารอย่างเปิดเผย ผลการวิจัยพบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 อยู่ใน ระดับมาก อาจเป็นเพราะผู้บริหารตระหนักถึงความสำคัญของการสื่อสารอย่างเปิดเผย การทำงานเป็น ทีมต้องอาศัยการสื่อสารที่ชัดเจนเหมาะสม เพื่อถ่ายทอดข่าวสารและความคิด ได้ตรงตามความต้องการ โดยมีผู้บริหารเป็นผู้นำทีม และบุคลากรต่างมีความเข้าใจในบทบาทของตนในการทำงานร่วมกันเป็นทีม ซึ่งสอดคล้องกับงานวิจัยของ สิทธิศักดิ์ เพ็ชรยิ้ม (2562) ได้ทำการวิจัยเรื่อง การทำงานเป็นทีมที่ส่งผล ต่อประสิทธิผลของโรงเรียน สำนักงานเขตพื้นที่การศึกษามัธยมศึกษา เขต 22 พบว่า การทำงานเป็น ทีมอยู่ในระดับมาก

5) การยอมรับนับถือ ผลการวิจัยพบว่า การทำงานเป็นทีมของผู้บริหารโรงเรียนใน กลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 อยู่ในระดับ มากอาจเป็นเพราะครูในโรงเรียนมีลักษณะการทำงานที่รับฟังเหตุผลซึ่งกันและกัน มีความสนใจและให้ เกียรติกัน ยอมรับนับถือซึ่งกันและกัน มีความตระหนักว่าทุกคนมีความสำคัญต่อการทำงานมีความเชื่อ ว่าทุกคนสามารถทำงานร่วมกันให้บรรลุเป้าหมายได้ ร่วมมือกันทำงานด้วยความเต็มใจและให้ความ เคารพในบทบาทและหน้าที่ของกันและกัน ซึ่งสอดคล้องกับงานวิจัยของ ลำเทียน เผ้าอาจ (2559) ได้ ศึกษา การทำงานเป็นทีมของข้าราชการครูในโรงเรียนขยายโอกาสอำเภอเมืองตราด สังกัดสำนักงาน เขตพื้นที่การศึกษาประถมศึกษาตราด ด้านการยอมรับนับถือ พบว่า การทำงานเป็นทีม โดยรวมมี ความคิดเห็นในระดับมาก

6) ความไว้วางใจซึ่งกันและกัน ผลการวิจัยพบว่า การทำงานเป็นทีมของผู้บริหาร โรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 อยู่ในระดับมาก อาจเป็นเพราะผู้บริหารโรงเรียนนำเอาวิธีการใหม่ ๆ เข้ามาใช้ในองค์กร รูปแบบการ

บริหารเชิงกลยุทธ์ที่ใหม่ๆ ทางการบริหารการศึกษา โดยเปิดโอกาสให้ผู้ใต้บังคับบัญชาเข้าพบได้อย่าง สะดวก คอยให้คำปรึกษาแนะนำ มีการมอบหมายงานที่สำคัญ ๆ ให้กับบุคลากรฝ่ายต่างๆ ดำเนินงาน ด้วยความไว้วางใจ มีความเชื่อมั่นในตัวครูและบุคลากรทาง การศึกษาในโรงเรียน สามารถจะแก้ปัญหา และอุปสรรคในการทำงานได้และไว้วางใจต่อเพื่อนร่วมงาน ทำให้การทำงานในโรงเรียนมีความเป็นมิตร และไว้วางใจกัน ซึ่งสอดคล้องกับงานวิจัยจันทร์จิรา จิตนาวสาร ได้ศึกษาการศึกษาการทำงานเป็นทีม ของครูผู้สอน ในเขตอำเภอคลองใหญ่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาตราด พบว่า ความไว้วางใจซึ่งกันและกัน โดยรวมและรายข้ออยู่ในระดับมาก

        2. เปรียบเทียบการประเมินการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ของครูจำแนกตามระดับการศึกษา และประสบการณ์การทำงาน พบว่า ครูที่มีระดับการศึกษาและประสบการณ์การทำงานต่างกันประเมิน การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษา ประถมศึกษาสุราษฎร์ธานี เขต 1 โดยรวมและรายด้านไม่แตกต่างกัน ทั้งนี้อาจเนื่องมาจากครูโรงเรียน ในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 มีความ เข้าใจ มีทิศทางและมุมมองที่ชัดเจนและเป็นไปในทิศทางเดียวกันต่อการทำงานเป็นทีมของผู้บริหาร รวมทั้งแนวทางการปฏิบัติตนเพื่อให้องค์กรเกิดประสิทธิภาพมากที่สุดซึ่งสอดคล้องกับงานวิจัยของกร วิภา งามวุฒิวงศ์ ได้ศึกษาปัจจัยที่ส่งผลต่อการทำงานเป็นทีมภายในสำนักอำนวยการ สำนักงาน ปลัดกระทรวงศึกษาธิการ จำแนกตามระดับการศึกษา พบว่า โดยรวมและรายด้านทุกด้าน ไม่แตกต่าง กัน เนื่องจากปัจจัยส่วนบุคคลไม่เกี่ยวข้องกับการทำงานเมื่อได้รับมอบหมายให้ทำงานนั้น ๆ แล้วทุกคน ต้องทำตามหน้าที่ของตนตามที่ได้รับมอบหมาย

7. สรุปและข้อเสนอแนะ

        จากการศึกษาการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงาน เขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 ผู้วิจัยมีข้อเสนอแนะดังต่อไปนี้

    ข้อเสนอแนะเพื่อนำผลการวิจัยไปใช้

    ผู้วิจัยขอเสนอแนวทางของการประยุกต์ใช้ผลการวิจัยนี้เพื่อเกิดประโยชน์ต่อผู้เรียนสังคมและ ประเทศชาติ

        1. การมีปฏิสัมพันธ์ ผู้บริหารสถานศึกษาควรมีความช่วยเหลือซึ่งกันและกันเป็นอย่างดี มี ความสัมพันธ์อันดีต่อกัน มีความเข้าใจซึ่งกันและกัน มีการสนับสนุนเกื้อกูลซึ่งกันและกัน ทำงานร่วมกัน อย่างมีความสุขและน้ำใจต่อกัน

        2. การมีส่วนร่วม ผู้บริหารสถานศึกษาควรมีส่วนร่วมในการวางแผนการบริหารงานของ โรงเรียน มีส่วนร่วมในการแก้ปัญหาเมื่อมีปัญหาเกิดขึ้น มีการประเมินผลงานทำงานต่อกันได้อย่างอิสระ สามารถแสดงความคิดเห็นในการกำหนดขั้นตอนการปฏิบัติงาน

3. การมีเป้าหมายเดียวกัน ผู้บริหารควรมีส่วนร่วมในการกำหนดเป้าหมายในการทำงาน มีความเข้าใจในทิศทางการทำงานของโรงเรียนอย่างชัดเจน ให้ความสนใจกับเป้าหมายส่วนรวมมากกว่าส่วนตัว ยอมรับวัตถุประสงค์การทำงานร่วมกัน ยอมรับความคิดเห็นของคนส่วนใหญ่

4. การสื่อสารอย่างเปิดเผย ผู้บริหารสถานศึกษาควรรับทราบข้อมูลข่าวสารอย่างชัดเจน มีการอภิปรายแสดงความคิดเห็น เปิดโอกาสให้รับรู้ข่าวสารในการทำงานอย่างชัดเจน มีการอภิปรายแสดงความคิดเห็นที่แตกต่างได้อย่างเปิดเผย มีการปรึกษาหารือกันอย่างมีเหตุผล ติดต่อ สื่อสารอย่างตรงไปตรงมา ด้วยความจริงใจและเมื่อมีปัญหาอุปสรรคในโรงเรียนผู้บริหารสามารถแสดงความคิดเห็นได้อย่างเปิดเผย

5. การยอมรับนับถือ ผู้บริหารสถานศึกษาควรยอมรับความรู้ความสามารถในการทำงานของกันและกัน ให้ความตระหนักว่าทุกคนมีความเสมอภาคกันในการทำงาน ร่วมมือกันในการทำงานด้วยความเต็มใจ ยอมรับเหตุผลของกันและกัน เคารพในบทบาท หน้าที่การตัดสินใจของเพื่อนร่วมงาน มีความเชื่อว่าทุกคนสามารถทำงานร่วมกันให้บรรลุเป้าหมายที่กำหนดไว้ได้และให้เกียรติกัน

6. ความไว้วางใจซึ่งกันและกัน ผู้บริหารสถานศึกษาควรมีความไว้วางใจซึ่งกันและกัน มีความรัก ความเมตตาต่อกัน มีอิสระในการทำงานที่รับผิดชอบ สามารถให้คำปรึกษาหารือกับเพื่อนร่วมงานได้ทุกเรื่อง มีความผูกพันกัน สามารถแสดงความคิดเห็นเกี่ยวกับเพื่อนครูอย่างจริงใจมีความเชื่อมั่นว่าจะสามารถแก้ปัญหา อุปสรรคในการทำงานได้

ข้อเสนอแนะเพื่อการวิจัยต่อไป

1. ควรมีการศึกษาเปรียบเทียบการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1 โดยเปรียบเทียบการทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1

2. ควรมีการทำวิจัยเชิงคุณภาพ เรื่อง แนวทางพัฒนายกระดับ การทำงานเป็นทีมของผู้บริหารโรงเรียนในกลุ่มเครือข่าย ช้างคู่ สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาสุราษฎร์ธานี เขต 1

บรรณานุกรม

กมลชนก ศรีวรรณา. (2561). **การบริหารแบบมีส่วนร่วมที่ส่งผลต่อการทำงานเป็นทีมในโรงเรียน สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษานครพนม เขต 2.** วิทยานิพนธ์การศึกษามหาบัณฑิต. บัณฑิตวิทยาลัย: มหาวิทยาลัยราชภัฏสกลนคร.

มัลลิกา วิชชุกรอิงครัต. (2553). **การศึกษาการทำงานเป็นทีมของพนักงานครูเทศบาล สังกัดเทศบาลเมืองชลบุรี.** วิทยานิพนธ์การศึกษามหาบัณฑิต สาขาวิชาการบริหารการศึกษา มหาวิทยาลัยบูรพา.

ลำเทียน เผ้าอาจ. (2559). **การทำงานเป็นทีมของข้าราชการครูในโรงเรียนขยายโอกาส อำเภอ เมืองตราด สังกัดสำนักงานเขตพื้นที่การศึกษาประถมศึกษาตราด.** วิทยานิพนธ์การศึกษามหาบัณฑิต. บัณฑิตวิทยาลัย: มหาวิทยาลัยบูรพา.

วรชัย วิฎูอุปรโคตร. (2564). **การจัดการศึกษาเชิงพื้นที่ในการบริหารแบบมีส่วนร่วมของผู้บริหารสถานศึกษา ขั้นพื้นฐาน.** วารสารปัญญาภิวัฒน์.13(3): กันยายน-ธันวาคม, 320-332.

วราภรณ์ ตระกูลสฤษดิ์ (2550). **การทำงานเป็นทีม.** กรุงเทพฯ: ศูนย์ส่งเสริมวิชาการ.

สิทธิศักดิ์ เพ็ชรยิ้ม. (2563). **การทำงานเป็นทีมที่ส่งผลต่อประสิทธิผลของโรงเรียน สังกัดสำนักงานเขตพื้นที่ การศึกษามัธยมศึกษา เขต 22.** วิทยานิพนธ์ครุศาสตรศึกษามหาบัณฑิต สาขาวิชาการบริหาร การศึกษา บัณฑิตวิทยาลัย: มหาวิทยาลัยราชภัฏสกลนคร.

สุนทร พลวงศ์. (2551). **การพัฒนาการทำงานเป็นทีมของบุคลากรในสังกัดกองการศึกษาทาสะอาด อำเภอ เซกา จังหวัดหนองคาย.** วิทยานิพนธ์การศึกษามหาบัณฑิต สาขาวิชาการบริหารการศึกษา บัณฑิต วิทยาลัย มหาวิทยาลัยมหาสารคาม.

อริศษรา อุ่มสิน. (2560). **การศึกษาการทำงานเป็นทีมของครูผู้สอนในสถานศึกษา สังกัดสำนักงานเขตพื้นที่ การศึกษามัธยมศึกษาเขต 17.** วิทยานิพนธ์การศึกษามหาบัณฑิต. บัณฑิตวิทยาลัย: มหาวิทยาลัยราช ภัฏรำไพพรรณ.

Likert, R. (1961). **New patterns of management.** New York: McGraw-Hill.

McGregor, D., & Burvis. (1970). **Team leadership in action.** Saint Louise: The C.V. Mos.

Romig, D.A. (1996). **Breakthrough Teamwork: Outstanding Result Using Structured Teamwork.** Chicago: Irwin.

Thassopon, T. and Songyu, C. (2024). **Empowering work-life balance of teacher's happiness in primary school.** (Proceeding). The 4th International conference on Education 2024, 24 - 25 February 2024 Chateau de khaoyai hotel & resort pakchong Nakhonratchasima, Thailand. Organized by Education sub-committee of Association of Private Higher Education Institution of Thailand under the Patronage of Her Royal Highness Princess Mahachakri Sirindhorn (APHEIT)

Woodcock, M., & Francis, D. (1994). **Team building strategy.** Hampshire: Gower Publishing.

จริยธรรมการตีพิมพ์บทความในวารสารปารมิตา
ศูนย์วิจัยธรรมศึกษา สำนักเรียนวัดอาวุธวิกสิตาราม

วารสารปารมิตา ของศูนย์วิจัยธรรมศึกษา สำนักเรียนวัดอาวุธวิกสิตาราม ให้ความสำคัญกับการรักษา
มาตรฐานด้านจริยธรรมในการตีพิมพ์เผยแพร่บทความ ดังนั้น จึงกำหนดให้ทุกฝ่ายที่เกี่ยวข้องต้องปฏิบัติตาม
หลักการและมาตรฐานด้านจริยธรรมในการตีพิมพ์อย่างเคร่งครัด ดังนี้

บทบาทหน้าที่ของบรรณาธิการและกองบรรณาธิการในวารสารปารมิตา

1. บรรณาธิการและกองบรรณาธิการมีหน้าที่พิจารณาและตรวจสอบบทความที่ส่งมาเพื่อพิจารณา
ตีพิมพ์ในวารสารทุกบทความ โดยพิจารณาความสอดคล้องของเนื้อหาบทความกับเป้าหมายและขอบเขตของ
วารสาร รวมถึงตรวจสอบคุณภาพของบทความตามกระบวนการประเมินคุณภาพบทความก่อนการตีพิมพ์

2. บรรณาธิการและกองบรรณาธิการต้องใช้หลักการในพิจารณาบทความโดยอ้างอิงเหตุผลทางวิชาการ
เป็นหลัก และต้องไม่มีอคติต่อผู้นิพนธ์บทความและเนื้อหาบทความที่พิจารณาไม่ว่าจะด้วยกรณีใดๆ ทั้งสิ้น

3. บรรณาธิการและกองบรรณาธิการต้องไม่มีส่วนได้ส่วนเสียกับผู้นิพนธ์บทความหรือผู้ทรงคุณวุฒิที่
ตรวจประเมินบทความ ไม่ว่าจะเป็นประโยชน์ในเชิงธุรกิจหรือในการนำไปเป็นผลงานทางวิชาการของตนเอง

4. บรรณาธิการและกองบรรณาธิการต้องไม่ปิดกั้น เปลี่ยนแปลง หรือแทรกแซงข้อมูลที่ใช้แลกเปลี่ยน
ระหว่างผู้ทรงคุณวุฒิที่ตรวจประเมินบทความและผู้นิพนธ์บทความ

5. บรรณาธิการและกองบรรณาธิการต้องปฏิบัติตามกระบวนการและขั้นตอนต่าง ๆ ของวารสารอย่าง
เคร่งครัด

บทบาทหน้าของผู้นิพนธ์บทความในวารสารปารมิตา

1. บทความที่ผู้นิพนธ์ส่งมาเพื่อพิจารณาตีพิมพ์ในวารสารต้องเป็นบทความที่ไม่เคยตีพิมพ์หรือเผยแพร่ที่
ใดมาก่อน

2. ผู้นิพนธ์บทความต้องทำการอ้างอิงให้ถูกต้องทุกครั้งเมื่อนำผลงานของผู้อื่นมานำเสนอหรืออ้างอิง
ประกอบในเนื้อหาบทความของตนเอง และต้องไม่คัดลอกผลงานของผู้อื่น

3. หากผลงานทางวิชาการของผู้นิพนธ์เกี่ยวข้องกับการใช้สัตว์ ผู้เข้าร่วม หรืออาสาสมัคร หรือ
ผลการวิจัยมีประเด็นที่เปราะบางต่อผู้ให้ข้อมูล ผู้นิพนธ์ควรดำเนินการตามหลักจริยธรรม ปฏิบัติตามกฎหมาย
และข้อบังคับที่เกี่ยวข้องอย่างเคร่งครัด รวมถึงต้องได้รับความยินยอมก่อนการดำเนินการเก็บรวบรวมข้อมูล

หรือแสดงเอกสารที่เกี่ยวข้อง เช่น หนังสือรับรองจากคณะกรรมการจริยธรรมการวิจัยในมนุษย์ หรือในสัตว์ทดลองประกอบด้วยทุกครั้ง

4. ผู้นิพนธ์บทความต้องยินยอมโอนลิขสิทธิ์ให้แก่วารสารปารมิตาก่อนการตีพิมพ์ และไม่นำผลงานไปเผยแพร่หรือตีพิมพ์กับแหล่งอื่น ๆ หลังจากที่ได้รับการตีพิมพ์กับวารสารปารมิตาแล้ว

5. ชื่อผู้นิพนธ์ที่ปรากฏในบทความต้องเป็นผู้ที่มีส่วนในบทความนั้นๆ จริง

บทบาทหน้าที่ของผู้ทรงคุณวุฒิที่ประเมินบทความ

1. ผู้ทรงคุณวุฒิที่ประเมินบทความต้องไม่มีส่วนได้ส่วนเสียกับผู้นิพนธ์บทความ การพิจารณาคุณภาพของบทความต้องคำนึงถึงคุณภาพของบทความเป็นหลัก และพิจารณาบนหลักการและเหตุผลทางวิชาการโดยปราศจากอคติหรือความขัดแย้งส่วนตัว

2. ผู้ทรงคุณวุฒิที่ประเมินบทความต้องตระหนักว่าตนเองเป็นผู้มีความเชี่ยวชาญ มีความรู้ความเข้าใจในเนื้อหาของบทความที่รับประเมินอย่างแท้จริง

3. ผู้ทรงคุณวุฒิที่ประเมินบทความต้องไม่แสวงหาประโยชน์จากบทความที่ตนเองได้ทำการประเมิน

4. หากผู้ทรงคุณวุฒิที่ประเมินบทความได้ตรวจสอบแล้วพบว่าบทความที่รับประเมิน เป็นบทความที่คัดลอกผลงานชิ้นอื่น ๆ ผู้ทรงคุณวุฒิประเมินบทความต้องแจ้งให้บรรณาธิการทราบทันที พร้อมแสดงหลักฐานประกอบที่ชัดเจน

5. ผู้ทรงคุณวุฒิที่ประเมินบทความต้องรักษาระยะเวลาประเมินตามกรอบเวลาประเมินที่วารสารปารมิตากำหนด รวมถึงไม่เปิดเผยข้อมูลของบทความให้ผู้ที่อื่นได้รับรู้

การเตรียมต้นฉบับเพื่อการเสนอจัดพิมพ์ในวารสารปารมิตา
ศูนย์วิจัยธรรมศึกษา สำนักเรียนวัดอาวุธวิกสิตาราม

1. ขนาดของต้นฉบับ

พิมพ์หน้าเดียวบนกระดาษสั้นขนาด A4 โดยเว้นระยะระหว่างขอบกระดาษด้านบน 3.81 ซม. ด้านขวากับด้านล่าง 2.54 ซม.

2. รูปแบบอักษรและการจัดวางตำแหน่ง

ใช้รูปแบบอักษร TH Sarabun PSK พิมพ์ด้วยโปรแกรมไมโครซอฟท์เวิร์ด โดยใช้ขนาดและชนิดของตัวอักษร รวมทั้งการวางตำแหน่งดังนี้

2.1 ขนาดกระดาษ จัดพิมพ์บทความด้วยกระดาษ ขนาด A4 พร้อมระบุเลขหน้า ขนาด 16 ชนิดตัวธรรมดา ตำแหน่งชิดขอบกระดาษด้านขวาและซ้ายตามรูปแบบการจัดหนังสือทั่วไป

2.2 ชื่อเรื่อง (ภาษาไทย) ขนาด 18 ชนิดตัวหนา ตำแหน่งกึ่งกลางหน้ากระดาษ

2.3 ชื่อเรื่อง (ภาษาอังกฤษ) ตัวพิมพ์ใหญ่ ขนาด 14 ชนิดตัวหนา ตัวพิมพ์เล็ก ขนาด 16 ชนิดตัวหนา ตำแหน่งกึ่งกลางหน้ากระดาษ

2.4 ชื่อผู้เขียน ขนาด 16 ชนิดตัวธรรมดา ตำแหน่งชิดขอบกระดาษด้านขวา ใต้ชื่อเรื่อง โดยให้ใส่ทั้งชื่อผู้เขียนภาษาไทยและภาษาอังกฤษ พร้อมระบุอีเมลด้วย

2.5 ที่อยู่หรือหน่วยงานสังกัดของผู้เขียน ขนาด 16 ชนิดตัวหนา ตำแหน่งชิดขอบกระดาษด้านขวา ใต้ชื่อผู้เขียน โดยให้ใส่ที่อยู่หรือหน่วยงานทั้งชื่อภาษาไทยและภาษาอังกฤษ

2.6 หัวข้อบทคัดย่อไทยและอังกฤษ ตำแหน่งชิดขอบกระดาษด้านซ้าย ใต้ที่อยู่หรือหน่วยงานสังกัดของผู้เขียน โดยหัวข้อบทคัดย่อไทยและหัวข้อบทคัดย่ออังกฤษ ขนาด 16 ชนิดตัวหนา ตัวพิมพ์ใหญ่

2.7 เนื้อหาบทคัดย่อภาษาไทยและภาษาอังกฤษ ขนาด 16 ชนิดตัวธรรมดา จัดพิมพ์ไม่ควรเกิน 3 ย่อหน้า บรรทัดแรกเว้น 1 แท็บ (Tab) จากขอบกระดาษด้านซ้าย และพิมพ์ให้ชิดขอบทั้งสองด้าน

2.8 หัวข้อของคำสำคัญ ภาษาไทย ขนาด 16 ชนิดตัวหนา ตำแหน่งชิดซ้ายหน้ากระดาษ ใต้บทคัดย่อภาษาไทย และคำสำคัญนี้ไม่ควรเกิน 3 ศัพท์ ขนาด 16 ชนิดตัวธรรมดา

2.9 หัวข้อของคำสำคัญ ภาษาอังกฤษ ขนาด 16 ชนิดตัวหนา ตำแหน่งชิดซ้ายหน้ากระดาษ ใต้บทคัดย่อภาษาอังกฤษ และคำสำคัญนี้ไม่ควรเกิน 3 ศัพท์ ขนาด 16 ชนิดตัวธรรมดา

2.10 หัวข้อเรื่อง ขนาด 16 ชนิดตัวหนา ตำแหน่งชิดขอบกระดาษด้านซ้าย ระบุหมายเลขข้อ

2.11 หัวข้อย่อย ขนาด 16 ชนิดตัวหนา ระบุหมายเลขข้อย่อย โดยเรียงตามลำดับตามเลขหัวข้อเรื่องเป็นหลัก

2.13 เนื้อหา ขนาด 16 ชนิดตัวธรรมดา และพิมพ์ให้ชิดขอบทั้งสองด้าน โดยบทความวิจัยและบทความวิชาการ ให้มีองค์ประกอบเริ่มตั้งแต่บทนำหรือความนำ เนื้อหาหลัก วิเคราะห์และสรุป บรรณานุกรม ส่วนบทวิจารณ์หนังสือ ให้มีข้อมูลทางบรรณานุกรม ชื่อผู้วิจารณ์ บทวิจารณ์ สำหรับงานสร้างสรรค์ประเภทอื่นๆ ให้มีองค์ประกอบตามบทความวิจัยและบทความวิชาการ

3. จำนวนหน้าต้นฉบับ

เนื้อหาของบทความตั้งแต่หัวข้อเรื่องจนถึงบรรณานุกรมควรมีความยาวไม่ควรเกิน 15 หน้า กระดาษขนาด A4

4. ช่องทางการส่งผลงาน

4.1 ทางไปรษณีย์ ให้พิมพ์ผลงาน 1 ชุด และซีดีบันทึกผลงานในรูปไมโครซอฟต์เวิร์ด 1 แผ่น ส่งถึง พระมหามฆวินทร์ ปุริสุตตโม, ผศ.ดร. 137 วัดอาวุธวิกสิตาราม ถ.จรัญสนิทวงศ์ 72 แขวงบางพลัด เขตบางพลัด กรุงเทพฯ 10700 โทร. 086-086-4258

4.2 ทาง Email โดยส่งไฟล์เวิร์ด ไปที่ maghavin9@gmail.com

4.3 ทาง website โดยส่งไฟล์เวิร์ดเข้าในระบบของวารสาร หลังจากนั้น ทางวารสารจะดำเนินการตามลำดับจนกว่าจะมีการตีพิมพ์ผลงาน