# 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 self-efficacy on the relationship between social environment and educational 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, and alleviate the employment pressure of art graduates.

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## 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.

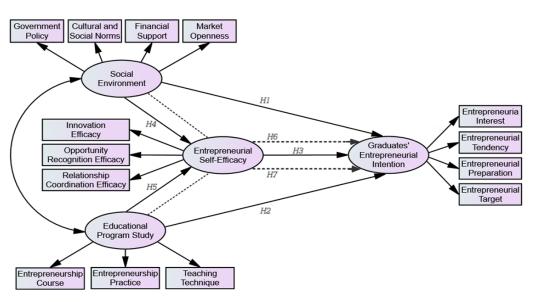
H3: The entrepreneurial self-efficacy had a positive direct effect on the graduates' entrepreneurial intention.

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  $\geq$  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.

| No. | Characteristic             |           | Frequency | Percentage | Cumulative<br>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          | Yes       | 211       | 50.5       | 50.5                  |
|     | entrepreneurship           | 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        |                       |

Table 1: The demographic profile of respondents

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 |
|--|----------|-----------------------------------|
|--|----------|-----------------------------------|

|      |       |       |        | Skew      | ness  | Kurte     | osis  |
|------|-------|-------|--------|-----------|-------|-----------|-------|
|      | x     | S.D.  | %CV    | 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 |

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|      | _     |       |        | Skew      | ness  | Kurtosis  |       |  |
|------|-------|-------|--------|-----------|-------|-----------|-------|--|
|      | x     | S.D.  | %CV    | 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 | <b>3</b> me           | IIIIIa                | Coner                 |      |       |      | n each | Tactor | as iou | 0005. |    |    |    |    |
|-------|-----------------------|-----------------------|-----------------------|------|-------|------|--------|--------|--------|-------|----|----|----|----|
|       | CE1                   | SE3                   | SE3                   | CE1  | EPS   | EPS  | EPS    | ESE    | ESE    | ESE   | EI | EI | EI | EI |
|       | 351                   | JEZ                   | 353                   | JE4  | 1     | 2    | 3      | 1      | 2      | 3     | 1  | 2  | 3  | 4  |
| SE1   | 1                     |                       |                       |      |       |      |        |        |        |       |    |    |    |    |
| SE2   | .74 <sup>*</sup><br>* | 1                     |                       |      |       |      |        |        |        |       |    |    |    |    |
| SE3   | .54*<br>*             | .67 <sup>*</sup><br>* | 1                     |      |       |      |        |        |        |       |    |    |    |    |
| SE4   | .56 <sup>*</sup><br>* | .71 <sup>*</sup><br>* | .72 <sup>*</sup><br>* | 1    |       |      |        |        |        |       |    |    |    |    |
|       | .34*                  | .38*                  | .37*                  | .41* | 1     |      |        |        |        |       |    |    |    |    |
| 1     | *                     | *                     | *                     | *    | 1     |      |        |        |        |       |    |    |    |    |
| EPS   | .39*                  |                       |                       |      | .64** | 1    |        |        |        |       |    |    |    |    |
| 2     | *                     | *                     | *                     | ×    | .04   | T    |        |        |        |       |    |    |    |    |
| EPS   | .22*                  |                       |                       |      | .60** | 64** | 1      |        |        |       |    |    |    |    |
| 3     | *                     | *                     | *                     | ×    | .00   | .04  | T      |        |        |       |    |    |    |    |
| ESE   | .40*                  | .42*                  | .41*                  | .49* | 40**  | 52** | .40**  | 1      |        |       |    |    |    |    |
| 1     | *                     | *                     | *                     | *    | .40   | .52  | .40    | T      |        |       |    |    |    |    |
| ESE   | .27*                  | .32*                  | .31*                  | .33* | 35**  | 39** | .36**  | 65**   | 1      |       |    |    |    |    |
| 2     | *                     | *                     | *                     | *    |       | ,    | .50    | .05    | T      |       |    |    |    |    |
| ESE   |                       |                       | .29*                  | .34* | 38**  | 46** | .33**  | 69**   | 65**   | 1     |    |    |    |    |
| 3     | *                     | *                     | *                     | *    | .50   | .+0  |        | .07    | .05    | Ţ     |    |    |    |    |

Table 3 The intra correlation of indicators of each factor as follows:

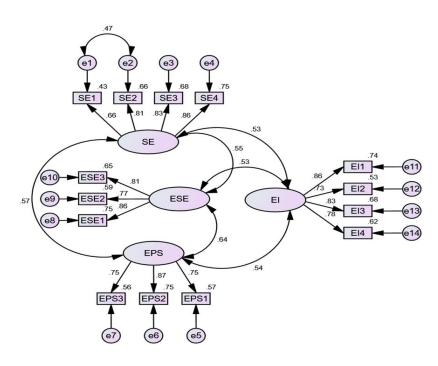
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|     | SE1                   | SE2                   | SE3                   | SE4                   |       |       | EPS<br>3 |       |       |       |                       |                       |                       |   |
|-----|-----------------------|-----------------------|-----------------------|-----------------------|-------|-------|----------|-------|-------|-------|-----------------------|-----------------------|-----------------------|---|
| EI1 | .32 <sup>*</sup><br>* | .36*<br>*             | .41 <sup>*</sup><br>* | .36 <sup>*</sup><br>* | .27** | .45** | .31**    | .39** | .33** | .36** | 1                     |                       |                       |   |
| EI2 | .23 <sup>*</sup><br>* | .25 <sup>*</sup><br>* | .28 <sup>*</sup><br>* | .30 <sup>*</sup><br>* | .25** | .34** | .28**    | .33** | .30** | .36** | .65 <sup>*</sup><br>* | 1                     |                       |   |
| EI3 | .30 <sup>*</sup><br>* | .35 <sup>*</sup><br>* | .42 <sup>*</sup><br>* | .37 <sup>*</sup><br>* | .34** | .44** | .32**    | .40** | .31** | .35** | .71 <sup>*</sup><br>* | .57 <sup>*</sup><br>* | 1                     |   |
| EI4 | .26 <sup>*</sup><br>* | .35 <sup>*</sup><br>* | .40 <sup>*</sup><br>* | .38 <sup>*</sup><br>* | .28** | .37** | .29**    | .38** | .31** | .29** | .66 <sup>*</sup><br>* | .59 <sup>*</sup><br>* | .66 <sup>*</sup><br>* | 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.

| 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      |

 Table 4: Measurement Model indicators

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.

|     | 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 |

 Table 5: The measurement model quality

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

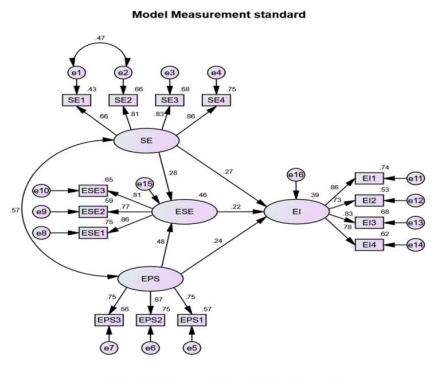
(1) Convergent validity

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



CMIN=133.886( p =.000) ; DF=70; GFI =.956 RMSEA=.047 ;CFI=.981;NFI=.961; TLI=.975



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.

| 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      |

 Table 6 Structural equation model fit evaluation

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.

| Dir | Direct Effects |     | Unstandardized | Standardized | S.E.  | S.E. C.R. |                | 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     | <del>***</del> | 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

|    | Ind | lirect Ef | ffects |     | Estimate | Lower | Upper | р  | 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 El via ESE.

Hypothesis testing for H7: The EPS had an indirect effect on El 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 | р  | 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 | р  | 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 selfefficacy 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 selfefficacy, 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.

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