

## Influence of Entrepreneurial Learning on College Students' Entrepreneurial Behavior in Heilongjiang Province, China

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### Abstract

Based on the research results of entrepreneurship education, combining social learning theory, taking the college students in Heilongjiang province as the research object, this paper was explored the internal relationship between entrepreneurial learning and entrepreneurial behavior of college students by questionnaire survey. Through the reliability, validity, correlation and regression analysis of 426 valid questionnaires, the research conclusion was finally drawn. Through the conclusion of the research, the enlightenment of entrepreneurship education in colleges and universities is drawn. Colleges and universities should set up the curriculum system of entrepreneurship education reasonably, optimize the curriculum teaching of entrepreneurship education in schools, stimulate students' interest in entrepreneurial learning, cultivate students' entrepreneurial ability in teaching practice, so as to promote the occurrence of college students' entrepreneurial behavior.

**Keywords:** Entrepreneurial learning, Entrepreneurial behavior, Entrepreneurship education

### Introduction

In recent years, China's economy has shifted from a stage of high-speed growth to a stage of high-quality development, and is now in a transition period of transforming its development model, optimizing its economic structure and transforming its growth drivers. In 2021, the global economy will recover and China's economy will continue to recover, but the impact of the epidemic remains far-reaching. In 2021, there were 9.09 million college graduates in China. In order to alleviate the employment pressure and employment competition brought by the increasing number of graduates and the COVID-19 epidemic, the relevant departments of the state have issued a series of implementation opinions and put forward five policy measures, including broadening the employment channels for college graduates, maintaining the identity of fresh graduates and other measures to cope with it. But from the current employment situation of college graduates, it is still not optimistic.

### Research Questions

1. What is the content of entrepreneurial context?
2. What is the relationship between entrepreneurial learning and entrepreneurial behavior?
3. What is the relationship between entrepreneurial learning and entrepreneurial ability?
4. How does entrepreneurial ability play a mediating role in entrepreneurial learning and entrepreneurial behavior?

## Research Objective

1. To investigate the mechanism and effect of entrepreneurial learning on college students' entrepreneurial behavior.
2. To explore the role of entrepreneurial ability in college students' entrepreneurial learning and entrepreneurial behavior.
3. To improve the content of entrepreneurial learning, put forward feasible suggestions for optimizing the construction of entrepreneurship education system in colleges and universities.

## Conceptual Framework

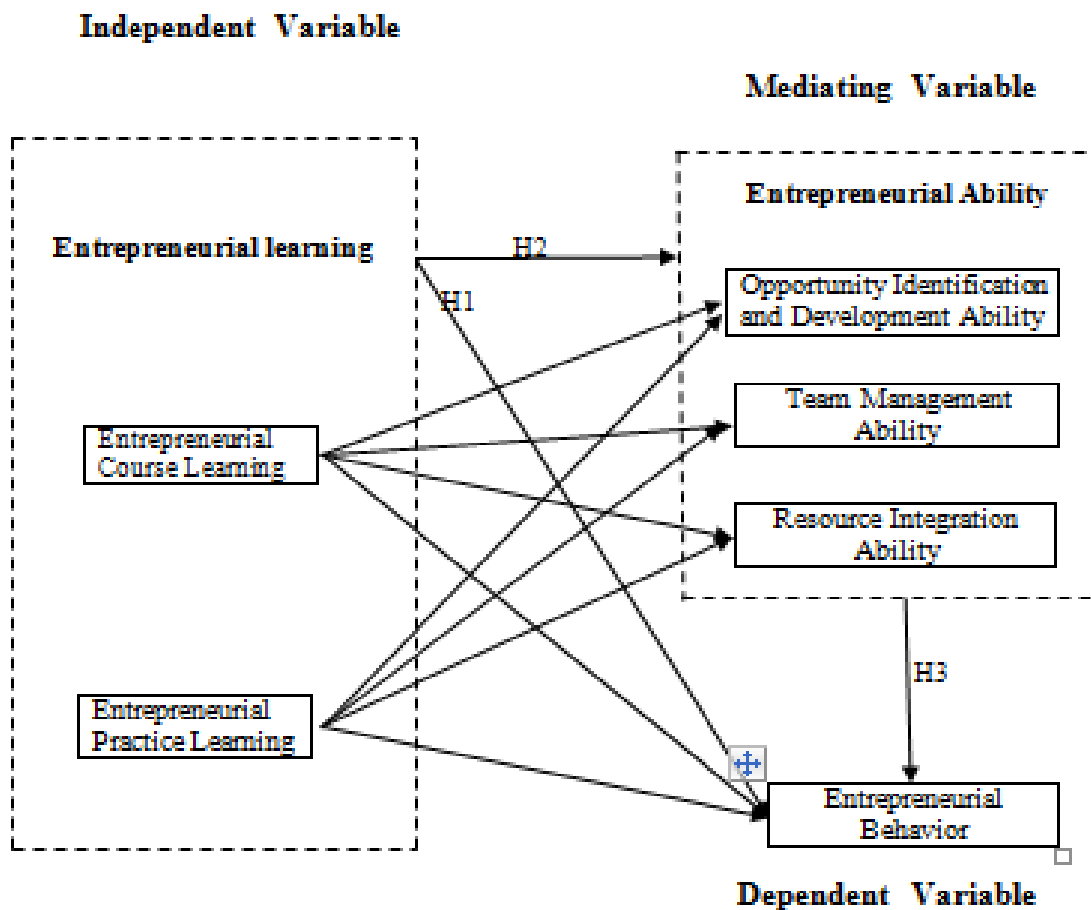


Figure 1. Conceptual Framework from original concept

## Research Hypothesis

- H1: Entrepreneurial learning has a significant positive impact on entrepreneurial behavior.
- H2: Entrepreneurial learning has a significant positive impact on entrepreneurial ability.
- H3: Entrepreneurial ability has a significant positive impact on entrepreneurial behavior.
- H4: Entrepreneurial ability plays a mediating role in the relationship between entrepreneurial learning and entrepreneurial behavior.

## Research Methodology

This paper mainly adopts quantitative research method. Firstly, the characteristics of entrepreneurial learning, entrepreneurial ability and entrepreneurial behavior variables are sorted out. Secondly, the questionnaire was designed according to the variables. Finally, the questionnaire was collected and the data was analyzed, and the conclusion was drawn.

According to the official website of the Education Department of Heilongjiang Province, there will be 81 colleges and universities in the province in 2021. Eight schools were selected for the distribution of the questionnaire, and finally 426 valid questionnaires were collected.

## Research Results

### Reliability and Validity

As can be seen from the table below, the Cronbach's Alpha of the questionnaire scale and its dimensions in this study are all greater than 0.8, indicating that the scale has good reliability.

**Table 1. Reliability Analysis**

| Variable                 | Dimension  | N of Items | Cronbach's Alpha |       |
|--------------------------|--|------------|------------------|-------|
| Entrepreneurial learning | Entrepreneurial Course Learning                    | 5          | 0.893            | 0.854 |
|                          | Entrepreneurial Practice Learning                  | 5          | 0.879            |       |
| Entrepreneurial Ability  | Opportunity Identification and Development Ability | 5          | 0.885            | 0.886 |
|                          | Team Management Ability                            | 5          | 0.882            |       |
|                          | Resource Integration Ability                       | 4          | 0.847            |       |
| Entrepreneurial Behavior |  | 6          | 0.902            |       |
| Entirety                 |  | 30         | 0.941            |       |

Validity analysis is to test the accuracy and validity of the measurement results. As shown in the table below, the KMO value is 0.939, the Chi-square value of Bartlett spherical test is 7907.654, and the degree of freedom is 435. The results show that the significance is  $0.000 < 0.001$ , which has reached the significance level, indicating that the total amount table is suitable for factor analysis.

**Table 2. KMO and Bartlett Tests for Total Volume Tables**

|  |                     |          |
|--|---------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                     | 0.939    |
| Bartlett's Test of Sphericity                    | Approx. Chi- Square | 7907.654 |
|  | df                  | 435      |
|  | Sig.                | 0.000    |

## Correlation Analysis

**Table 3. Correlation Analysis Results of All Dimensions**

| Variable   | M      | S.D.   | 1       | 2       | 3       | 4       | 5       | 6 |
|--|--------|--------|---------|---------|---------|---------|---------|---|
| Entrepreneurial Course Learning                    | 3.6094 | 0.9986 | 1       |         |         |         |         |   |
| Entrepreneurial Practice Learning                  | 3.5192 | 0.9126 | 0.255** | 1       |         |         |         |   |
| Opportunity Identification and Development Ability | 3.5920 | 0.9117 | 0.494** | 0.394** | 1       |         |         |   |
| Team Management Ability                            | 3.5277 | 0.9273 | 0.426** | 0.466** | 0.425** | 1       |         |   |
| Resource Integration Ability                       | 3.7365 | 0.9300 | 0.435** | 0.468** | 0.359** | 0.353** | 1       |   |
| Entrepreneurial Behavior                           | 3.5063 | 0.9759 | 0.487** | 0.515** | 0.496** | 0.551** | 0.537** | 1 |

According to the correlation analysis results in the table above, the correlation coefficients of each dimension of entrepreneurial learning and each dimension of entrepreneurial ability are all positive, and the significance is less than 0.05, indicating an obvious positive correlation. The correlation coefficients of all dimensions of entrepreneurial learning and entrepreneurial behavior are positive, and the significance is less than 0.05, there is an obvious positive correlation. The correlation coefficients between all dimensions of entrepreneurial ability and entrepreneurial behavior are positive, and the significance is less than 0.05, indicating an obvious positive correlation. Therefore, there is a positive correlation between all dimensions in the model, which needs to be verified by further analysis.

## Regression Analysis of Entrepreneurial Learning and Entrepreneurial Behavior

According to the results of correlation analysis, there is a significant correlation between entrepreneurial practice learning, entrepreneurial course learning and entrepreneurial behavior, so multiple regression analysis is carried out for both.

**Table 4. Model Summary**

| Model | R                  | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1     | 0.633 <sup>a</sup> | 0.401    | 0.398             | 0.75720                    |

As shown in the above table, R square is 0.401 and adjusted R square is 0.398, indicating that the established model can explain 39.8% of the information. That is, most of the explained variables can be well explained by the model.

**Table 5. ANOVA Analysis**

| Model |            | Sum of Squares | df  | Mean Square | F       | Sig.               |
|-------|------------|----------------|-----|-------------|---------|--------------------|
| 1     | Regression | 162.291        | 2   | 81.145      | 141.530 | 0.000 <sup>b</sup> |
|       | Residual   | 242.526        | 423 | 0.573       |         |                    |
|       | Total      | 404.817        | 425 |             |         |                    |

As shown in the table above, the observed value of the F-test statistic is 141.530, and the corresponding probability P value is 0.000. The significance test of the regression equation can be carried out according to the results of the table. Since P value is less than 0.05, a linear model can be established.

**Table 6. Regression Coefficient**

| Model |                                   | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.  | VIF   |
|-------|-----------------------------------|-----------------------------|------------|---------------------------|--------|-------|-------|
|       |                                   | B                           | Std. Error | Beta                      |        |       |       |
| 1     | (Constant)                        | 0.591                       | 0.177      |                           | 3.334  | 0.001 |       |
|       | Entrepreneurial Course Learning   | 0.372                       | 0.038      | 0.381                     | 9.776  | 0.000 | 0.935 |
|       | Entrepreneurial Practice Learning | 0.447                       | 0.042      | 0.418                     | 10.741 | 0.000 | 0.935 |

A Dependent Variable: Entrepreneurial Behavior

As shown in the table above, the VIF value is less than 5, indicating that there is no collinearity between independent variables. Both entrepreneurial practice learning and entrepreneurial course learning have significant significance at the level of 0.05, and the regression coefficients are 0.372 and 0.447 respectively, indicating that both entrepreneurial practice learning and entrepreneurial course learning have significant positive impact on entrepreneurial behavior, so the hypothesis is valid.

### Bootstrap mediating effect

In this paper, bootstrap method in PROCESS in statistical package was used to analyze the mediation effect.

**Table 7. Testing the Mediating Effect of Entrepreneurial Ability**

|   | Effect | SE     | Z       | p      | LLCI   | ULCI   |
|---|--------|--------|---------|--------|--------|--------|
| Total effect  | 0.6316 | 0.0377 | 16.7739 | 0.0000 | 0.5576 | 0.7056 |
| Direct effect   | 0.2677 | 0.0504 | 5.3096  | 0.0000 | 0.1686 | 0.3669 |
| Total indirect effect   | 0.3638 | 0.0391 | 9.3043  | 0.0000 | 0.2915 | 0.4434 |
| Indirect effects of opportunity identification and developing ability | 0.0857 | 0.0248 | 3.4556  | 0.0000 | 0.0387 | 0.1350 |
| Indirect effects of team management ability                           | 0.1408 | 0.0251 | 5.6096  | 0.0000 | 0.0939 | 0.1920 |
| Indirect effect of resource integration ability                       | 0.1373 | 0.0277 | 4.9567  | 0.0000 | 0.0842 | 0.1949 |

It can be seen from the Bootstrap mediation effect test in the above table. The indirect effect of entrepreneurial learning on entrepreneurial behavior is 0.0857, and the confidence interval of Bias-corrected method is [0.0387, 0.1350] at 95% confidence level, excluding 0, indicating significant indirect effect. The direct effect is 0.2677, and the confidence interval of Bias-corrected method at 95% confidence level is [0.1686, 0.3669], excluding 0, indicating that the direct effect is significant. That is to say, opportunity identification and development ability play a partial mediating role in entrepreneurial learning and entrepreneurial behavior.

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## Conclusion and Suggestion

### Conclusion

This paper takes college students in Heilongjiang Province as the research object, constructs the relationship model among entrepreneurial learning, entrepreneurial ability and entrepreneurial behavior, and puts forward corresponding research hypotheses. Statistical analysis software is used to conduct empirical analysis and verification of each research hypothesis, and the conclusions are as follows.

a) Entrepreneurial learning has a significant positive impact on college students' entrepreneurial behavior. Two dimensions of college students' entrepreneurship learning entrepreneurship course learning and entrepreneurship practice learning have significant positive impact on the occurrence of students' entrepreneurial behavior respectively.

b) Entrepreneurial learning has a significant positive impact on entrepreneurial ability. Through regression analysis, we conclude that the regression coefficient of entrepreneurial learning on entrepreneurial ability is significant, which verifies the research hypothesis proposed in this paper, indicating that entrepreneurial learning is an effective way to improve the entrepreneurial ability of college students.

c) This paper examines the mediating role of entrepreneurial ability in the relationship between entrepreneurial learning and entrepreneurial behavior from three dimensions: opportunity identification and development ability, team management ability, and resource integration ability. Through entrepreneurial learning, students can improve their entrepreneurial ability and become more likely to start their own businesses.

### Suggestion for use

a) The curriculum system of school entrepreneurship education should be reasonably set up, the curriculum teaching of school entrepreneurship education should be optimized, the specific needs of individual students for entrepreneurship learning should be understood, the motivation for them to seek entrepreneurship learning should be strengthened, and the theoretical knowledge reserve related to entrepreneurship should be improved. Strengthen the combination of entrepreneurship theory and entrepreneurship practice courses, adjust the content of school curriculum according to the social market demand to increase the practicality of entrepreneurship education, so as to improve the overall efficiency of entrepreneurship learning.

b) Entrepreneurship education in colleges and universities should pay more attention to the cultivation of entrepreneurial ability of college students in practice, such as integrating and utilizing the favorable resources around and improving the efficiency of resource optimization. Through practice activities such as simulated entrepreneurship competition, students can constantly evaluate their own abilities in practice, so that I can view entrepreneurship more rationally and consider the possibility of taking entrepreneurship as my future career.

c) College students themselves should actively accept entrepreneurship education, pay attention to the cultivation of entrepreneurship quality, participate in entrepreneurship learning, accumulate entrepreneurial experience, entrepreneurial knowledge, entrepreneurial skills in entrepreneurial practice activities, so as to improve entrepreneurial ability.

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