Analysis on the influence factors of College Students' Entrepreneurship Based on structural equation model

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Abstract:

In contemporary society, self-employment is undoubtedly a good choice to solve the college students' employment difficulty. However, due to the impact of various factors, entrepreneurship is still a minority college students' choice. This paper concerns factors, only minority of college students choose to start a business. This article focused on the influence factors of university students innovative undertaking, and selected the employment data from universities in Nanchong of Sichuan province and in Henan province. Based on these employment data, this paper applied structural equation model to analyze how much degree the three exogenous latent variables (family, school and individual) have influenced on the college students entrepreneurship.

Key words：structure equation model；college students entrepreneurship；factors affecting

1. INTRODUCTION：

According to "China 2015 Graduate Employment Report" shows that of 2014, 2013 , 2012 the ratio of college students entrepreneurship were 2.9%, 2.3%, 2.0%. As can be seen from the trend of the past three sessions of the proportion of college students entrepreneurship on the rise, but compared with up to 20% -30% of the developed countries, the rate of college students entrepreneurship in the proportion of college students are still far away. Therefore, in our college students entrepreneurship promote the moment, in-depth analysis of factors affecting university students entrepreneurship, promote college students entrepreneurship will have a positive meaning.

2. Research hypothesis

After reading a lot of literature shows that the factors that affect business students personal traits, social environment, family environment, school environment. Stein puts forward personal factors which have made a significant impact on entrepreneurial tendencies. Shapero made factors affecting entrepreneurial tendencies have personal characteristics in the business event model, the feasibility of cognitive and personal mobility. Factors influencing college students entrepreneurship is quite broad, paper chooses family environment, school education, personal three factors some subtle factors as the main content of the study. Based on the above analysis, the paper constructs influence Students start selection structure model (described in Figure 1 with the path inside the dashed border). Structural model based on the following assumptions:

Hypothesis 1: The degree of personal understanding of the direct impact of college students entrepreneurship, family environment and indirectly affect students start school choice;

Hypothesis 2: The degree of influence of family environment is greater than the impact of school education;
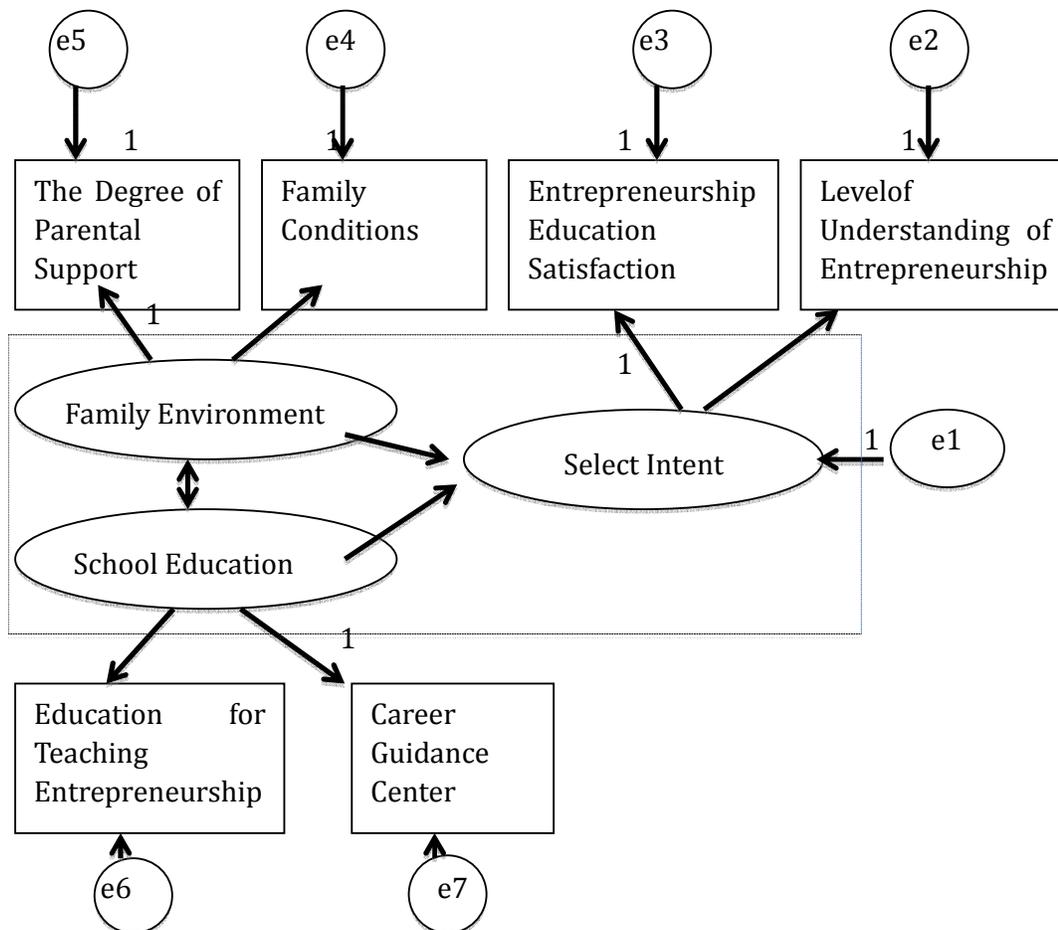
Figure 1 college students entrepreneurship choose SEM initial hypothetical model

3. Research Design and Methods

Data Sources

March 2015 China West Normal University Students' Science and Technology Innovation Fund Project "Entrepreneurship Education Problems in and Countermeasures" group chose to implement the survey part of University College, Nanchong City, Sichuan Province and Henan Province, a total of 300 questionnaires, ultimate recovery of 273 valid questionnaires. This paper uses survey data as a reference for research.

Analysis of reliability and validity of questionnaire

In order to ensure the quality of the model, it is necessary to analyze the data reliability and validity, we use statistical software SPSS20.0 to six variables validity and reliability analysis (see Table 1, Table 2). Using SPSS20.0 software, data base entry, open dimensionality reduction option analysis module under selection factor analysis, as shown in Table 1 that exploratory factor analysis KMO value of 0.878, Bartlett is 2196.192, Sig value is 0.000, less than significant level 0.005, indicating good consistency of the indicators. For the reliability of the data according to Table 2, we can learn from Table 2 that all three components of Alpha coefficient higher than 0.7, while the coefficient Alpha higher than the total scale of 0.9, indicating the scale of credibility better.

Table 1 KMO and Bartlett's test

Adequate sampling of the Kaiser-Meyer-Olkin measure	0.878
Sphericity Bartlett approximate chi-square test	2196.192
Df	15
Sig.	0.000

Table 2 Scale reliability statistics

	Cronbach's Alpha	Several
family environment	0.827	2
school education	0.927	2
Select intent	0.839	2
Total table	0.951	6

Variable settings

In order to reflect the intensity of these latent variables and college students entrepreneurship, we give specific observed variables (see Table 3).

Table 3 variable setting and quantized

Latent variable	Observed variables	Measure quantized description
Select intent	Entrepreneurship Education Satisfaction	1 = satisfied; 2 = Usually; 3 = not satisfied
	Level of understanding of entrepreneurship	1 = I do not know; 2 = there are; 3 = no
family environment	The degree of parental support	1 = strongly supported; 2 = support; 3 = do not support the no objection; 4 = against; 5 = strongly oppose
	Family atmosphere	1 = harmonious family atmosphere; 2 = good economic conditions; 3 = enlightened parents; 4 = network resources
school education	Education for Teaching Entrepreneurship	1 = I do not know; 2 = there are; 3 = no
	Career Guidance Center	1 = I do not know; 2 = there are; 3 = no

Measurement Methods

Because this paper is "college students venture Choice Model" (Figure 1), the discussion is the intention of students choose the relationship between family environment, school education and three latent variables affect the degree of each other, so we used a structural equation model (SEM), both to deal with each other observable causal link between variables, but can also analyze the relationship between latent variables and latent variables and between the observed variables.

4. Empirical test and Results Analysis

In this study, using SPSS20.0 software package and Amos20.0 survey data analysis, the final results of the model estimates (see Figure 2), the inspection of model fit, the chi-square value of 157.736, significance probability value p = 0.000 <0.005, reached a significant level, reject null hypothesis indicates that the data can not be supported. In the initial model, since the variance-covariance matrix Σ assumptions of the model can not be adapted to the variance-covariance matrix S observational data, the model needs to be further amended. Correction assumptions of the model, this portion of the reference (Table 4) provide an index value.
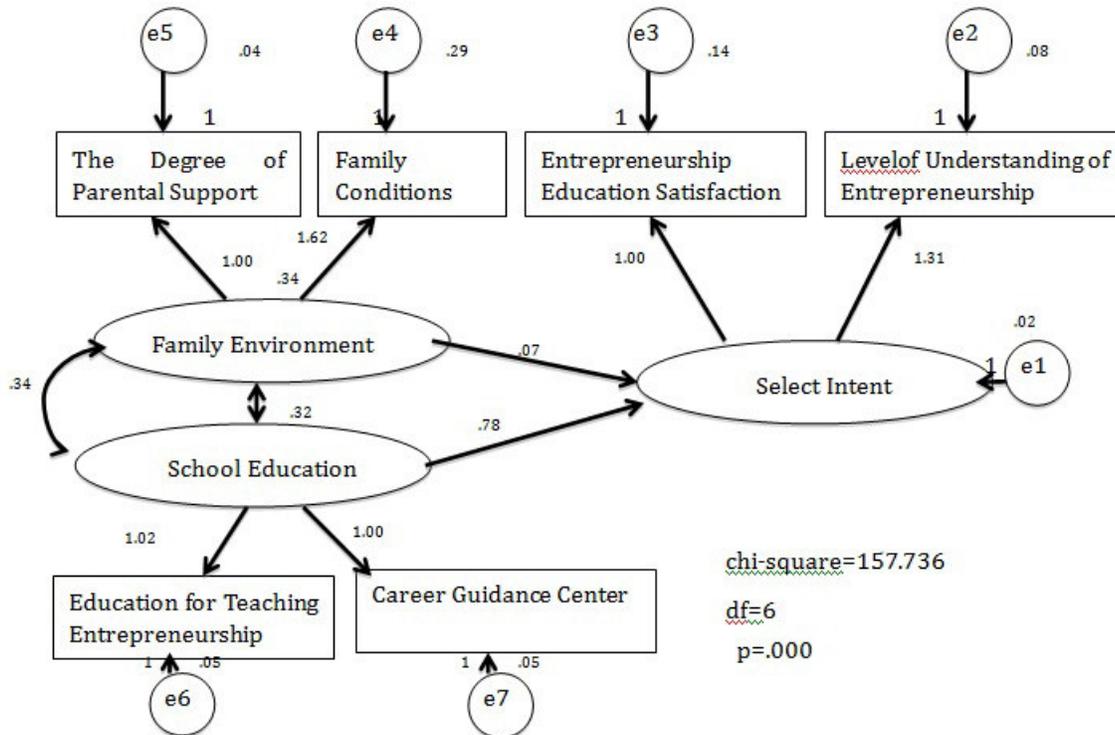
Figure 2

According to the model correction index value (see Table 4), in the SEM model, the estimated parameters are not known as fixed parameters, fixed parameter value is usually fixed to 0 or a constant. We can see from Table 4, the addition of variable error e3 and error variable e4 room with covariant with additional error variance and error variance e2 e4 room with covariant. After correction model shown in Figure 3, the chi-square value of 9.003, the significance probability value $p = 0.061 > 0.005$, not significant level, to accept the null hypothesis, indicating that the variance-covariance S matrix hypothetical model derived observational data derived variance Association the assumption of equal variance matrix Σ supported, and assumptions and model fit the observed data. Wherein the model adaptation data, AGFI = 0.943> 0.900, GFI = 0.989> 0.900, RMSEA = 0.068 <0.008, 0.05 significance level when, CN value = 287> 200; at the 0.01 level of significance, CN value = 402> 200, are up to the standard model adaptation, the model represents the observed data can be adapted. The initial model is 6 degrees of freedom, freedom becomes modified model 4.

Table 4 Covariances: (Group number 1 - Default model)

			M.I.	Par Change
e3	<-->	School Education	7.165	-.009
e3	<-->	Family Environment	6.837	.009
e3	<-->	e7	10.129	-.017
e4	<-->	e1	37.630	.042
e4	<-->	e7	13.073	-.023
e4	<-->	e3	66.268	.095

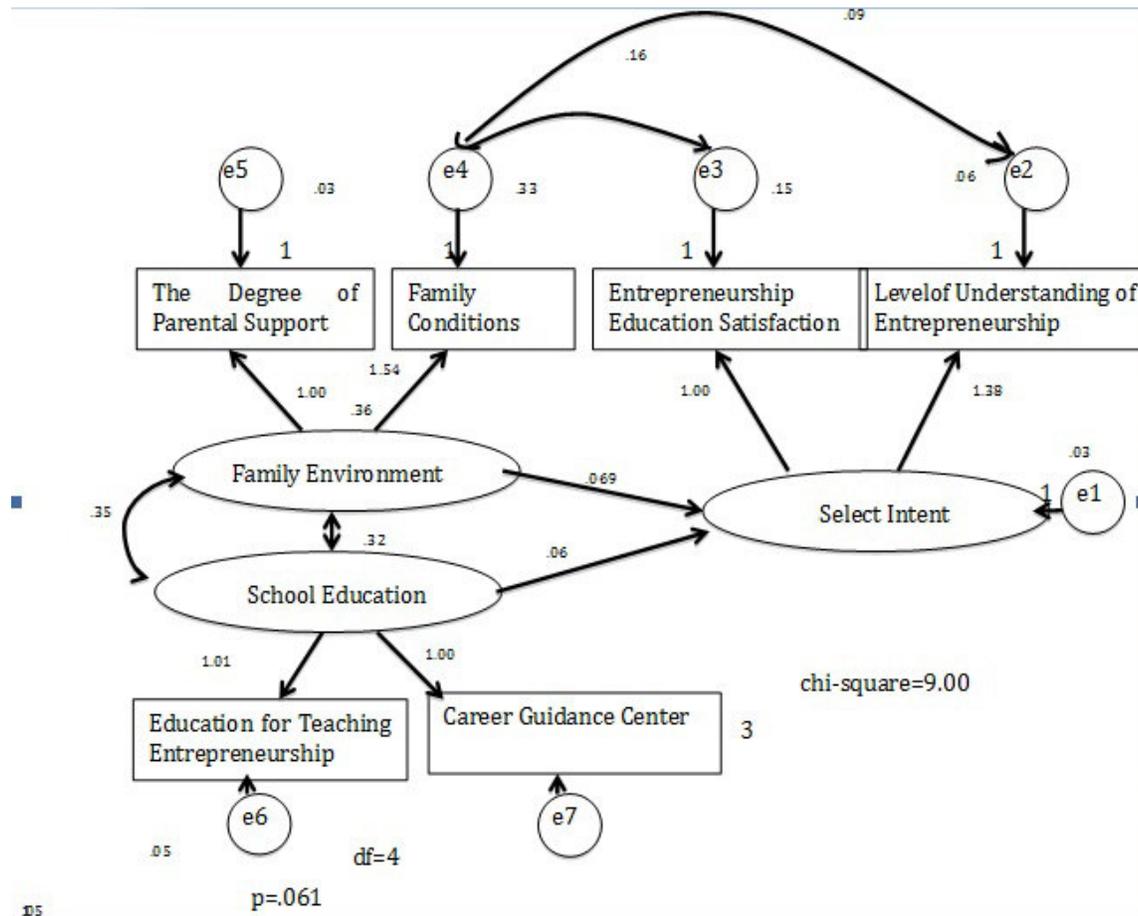|	M.I.	Par Change
e5 <--> e1	11.768	-.008
e5 <--> e7	5.374	.005
e5 <--> e2	8.538	-.010

Figure3

According to the model in Figure 3 after correction obtained data standardization and standardization of the direct effects indirect effects in Table 5

Table 5 Total effect assumptions underlying the model variables decomposition report

Causal variables	Outcome variables	Total effect	Direct effect	Indirect Effects
family environment	Select intent	.825	.825	.000
school education	Select intent	.070	.070	.000

Based on Figure 3 and Table 5 (standardized direct effect) analyzed, we can draw the following conclusions:

"Hypothesis 1" get data support that individuals understand the relevance of the impact of college students entrepreneurship choose. As can be seen from Table 5, have a direct impact on individuals' level of understanding of entrepreneurship education "and" entrepreneurship education satisfied "with the intention of selecting entrepreneurial college students. From the size of the impact, the "level of understanding of entrepreneurship" greater than "Entrepreneurship Education satisfaction", indicating that even in entrepreneurship education is not a very satisfactory situation, but a high level of understanding of entrepreneurship, business line may select large. That is, if an individual interested in entrepreneurship, entrepreneurial know more level, the more inclined to choose entrepreneurship.

"Hypothesis 2" has been supported by data, the impact is greater than the influence of the family environment of school education. As can be seen from Figure 3 and Table 5, from the size of the impact point of view, the impact of family environment is greater than the impact of school education. This may explain, although in our vigorous advocacy, policy support Entrepreneurship Education and the like, but in entrepreneurship education do not in place, we need to take active steps to do a good job in this regard.

5. Conclusions and Implications

Generally speaking, the impact of various internal and external factors will change the intention of college students venture choice. Full induction, we can get the following conclusions and Implications:
Conclusions

Students' individual level of understanding of entrepreneurship has adirect impact directly on the selection entrepreneurship. Therefore, in the public entrepreneurship and innovation in the background, as college students should take the initiative to learn, active choice, initiative to innovate.

Family environment and affect school students start the intention of choice, but for now the extent of domestic environment on entrepreneurial intention university students is greater than school education.
Implications

Stimulated - stimulate entrepreneurial motivation

Entrepreneurial Motivation is the prerequisite and basis for a variety of entrepreneurial behavior, the key Entrepreneurship Education is to stimulate entrepreneurship among university students motivation. And college students can stimulate good entrepreneurial motivation, the key depends on the guiding role of teachers. For a long time, China's Entrepreneurship Education Course lack of effective practical operation, Theory and Practice improper. Faced with the current situation of Entrepreneurship Education, it is necessary to follow - the requirements set course "theory and practice" theory, allow students to practice the process of making the students take entrepreneurial confidence, get hands-on experience through a stage success, in order to cultivate student achievement motivation, and thus stimulate entrepreneurship among university students motivation.

Variable - Students 'creative thinking, changing students' ideas

Creative thinking means entrepreneurs will have the knowledge, information processing and combinations, thus the formation of new ideas and new perspectives to problem-solving thinking process. In the process of rapid development of the Internet, the role of the Internet has been very important to be able to assume additional responsibilities of teachers, but all the people including school administrators and educators and even students are not fully aware of this. Therefore, the teacher as the main teaching activities, to abandon the static type of the traditional teaching model, the implementation of dynamic help to stimulate students 'thinking teaching mode, fully cultivate students' innovative thinking, the concept of college students change.

Move - family, school education linkage

Students in the process of entrepreneurship education in school education and family education in college students to jointly promote entrepreneurship education, rather than a single school or home education in the promotion of university entrepreneurship education. Therefore, family education and school education conjoined Collaboration in the process, should give full play to the role of education in the family can not be played by the school, to provide financial support, spiritual motivation for college students. Play a role in school education in family education can not play for college students to provide intellectual support, professional skills, improve the quality of college students venture. Both complement each other to jointly promote the development of Entrepreneurship Education.

REFERENCES

1. Sohu Education. 2015 "Chinese Graduate Employment Report" released.
    Http://learning.sohu.com/20150614/n414990956.shtml.2015.(6)
2. Ye Yinghua. Factors Affecting College Students' Entrepreneurial Intentions [J]. Educational Research, 2009, (4)
3. moneyYonghong. Entrepreneurial Intentions Factors [J]. Journal of Zhejiang University (Humanities and Social Sciences), 2007, (4).
4. Wu shipment. Construction of Chinese College Students entrepreneurial support system [J]. Technology Monthly, 2008, (3).
5. ZhengMingyuan. Entrepreneurial environment for business students Tendency to explore [J]. Modern Economy, 2011, (11).
6. Wu Minglong operating and structural equation model of -AMOS. [M]. Chongqing University Press .2013, (3).