

Study on the Influencing Factors of College Students' Entrepreneurial Intention

--A Case Study of Students from Southwest Petroleum University

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Abstract

This studies the influencing factors of college students' entrepreneurial intention, establishes the entrepreneurial intention - subjective factor - objective factor model, and divides the relevant factors into two parts: subjective factor and objective factor. On the basis of 1784 valid questionnaires collected from students of Southwest Petroleum University, this paper uses structural equation model to verify the subjective factors of generalized entrepreneurial attitude, including entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition, and tests the impact of these three variables on entrepreneurial intention. This paper also uses T-test and variance analysis to examine the influence of individual background on entrepreneurial intention in two aspects: individual social background and entrepreneurial education. Thus, the validity of the model is verified. The results of the research show that college students' entrepreneurial intention is influenced by multiple factors. Entrepreneurial motivation and entrepreneurial environment perception have a positive impact on entrepreneurial intention, and entrepreneurial factors cognition has a negative impact on entrepreneurial intention, and entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition are positively correlated. Entrepreneurship education can significantly positively affect college students' entrepreneurial intention.

Keywords

Entrepreneurial intention; Generalized entrepreneurial attitude; Entrepreneurial intention-subjective factor-objective factor model.

1. Introduction

In China, due to the contradiction between supply and demand and the structural contradiction between supply and demand brought about by the expansion of college enrollment, it is necessary for some college students to solve the employment problem by starting their own businesses. In a survey of college students on entrepreneurship, it is found that although most respondents are in favor of, appreciate and support entrepreneurship, the vast majority of them do not intend to start a business immediately after graduation or within one or two years after graduation. This shows that entrepreneurial attitude and entrepreneurial intention are not identical concepts, and there is not a simple linear positive correlation between them. Therefore, when scholars study who may choose to start a business, they will naturally pay attention to the relationship between entrepreneurial attitude and entrepreneurial intention, as well as what other factors affect entrepreneurial intention and how.

Domestic and foreign scholars have analyzed the factors affecting entrepreneurial intention and established many research models. For example, according to the entrepreneurial event

model proposed by Shapero and Sokol, entrepreneurial intention is influenced by perceived feasibility and perceived desirability [1]. Bird believes that entrepreneurial intention is based on rational thinking and intuitive thinking, and individual and social background jointly affect the formation process of entrepreneurial intention [2]. Ajzen put forward the theory of planned behavior, which holds that behavioral intention is mainly affected by three factors: behavioral attitude, subjective norms and sense of behavioral control [3]. Krueger et al.'s entrepreneurial intention model puts forward three antecedents: value expectation, normative belief and self-efficacy [4]. Autio et al. found that sense of behavioral control has the strongest influence on entrepreneurial intention, while subjective norms have the weakest influence [5].

Chinese scholars have also carried out effective empirical studies on entrepreneurial attitude, individual background and entrepreneurial intention. He Dan, Jiang Yan, Wu Lingfei et al. found that college students' entrepreneurial attitude is positively correlated with their entrepreneurial intention, and entrepreneurial attitude can affect entrepreneurial intention through perceived entrepreneurial value. Chen Jin et al., Xiang Chun studied the influence of individual background on entrepreneurial attitude and intention. The above studies have not yet formed a relatively consistent understanding on the selection of influencing factors, so it is difficult to standardize the research model. In this paper, a model of entrepreneurial intentions-subjective factors-objective factors is established in order to obtain a normative model of entrepreneurial intentionality research.

2. Construct the model

At this point, this paper considers the influencing factors of entrepreneurial intention from the two aspects of subjective factors and objective factors, and builds an entrepreneurial intention-subjective factor - objective factor model of influencing factors of entrepreneurial intention. The subjective factors include entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial element cognition, and the objective factors include individual social background and entrepreneurial education. This model measures the objective variable of entrepreneurial environment in a subjective way, so that the variable can be studied quantitatively. It also adjusts the measurement Angle of existing studies on entrepreneurial elements, and changes the measurement of confidence to the measurement of cognition, which is more in line with the characteristics of college students.

3. The research scheme of the model

A total of 2000 questionnaires were distributed to students in Southwest Petroleum University by means of convenient sampling, of which 1784 were valid, with an effective rate of 89.2%.

3.1. Measurement design of subjective factors of generalized entrepreneurial attitude

In the questionnaire, the entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition were qualitatively measured by 7-point Likert scale.

Entrepreneurial motivation includes nine observation items: achieving personal economic independence, challenging oneself, obtaining a sense of accomplishment, improving status, enhancing personal social influence, accumulating wealth, promoting national economy, contributing to society, and solving personal employment through entrepreneurship. Among them, achieving personal economic independence and improving personal social influence are newly proposed variables in this paper. The perception of entrepreneurial environment includes 8 observation items: economic situation, market environment, relatives' attitude, friends' support, school support, local support, central support and social environment, among which central support and market environment are proposed in this paper. Entrepreneurial

factors cognition includes 13 items: innovation spirit, entrepreneurial opportunities, products and services, business model, management team, business environment, interpersonal relationship, technical intelligence, financial support, entrepreneurial mentors, family support, government policies, and social atmosphere, among which social atmosphere and entrepreneurial opportunities are proposed in this paper.

3.2. Personal background objective factors measurement design

Personal background is divided into two types of variables: personal social background and entrepreneurial education, and the survey is carried out by a fixed measurement method. Personal social background refers to the basic information and social background information of individuals, including the gender, major, education, whether the only child of college students, the occupation of parents, the education level of parents, the growth environment, the growth region, the university region and the university where the university is located, among which the university region and the university are the measurement variables proposed in this paper. Entrepreneurship education refers to the education links related to entrepreneurship that college students have received or experienced during their college years, including five observation items: entrepreneurial course experience, entrepreneurial competition experience, competition award, award level, and entrepreneurial experience. Among them, entrepreneurial course experience, entrepreneurial competition experience and competition award are proposed in this paper.

3.3. Entrepreneurial intent measurement design

In the questionnaire, the entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition were qualitatively measured by 7-point Likert scale. This paper inherits the previous research, and uses 7 observation items to characterize entrepreneurial intention: starting point of occupation, active understanding, preparation for entrepreneurship, postponing graduation, university education, starting a business in school and starting a business after graduation.

4. Verification of entrepreneurial intention- subjective factor - objective factor model

4.1. Scale reliability and validity test

Reliability detection of entrepreneurial motivation, entrepreneurial environment perception, entrepreneurial element cognition, general entrepreneurial attitude as a whole and entrepreneurial intention can be tested by Cronbach's α (α reliability) value of the test factor. The validity test calculates the KMO (Kaiser-Meyer-Olkin) value and the Bartlett sphere test for all observed variations. The test results are shown in Table 1. It can be seen that the reliability and validity of each variable are high, and the significance level $p < 0.001$, indicating a high internal reliability, suitable for factor analysis.

Table 1 Reliability and validity test of ISO model subjective factor scale

Measured variable	Cronbach, α value	KMO	Bartlett value
Entrepreneurial motivation	0.949	0.930	9332.7
Entrepreneurial environment perception	0.906	0.881	5704.8
Entrepreneurial elements cognition	0.933	0.953	9017.0
Broad entrepreneurial attitude as a whole	0.950	0.954	25159
Entrepreneurial intention	0.927	0.912	5823.0

Through factor analysis, the measurement variables of entrepreneurial motivation are divided into four factors: economic pursuit motivation, spiritual pursuit motivation, social pursuit motivation and responsibility pursuit motivation. The measurement variables of entrepreneurial environment perception were divided into three factors: market environment perception, family environment perception and policy environment perception. The factors of innovation cognition were divided into four factors: cognition of basic factors, cognition of ability resources, cognition of external support and cognition of macro environment. The measurement variables of entrepreneurial intention were divided into three factors: entrepreneurial intention, entrepreneurial intention at school and entrepreneurial intention after graduation. In particular, it should be pointed out that the exploratory factors of the general entrepreneurial attitude as a whole, which are composed of the combination of three variable factor indicators, are separated into the results, and the dynamic factors of entrepreneurship, the perceptual factors of entrepreneurship environment and the cognitive factors of entrepreneurship are extracted. The three variables of entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition designed in this paper are exactly the same, which also indicates that this paper holds that entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition belong to a kind of view and recognition of entrepreneurship, that is, the definition of the broad entrepreneurial attitude sub-variable is valid. The Cronbach's α value of each variable after factorial analysis also exceeds 0.7, which indicates that the factorial analysis also has high reliability.

4.2. Structural equation model testing

For the verification model A and model B, the first or second order structural equation models can be established respectively and named as model A1 (first-order model), model A2 (second-order model), model B1 (first-order model) and model B2 (second-order model).

The second-order constitutive equation of model A2, the second-order latent variables include entrepreneurial motivation (DJ), entrepreneurial environment perception (HJ), entrepreneurial element cognition (YS) and entrepreneurial intention (YX). First-order potential variables include economic pursuit motivation (DJ10), spiritual pursuit motivation (DJ11), social pursuit motivation (DJ12), responsibility pursuit motivation (DJ13), market environment perception (HJ9), family environment perception (HJ10), policy environment perception (HJ11), fundamental element recognition (YS14), and ability Source awareness (YS15), External support Awareness (YS16), Macro View environmental awareness (YS17), Business Awareness and Orientation (YX8) and business intention on campus (YX9); The observed variables included 9 observation items of entrepreneurial motivation (DJ1-DJ9), 8 observation items of entrepreneurial environment awareness (HJ1-HJ8), 13 observation items of entrepreneurial element cognition (YS1-YS13) and 7 observation items of entrepreneurial intention (YX1-YX7). Among them, YX7 also corresponds to the graduation entrepreneurial intention factor.

By setting the model, 93 parameters to be estimated are obtained, and the data can provide 703 data points, so the freedom of the model is 610, which meets the necessary conditions for model recognition and can be estimated. From model A1, it is found that the first-order constitutive equation model composed of three variables, namely entrepreneurial motivation, entrepreneurial environment awareness and entrepreneurial factor cognition, is actually the second-order structural equation model of the subjective factor variable of generalized entrepreneurial attitude. With 80 parameters to be estimated, the freedom of the model is 623, which is a necessary condition for the recognition of the model. Similar to model A2, Model B2 has no correlation among the three variables of entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial element recognition. Set by the model, 90 parameters to be estimated are obtained. The degree of freedom of the model is 613. The model

can be identified. Similar to model A1, model B1 is set by the model, and 77 parameters to be estimated are obtained. The degree of freedom of the model is 626, which can be identified.

It is found that individual social background has significant influence on entrepreneurial intention, entrepreneurial motivation, entrepreneurial factors cognition and entrepreneurial environment perception. In terms of entrepreneurial intention, men are stronger than women, science and engineering students are stronger than law students, and undergraduates are stronger than postgraduates. These results are consistent with many research findings in the academic field. Those whose parents work as farmers are stronger than those who work in state-owned enterprises, and those who grow up in rural areas are stronger than those who grow up in urban areas, indicating that family economic status may be an important factor affecting entrepreneurial intention. The growth region and university region are stronger in East China than in northwest China, indicating that the entrepreneurial intention of college students is affected by the economic development and entrepreneurial environment of the region. The entrepreneurial intention of students in different universities is significantly different, which shows the role and importance of university education.

The test on the impact of entrepreneurship education shows that entrepreneurship education has a significant impact on all variables, and the entrepreneurial intention of students with some entrepreneurial education experience is significantly stronger than that of students without entrepreneurial education experience. The entrepreneurial intention of students who have taken entrepreneurship courses combined with majors is significantly stronger than that of students who have taken general courses. This conclusion suggests that universities should offer more entrepreneurship courses combined with majors. However, there is no significant difference in the entrepreneurial intention of students who have participated in different levels of entrepreneurial competitions and won multiple or different levels of entrepreneurial competitions, suggesting that colleges and universities can carry out entrepreneurial competitions extensively based on their own schools, rather than obsessively focusing on the level and level of participation and award.

5. Concluding discussion

In this paper, a normative model of the influencing factors of entrepreneurial intention, ISO (entrepreneurial intention - Subjective factor model - Objective factor) model, is proposed, and the relevant variables of entrepreneurial intention are unified. Through a large sample survey of 25 universities in China, this paper studies the entrepreneurial intention of college students from two aspects: subjective factors and objective factors. In terms of subjective factors, the broad entrepreneurial attitude is defined, including entrepreneurial motivation, entrepreneurial environment perception and entrepreneurial factors cognition. The objective factors include individual background, including individual social background and entrepreneurial education. Based on the survey data, structural equation model, T test and analysis of variance were used respectively to test the influence of subjective and objective factors, which verified the effectiveness of ISO model.

The implications of this research are as follows: 1) The influence of college students' entrepreneurial attitude on entrepreneurial intention is a comprehensive process with multiple factors and miscellaneous functions; 2) The economic situation and educational situation are the important factors influencing the intention of university students to create a career; 3) Universities should attach great importance to and widely carry out entrepreneurship education, cultivate and improve college students' entrepreneurial awareness and ability.

Acknowledgements

Supported by Southwest Petroleum University Innovation and Entrepreneurship Research Fund. "Research on the influencing factors of college students' entrepreneurial intention based on ISO model -- taking students of Southwest Petroleum University as the object" (2022RW004).

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