

The Analysis of College Students' entrepreneurship influence factors

Wang YuE¹ Zhang Sixiang² Gao Baijun³

¹Hebei University of Technology, Tianjin 300130, China, wangyue3588@163.com

²Hebei University of Technology, Tianjin 300130, China, zhangsixiang@hebut.edu.cn

³Hebei University of Technology, Tianjin 300130, China, gaobj@hebut.edu.cn

Abstract

In order to improve the frequency and success rate of college students entrepreneurship, this paper study the influence factors of college students' entrepreneurship and influence mechanism. This paper employed random sampling survey and the method of statistical analysis to investigate the influence factors of college students' entrepreneurship, and to analyze the influence mechanism. The results of regression analyses show that the three external factors of college students' entrepreneurship significantly affect on the four internal factors.

Keywords: college students, entrepreneurship, influence factors

1. Introduction

As the potent force of entrepreneurship, students' innovative undertaking is very important meaning. However, the actual situation is students' innovative undertaking rate is very low in china. Therefore, the research on affecting factors of entrepreneurship can help us understand the entrepreneurs thinking better and reveal the causes of entrepreneurship, so as to better promote innovative undertaking.

Based on relative theories of management and education such as the theories of human capital, action learning and ability development and taken college students' entrepreneurial factors as the main line, this thesis employs the combination of literature research, questionnaire survey, theoretical analysis, empirical study, qualitative analysis and quantitative model as research methods. Firstly, the internal and external factors of college students' entrepreneurial are identified systematically, the former named as entrepreneurial quality and the latter as entrepreneurial training surroundings. Secondly, the model structure of effect factors is constructed. Thirdly, with the empirical data, scales' validity and reliability are confirmed, and the fitting of model structure and variable relationship are tested, either.

2. Graduate entrepreneurship influence factors analysis

College students' entrepreneurship is a multi-dimensional concept [1], under the influence of internal and external factors. It is influenced by self consciousness and knowledge factors, and by external factors such as, family, school, society and others. It is the result of interaction between internal and external factors [2][3].

2.1. Internal factors

The internal factors of college students' entrepreneurship, it is of the college students themselves. It is base and supporting role of the formation of entrepreneurial abilities and improving. It is indispensable basic quality to the formation and growth ability of entrepreneurship.

The internal four factors affecting college students' entrepreneurship was got by generalizations of foreign scholars' research achievements. It is entrepreneurial awareness, personality traits, entrepreneurial knowledge and entrepreneurial practice.

Entrepreneurial awareness is entrepreneurs from their physiological and psychological motivation, perception, and understanding of objective things through judgment and reasoning, such as the brain processes, thus it forms the business image. Entrepreneurship is a powerful driving force. Entrepreneurial awareness is composed of elements such as entrepreneurial needs, interests and belief. It controls the attitude of the entrepreneur and behavior. It is personality tendency and plays a dynamic role in entrepreneurial activity.

Personality is gradually formed a relatively stable psychological, thoughts and emotions in the process of psychological development, and it is closely related with growth environment, teaching, social and genetic factors. College students must have a good quality, such as energy, courage, perseverance, bold, smart, etc. to become a successful entrepreneur. It needs to be able to correctly understand and evaluate their own ability, and properly handle interpersonal relationships, and make their own entrepreneurial behavior conform to the objective needs and social moral standards and timely adjustment.

Entrepreneurial knowledge is entrepreneurial talents

should have helpful to pioneering business knowledge and skills, including explicit knowledge, but more tacit knowledge, such as to grasp the business opportunity, integrate resources, entrepreneurial group tacit understanding, etc.

Entrepreneurial practice is various practical activities which are related to entrepreneurship for college students to participate. They are way of teaching activities which can reflect entrepreneurial education characteristics and nature, and can inspire students' potential.

2.2. External factors

The external factors of college students' entrepreneurship are connection and contradictions with the outside world in the college students' entrepreneurial learning process, and they are mutual influence with the entrepreneurial quality. They mutually decide the process and result of cultivating the ability of college students' entrepreneurship.

According to previous scholars research, and fully considering the characteristics of college students in colleges and universities, college students' entrepreneurial external factors can be divided into family entrepreneurial support, entrepreneurial education and social entrepreneurship atmosphere, and they is named for the uniform variable entrepreneurial environment.

Family entrepreneurial support can not only play a supporting role, may also help prevent to the cultivation of college students' entrepreneurial ability. Modes of relationships between college students and families, especially their parents continue to play a role on college students' psychological characteristics and the development of personality traits, which are important factors that affect college students' entrepreneurial ability. From the point of family, family values, parents' attitude towards entrepreneurship, home environment and conditions, parents' entrepreneurial experience, parents' support, relatives, friends and personal social network and network support have a certain degree of influence on the cultivation of the college students' entrepreneurial ability.

School is directly effect the ability of the college students' entrepreneurship environment factors, the entrepreneurship education of the school, the establishment of the university science park, which can influence college students' entrepreneurial capacity and entrepreneurial behavior. Concept of entrepreneurship education in colleges and universities, entrepreneurial knowledge and entrepreneurial practice arrangement directly affect college students' consciousness of entrepreneurship, entrepreneurial knowledge and entrepreneurial skills, etc.

Good social entrepreneurship atmosphere helps to enhance college students' consciousness of entrepreneurship and enthusiasm of entrepreneurship, and translated into the intrinsic motivation of cultivating the ability of college students involving in the entrepreneurship. Social factors closely related with college students entrepreneurial ability is social entrepreneurship atmosphere, including high entrepreneurial enthusiasm, positive entrepre-

neurial guidance, support policies, and high recognition for college students' entrepreneurship in the society.

3. The model and variables

According to above analysis, the college students' entrepreneurship is the effect result of the combination of internal and external factors, the college students' entrepreneurial factors affecting structure model is build as shown in figure 1.

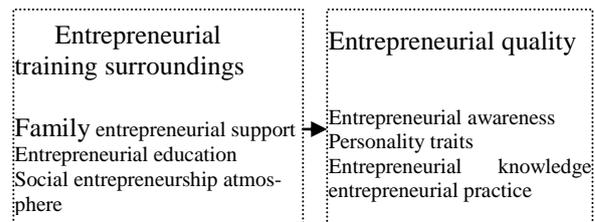


Fig.1. The structure model of college students' entrepreneurial factors affecting

The independent variables are encapsulated into three aspects. These aspects were family entrepreneurial support, entrepreneurial education and social entrepreneurship atmosphere, which is well defined from the prior research.

The dependent variables are encapsulated into four aspects. From the prior research, the four aspects as follow: entrepreneurial awareness, personality traits, entrepreneurial knowledge and entrepreneurial practice.

Each of the aspects or types consists of a set of items depicting them from different angles. For each item, a 5-point Likert scale is used(1-being strongly disagree and 5-being strongly agree)to enable respondents to indicate the extent to which their businesses agree with these items.

4. Data analysis and results

4.1. Sample and data

The principal purpose of this study is to investigate the effect of University Science Park on Graduate entrepreneurship. The businesses were randomly sampled from the recognized college students' entrepreneurial companies. Our sample contains 573 college students' entrepreneurial companies. Four weeks after the initial emailing, a second wave was sent to the non-respondents. From the two waves of posts, 235 useful responses were received, leading to a response rate of 41 percent.

4.2. Validity analysis

The validity of all variables should be measured before formal data analysis, in order to improve data validity. Cronbach's alpha coefficient and Corrected Item-Total Correlation (CITC) are used to measure variables validity. CITC standard value is not less than 0.4[4]. Cronbach's alpha coefficient standard value is more than 0.7[5]. Entrepreneurial training surroundings CITC and Cronbach's alpha coefficient such as table 1. Graduate entrepreneur-

ship quality CITC and Cronbach's alpha coefficient such as table 3.

Table1 and Table2 present the results of reliability tests for independent variables and dependent variables. The CITC of these items are greater than 0.4, and Cronbach's alpha scores were the threshold 0.7, which are up to standards, so these items should be retained, which suggest that the data of there aspects are reliable.

At the end, we kept 11 items about entrepreneurial training surroundings and 12 items about graduate entrepreneurship quality were attained.

Table 1 Entrepreneurial training surroundings CITC and Cronbach's alpha

Aspect	Item	CITC	Alpha if item Deleted	Cronbach's alpha
family entrepreneurial support	Fe1	0.725	0.761	0.842
	Fe2	0.615	0.712	
	Fe3	0.528	0.748	
entrepreneurial education	Ee4	0.732	0.752	
	Ee5	0.718	0.742	
	Ee6	0.678	0.821	
	Ee7	0.634	0.798	
social entrepreneurship atmosphere	Se8	0.761	0.753	
	Se9	0.713	0.742	
	Se10	0.673	0.821	
	Se11	0.637	0.783	

Table 2 Graduate entrepreneurship quality CITC and Cronbach's alpha

Aspect	Item	CITC	Alpha if item Deleted	Cronbach's alpha
entrepreneurial awareness	Ea1	0.736	0.712	0.816
	Ea2	0.625	0.794	
	Ea3	0.723	0.747	
personality traits	Pt4	0.532	0.709	
	Pt5	0.409	0.574	
	Pt6	0.718	0.712	
entrepreneurial knowledge	Ek7	0.861	0.762	
	Ek8	0.781	0.793	
	Ek9	0.713	0.874	
entrepreneurial practice	Ep10	0.724	0.623	
	Ep11	0.673	0.723	
	Ep12	0.615	0.776	

4.3. Exploratory factor analysis

Exploratory factor analysis of three aspects of entrepreneurial training surroundings and four aspects of graduate entrepreneurship quality are done through the use of SPSS 17.0. Table 3 and table 4 show analysis results.

According to Kaiser(1974), the standard value of KMO(Kaiser-Meyer-Olkin) and Bartlett is more than 0.6 and less than 0.01. Because KMO of all variables are more than 0.6 and Bartlett of all variables are less than 0.01. The results show that measuring tool can reflect the concept internal structure.

Table 3 Exploratory factor analysis of entrepreneurial training surroundings

Aspect	Item number	KMO	Bartlett
family entrepreneurial support	3	0.678	0.000
entrepreneurial education	4	0.721	0.000
social entrepreneurship atmosphere	4	0.741	0.000

Table 4 Exploratory factor analysis of graduate entrepreneurship quality

Aspect	Item number	KMO	Bartlett
entrepreneurial awareness	3	0.715	0.000
personality traits	3	0.678	0.000
entrepreneurial knowledge	3	0.723	0.000
entrepreneurial practice	3	0.632	0.001

4.4. Regression analyses

On the basis of reliability analysis, regression analyses between three aspects of University Science Park capital and seven aspects of graduate entrepreneurship were conducted respectively. The results are shown in the table 5.

Table 5 Regression analyses of variables

Variable	family entrepreneurial support	entrepreneurial education	social entrepreneurship atmosphere
entrepreneurial awareness	0.618*	0.732*	0.706*
personality traits	0.714*	0.125	0.645*
entrepreneurial knowledge	0.064	0.733*	0.068
entrepreneurial practice	0.032	0.678*	0.523*

*: p<0.05

The regression analysis of entrepreneurial training surroundings and graduate entrepreneurship quality: Regression analysis results show that different types of entrepreneurial training surroundings and graduate entrepreneurship quality are positive correlation. This indicates that different types of entrepreneurial training surroundings to improve graduate entrepreneurship quality are significantly positive effect.

5. Conclusion

Conclusions are as follows: entrepreneurial competence of college students is a multidimensional concept and is affected by varied internal and external factors. External factors have significant positive effect on internal factors.

Regression analysis results show that family entrepreneurial support and social entrepreneurial atmosphere have significant positive effect on entrepreneurial awareness and personality traits. The better entrepreneurial support and social entrepreneurial atmosphere are, the college students' awareness of entrepreneurship and personality traits is higher. The correlation coefficient is 0.618, 0.706, 0.714 and 0.645.

Family entrepreneurial support and social entrepreneurial atmosphere have insignificant positive effect on entrepreneurial knowledge and entrepreneurial practice. It is osmosis.

The effects from family and society on college students' entrepreneurship are relatively stable, and college entrepreneurial education can improve students' entrepreneurial awareness, enrich students' entrepreneurial knowledge and enhance their entrepreneurial practice skills in a relatively short period of time. So it requires the interaction of college and its students to develop students' entrepreneurial competence. The evolution of this interaction process can go forward the right direction through adjusting training strategies.

Research shows that promoting college students' entrepreneurial competence can be done from four aspects: training concept, training goal, training form and training surroundings.

This study is an empirical exploration. The methodological challenges in executing business research imply that a number of limitations may constrain the generality of the conclusions. The sample size limitation was confronted in this study. Enterprise email surveys often

suffer from a low response rate, which is believed to be the 'result more from not using available knowledge' of the survey than any other issues inherent in the approach. Nonetheless, recently a further decline of the response rate has been recognized [6]. This is partly because many firms encounter a 'survey fatigue' of being 'bombarded' by overwhelming questionnaires, and a relatively high percentage of these questionnaires are poorly designed.

Acknowledgement

Research works in this paper are supported by Tianjin Social science major projects (No.2014ZD37) and Tianjin science and technology plan projects (No.13ZXFYCX04800)

References

- [1] Thompson J L. "The facets of the entrepreneur: identifying entrepreneurial potential", *Management Decision*, vol.45,no.2,pp. 243-258,2004.
- [2] Zahra Shaker A. "Emerging Multinationals venturing into developed economies: implications for learning, unlearning, and entrepreneurial capability", *Journal of Management Inquiry*, vol.20,no.3,pp. 323-330,2011
- [3] Clarysse Bart, Tartari Valenlina, Salter Ammon. "The impact of entrepreneurial capacity, experience and organizational support on academic entrepreneurship" ,*Research Policy*,vol.40,no.8,pp.1084-1093,2011
- [4] Delgado-Ballester,E., Munuera-Aleman,J.L., and Yagüe-Guillen,M.J., "Development and validation of a brand trust scale", *International Journal of Market Research*, vol.45, no. 1, pp. 36-53, 2003.
- [5] K.Malhotra, "An integrated model of attitude and affect: Theoretical foundation and an empirical investigation", *Journal of Business Research*, vol.58, no. 4, pp.483-493, 2005.
- [6] Dennis Jr., William, J., "Raising response rates in mail surveys of small business owners: results of an experiment", *Journal of Small Business Management*, vol.41, no. 3, pp.278-295, 2003.