

Analysis of Connotation Factors of Entrepreneurial Ability of Chinese College Students Based on Grounded Theory

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토대이론을 기반으로한 중국대학생 창업능력 내포요소 분석

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Abstract With the increase of employment pressure in China and the need of economic transformation, chinese government started to encourage college students to innovate and start their businesses to relieve the employment pressure. Due to the lack of entrepreneurship ability, the success rate of college students' entrepreneurship is not high. Therefore, based on the grounded theory and qualitative research methods, this paper focuses on the entrepreneurial ability of college students, selects college students who have started their own businesses in jilin university of China as interview objects, and summarizes the original data obtained in the in-depth interview for analyzing the connotation of college students' entrepreneurial ability, and puts forward the concept model of Chinese college students' entrepreneurial ability. The results show that the entrepreneurial ability of college students consists of driving force, management ability, entrepreneurial endowment, and potential ability. This study has certain guiding significance for universities to carry out entrepreneurship education.

Key Words : Entrepreneurial ability, College Students' innovative undertaking, Grounded theory, The connotation of the factors, Coding

요 약 대학에서는 취업에 대한 부담을 완화시키고, 경제발전을 촉진할 수 있는 혁신창업인재를 양성하기 위하여 대학생의 창업교육을 중시하고 있다. 중국은 “대중창업, 만인혁신”을 배경으로 대학생들에게 기업이 정신교육에 큰 비중을 두고 있지만, 실제 창업 성공률이 높지 않은 것은 창업능력의 부족에 기인한 것이다. 이에 본 논문은 중국 길림대학에서 창업한 대학생들을 탐방대상으로 선정하였고, 이들에 대한 심층면접을 통하여 얻은 자료를 질적 연구방법인 귀납적 토대이론에 근거하여, 대학생들의 창업능력의 함축성에 대한 요소분석을 하였다. 이를 통하여 창업능력의 개념모형을 혁신적으로 제시하였다. 연구결과로는 대학생의 창업능력에는 창업 추진력, 관리능력, 창업 재능과 잠재 능력으로 구성 되어 있는 것으로 나타났다. 본 논문은 대학에서 창업 성공률을 높일 수 있는 창업교육을 실시하는데 지침적 의미가 있는 연구이다.

주제어 : 창업 능력, 대학생 토대이론, 내포적 요소, 코딩

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1. Introduction

With the slogan of “mass entrepreneurship and innovation” put forward, Chinese college students' enthusiasm for entrepreneurship is increasing day by day. According to the survey data in employment blue book: 2018 employment report of Chinese college students, written by MYCOS research institute and published by social sciences academic press, 3 percent of college graduates from 2016 to 2018 started their own businesses. At the same time, it is worth noting that the success rate of Chinese college students' entrepreneurship is relatively low, only 2% ~ 5%, while the success rate of American college students' entrepreneurship is as high as 20%[1]. Investigate its

reason, lies in the training mode of entrepreneurship education in colleges and universities, from the point of reality, students entrepreneurship by macro policy environment, professional disciplines background, entrepreneurial intention, entrepreneurial atmosphere, and other factors, the influence of the entrepreneurship as internal environmental factors affecting the effects of college students' entrepreneurship, has become one of the core content of entrepreneurship education in colleges and universities.

2. Theory background

Grounded Theory is one of The forefons in The field of qualitative research methodology, The earliest by B. Glaser and A. Strauss in their works in The Discovery of Grounded in going forward, advocated based on The Theory of data in this study, instead of The existing Theory deduce verifiability hypothesis, by collecting detailed data to refine The new point of view, and then rise to Theory level, with theoretical saturation, constantly absorbing new ideas until eventually formed systematic Theory [2]. The

core of the grounded theory method is the process of data collection and analysis, which includes both theoretical deduction and theoretical induction. During the whole research process, data collection and analysis are both simultaneous and continuous. This method is widely used in the research of the definition of the concept, connotation and influence factors, etc. Z. W. Zhu & R. Gu used the grounded theory to build the brand value evaluation model of China's agricultural products[3], T. Yue. R. Y. Long. & S. W. Ge used the grounded theory to build the influencing factor model of urban residents' energy-saving behavior in Jiangsu province[4], and C. H. Shen & L. Luo used the grounded theory to define the concept and elements of public service capacity[5].

At present, there is a lack of authoritative research results on the entrepreneurial ability of college students, and there are great difficulties in quantitative analysis, so this paper decides to adopt grounded theory research. Grounded theory USES data collection tools such as in-depth interview and text analysis to complete data collection and form generative analysis, so as to establish a theory that is faithful to the original data and reflects the essence of phenomena. Therefore, it is suitable for theoretical researches with vague concepts and controversial elements

3. Research method

This research adopts a standard qualitative research process, IT pays attention to the diversity of data sources and focuses on the original data obtained through in-depth interviews, supplemented by literature.

3.1 Data collection

Thirty entrepreneurial college students from Jilin University in China were selected as

interviewees. In order to enrich the connotation of entrepreneurial ability, at the same time, according to the actual needs of entrepreneurial college students, the interviewees have been doing business for at least half a year, and their professional background involves engineering, economics and management, science, art, and other aspects. There are two reasons for the selection of interviewees. First, the students who participate in entrepreneurship have a deep understanding of the connotation of college students' entrepreneurship ability and they can intuitively feel the quality of entrepreneurship. The understanding of college students' entrepreneurship ability has a certain reference value. Secondly, with the expansion of the research field of college students, scholars' research on the entrepreneurial ability of college students is also deepening. They have deep thoughts and insights on the dimensions, measurement, and improvement of college students' entrepreneurial ability to ensure the scientificity and representativeness of sample data.

3.2 Interview and data statistics

3.2.1 Interview syllabus

Interview outline is a tool designed by researchers to explore related issues of interviewees according to the research purpose, which plays a decisive role in the direction of the interview. In this study, the semi-structured interview method was adopted, and the interview questions were designed as a mixture of questions with different levels of structure, so as to make the respondents more flexible in answering the questions [6]. In order to enrich the connotation model construction of entrepreneurial ability, this interview includes low-structured part and high-structured part. Among them, the low-structured part limits the interviewees to analyze their entrepreneurial motivation based

on their entrepreneurial experience. In the highly structured part, some specific information comes from all interviewees, which facilitates the collection of basic information and ensures the integrity of the connotation of college students' entrepreneurial ability.

The interviewee is the researcher of this paper. This interview outline draws on the research results of J. Tang . & Y. F. Jiang[7], Y. Zhou & M. M. Jia[8], and W. Cheng[9]. Before the interview, the interviewees have introduced the interview process and matters needing attention. The interview contents are recorded with the consent of interviewees, The interview questions are as follows 1 . Why do you choose to start a business? What do you think of college students' starting a business? 2 . Please describes in detail the successful cases in your entrepreneurial process or the cases that you think you have handled well (2-5 examples) ; 3 . Please describes in detail the difficulties you encountered in the process of starting your business, and how you solved them, and how the effect was (2-5);4 . What do you think you stand out from your business partners? (hint: give examples and describe them in detail.);5 . What entrepreneurial ability and quality do you think a good entrepreneur should have? 6 . If you were to start a business all over again, what would be your priorities? 7 . If you were to start a business all over again, what would be your priorities?

3.2.2 Data statistics

After the completion of each interview, the researcher transcribed the words in combination with the recording to ensure the originality of the words to the greatest extent and recalled and described the body movements and expressions of the interviewees at that time. After the interviewees confirm that the information is correct, the data should be converted into text and saved.

3.3 Grounded analysis

In the practice of grounded theory, existing literature and original data should be encoded. Encoding means clustering data fragments with concise terms and explanation. In this paper, the data processing based on grounded theory has experienced three stages: open coding spindle coding, and selective coding.

3.3.1 Open coding

Open coding is to extract the concepts and categories reflecting the data content by mining the early data and name them with a short discourse[10]. In order to ensure the accuracy and effectiveness of the research process, this study analyzed the previously obtained data line by line and word by word and tried to use the expressions in the data to avoid the intervention of empirical judgment. This paper mainly studies college students' entrepreneurial ability connotation factor, the respondent's audio data are text, then 27 random sample data, interviews of college students, has a wealth of experience, Their comments and opinions were sorted out word by word. Some interviewees had little information or invalid information, so they were eliminated. The remaining effective information contents were coded and labeled according to the five basic principles of open coding proposed by Strauss[11]. In this study, 45 representative descriptive texts were selected and 35 conceptual categories were obtained.

For the 35 conceptualized categories, some indicators are described in detail in combination with the actual situation of the interview in this paper. Experience driving force, interest driving force, goal driving force, etc. Refers to the ability of entrepreneurs to integrate the personal experience, interest, personal goal, and other factors into the entrepreneurial process and ultimately transform them into material wealth. Responsibility driving force, self-actualization

value driving force, survival driving force, etc., refers to the ability of entrepreneurs to take responsibility, self-value realization, survival need, and other factors as entrepreneurial motivation and promote the realization of the whole entrepreneurial process. "Entrepreneurial environment response" refers to the ability of entrepreneurs to actively stimulate their interest in entrepreneurship due to the strong entrepreneurial atmosphere or the influence of national entrepreneurship incentive policies. The difference between "talent discovery and cultivation ability" and "team human resource construction and integration" lies in that the former emphasizes talent introduction and cultivation, while the latter emphasizes the optimal design of the matching of team insiders." Self-mastery" refers to the entrepreneur's ability to control personal behaviors that may affect the entrepreneurial process, such as the ability to work under pressure and the ability to clearly understand the entrepreneurial self.

3.3.2 Spindle coding

Spindle coding is a process of association construction of the logged classes in the open coding process, so as to establish an organic association for each part of the data. In this study, according to the 35 conceptual categories, the existing relationships among the conceptual categories were analyzed to obtain 10 categories including internal driving force, external driving force, operational ability, team building, organizational and coordination ability, operational ability, enterprise development ability, resource utilization, personal characteristics, knowledge and skills.

3.3.3 Selective coding

Selection coding is the process of "kernelization" of analyzed conceptual genera, that is, the process of classifying conceptualized

Table 1. Categories of generic relation categories

The core category	Categorize the genus	Conceptualize the genus
Entrepreneurial drive	Interior driving forces	Goal driving force, Interest driving force, Responsibility driving force, Self-worth driving force, Experience driving force
	External driving force	Survival driving force, Entrepreneurial environment response
Management ability	Operational capacity	Execution , problem solving ability
	Team building	Team culture building ability, Talent discovery and cultivation ability, Startup partner selection ability, Team collaboration ability, Team human resource building, integration
	Ability to organize and coordinate	Customer retention, balance and coordination, leadership
	Operation ability	Financial operation ability, product operation and brand building ability, market operation, risk tolerance and commitment competence
Dig latent capacity	Enterprise Sustainable Development Ability	Forward-looking and pattern, Planning, Opportunity id- entification, Competency, innovation ability
	Resource use ability	Utilization of material resources, Financing capacity, Social relations
Entrepreneurial Endowment	Personal characteristics	Self - control ability, Physical and mental quality, Communication skills
	Knowledge and skill	Professional skills, Knowledge base ,Learning ability

genera in a wide range. In this study, based on the integration and analysis of conceptual genera and categorical generic, get Entrepreneurial drive Management ability to Dig latent capacity Entrepreneurial Endowment. The relationships among the genera are shown in Table 1.

3.4 Theoretical saturation and reliability test

In order to ensure the saturation of theoretical construction and determine when to stop sampling, this paper USES the theoretical saturation test as the evaluation standard[12]. This study randomly selected 80% samples for research, and the remaining 20% samples were analyzed according to the three-level stepwise coding analysis method of grounded theory. The results obtained were still consistent with the "connotation factors of college students' entrepreneurial ability" in the model. Combined with the data analysis results obtained in the first 80% copies, no new connotation elements were found. Therefore, the theoretical model established in this paper was saturated.

According to the calculation formula of encoder reliability in qualitative data analysis:

Reliability = number of consistent codes/number of all codes[13].

In the first-level coding, namely open coding, the consistency rate of three-person decoding results is as high as 85.82%, the pair wise consistency rate is 87.32%, 86% and 85.12%, respectively. Fig. 1

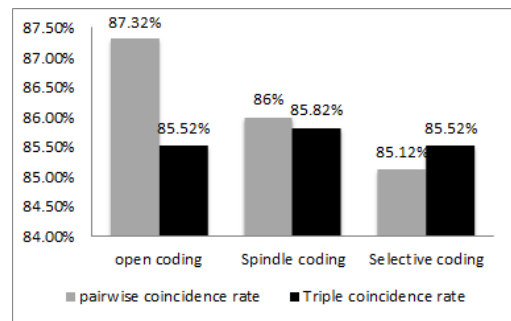


Fig. 1. Coding reliability

Therefore, the connotative factors of college students' entrepreneurial ability have a stable structure and good structural reliability. The group members also reached a consensus on the controversial indicators of individual related categories after full discussion and reference to relevant literature.

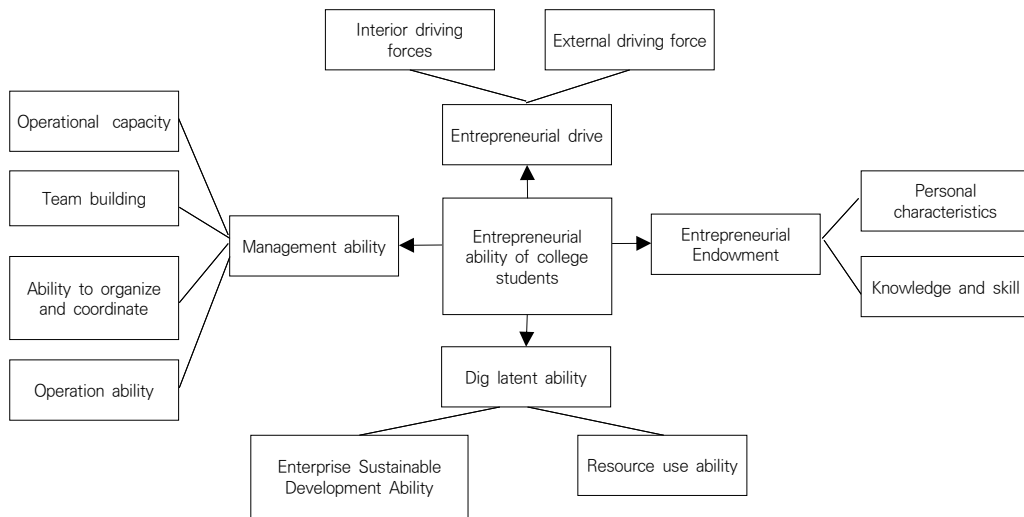


Fig. 2. Connotation factor model of the entrepreneurial ability of college students

4. Analysis results

Through data integration of 27 effective interview reports, more than 390 pieces of effective information were extracted, including 35 conceptual categories, 10 categorical categories, and 4 core categories. Finally, the entrepreneurial ability of Chinese college students was constructed based on four factors, namely entrepreneurial driving force, management ability, digging potential ability and entrepreneurial endowment. Construct the connotative factor model of college students' entrepreneurial ability. Fig. 2

Relevant concepts in the model are expressed as follows:

Entrepreneurial driving force includes internal driving force and external driving force, which refers to the ability of entrepreneurs to be influenced by internal and external factors and convert them into an entrepreneurial driving force.

The internal driving force mainly refers to the ability of entrepreneurs to be influenced by such factors as goals, interests, responsibilities, self-realization, and experience related to entrepreneurship, and convert these influencing factors into entrepreneurial motivation and

material wealth generation.

External driving force refers to the entrepreneurial driving force generated by the influence of external entrepreneurial atmosphere and environment and the pressure of personal survival.

As the initial factor of college students' entrepreneurship, the entrepreneurial driving force plays an important role in the process of college students' entrepreneurship. In combination with the interview, it is found that entrepreneurs have entrepreneurship experience and are influenced by the entrepreneurial atmosphere and environment, so it is particularly important to cultivate the ability of college students to transform the influencing factors into entrepreneurial driving forces.

As the initial factor of college students' entrepreneurship, the entrepreneurial driving force plays an important role in the process of college students' entrepreneurship. Combined with the visiting management ability, it includes operation ability, team building, organization and coordination ability, and operation ability, which is fundamentally the ability to improve organizational efficiency.

Digging potential ability includes enterprise

development ability, resource utilization ability. The so-called "digging potential" refers to the integration and utilization of resources and insight into the future to fully tap the potential of enterprises and achieve the sustainable development of enterprises. Specifically, the ability to dig for potential includes forward-looking and pattern, planning ability, opportunity identification and competence, innovation ability, material resources utilization, financing ability, and social relations utilization.

The entrepreneurial endowment includes personal characteristics and knowledge and skills, which refers to the entrepreneurial talent and later entrepreneurial skills. Specifically speaking, personal characteristics include self-control ability, physical and mental quality, communication and expression ability; Knowledge and skills include professional skills, knowledge base and learning ability.

Through the study of the previous cases of college students' entrepreneurship, the failure of college students' entrepreneurship is mostly caused by the lack of entrepreneurial ability of college students. The type of failure is usually summed up as blind conformity, lack of experience, poor management and so on. This paper holds that improving the entrepreneurial ability of college students is the most fundamental and critical link to improve the entrepreneurial quality and survival rate of college students.

The lack of experience and poor management lies in the fact that college students have not yet understood or participated in the real entrepreneurial process, and they lack the management ability and potential exploration ability that should be possessed in the entrepreneurial process. Blind conformity lies in the fact that college students lack a strong and real entrepreneurial driving force and imitate others to start businesses only for short-term interests. In addition, it was found in the study

that the frequency of mentions was nearly 100% based on the frequency of mentions of personal traits, knowledge, skills and other conceptual indicators. Therefore, it can be seen that entrepreneurial endowment is the basis to ensure the smooth start-up process[14].

In the study, it is found that all the indicators are not independent of other indicators, but the result of mutual promotion and interaction. Four core category is the relationship between the entrepreneurial talents are the basis of business entrepreneurs and congenital conditions, and the entrepreneurial drive is prompting gen industry entrepreneurial talents into full play and transformed into actual entrepreneurship "catalyst", under the action of "catalyst" encourage entrepreneurs to actively explore the ability of the enterprise operation management related so as to achieve ideal results.

5. Conclusions

According to the outline of China's 13th five-year plan[15], we will further promote mass entrepreneurship and innovation. Chinese universities have added the content of "cultivating college students' awareness of innovation and entrepreneurship" to their student training programs and set up innovation and entrepreneurship education platforms such as entrepreneurship classes. In business class, for example, It is mainly guided by "entrepreneurship knowledge education + innovation project training + entrepreneurship plan competition + entrepreneurship project internship". Enable students to master business, marketing, management and other related knowledge related to entrepreneurship, which has a significant effect on improving students' management ability. Combined with the current situation of entrepreneurship education in Chinese universities and the research results of this paper, entrepreneurship education for

college students can be further improved from the following three aspects:

One, such as "entrepreneurship class" entrepreneurship education platform as the basis, to college students business plan competition, "Internet +" business plan competition for college students innovation, to promote learning, to promote building, further broaden the college students' entrepreneurship education platform, fully excavate students entrepreneurial interest, stimulating the enthusiasm of college students' entrepreneurship, to build a good business environment, cultivate college students' real and strong entrepreneurial drive. At the same time, further, implement entrepreneurial incentive policies, enrich the construction of business incubation base, and create a good entrepreneurial atmosphere for college students].

Secondly, we should give full play to the role of off-campus mentors in "teaching, helping and driving" so as to improve students' entrepreneurial potential. On the basis of the existing and relatively perfect courses of management ability training, we should give further play to the guiding role of off-campus entrepreneurship tutors. Off-campus mentors can visit through the enterprise and entrepreneurship salon, business enterprise practice such as various forms of practice, teaches students entrepreneurial experience, guide the students to understand the actual process of entrepreneurship in the entrepreneurial practice, urge students to broaden the knowledge of the individual, discover possible business opportunities, to develop their students and the industry to dig latent capacity.

Third, cultivate the exploration spirit of college students, improve their learning ability, guide students to combine professional learning with practice, and enhance the ability of scientific and technological achievements into productivity; Actively explore other entrepreneurship-related knowledge (such as management, psychology, finance, law, etc.) other than professional

knowledge, so as to lay a solid theoretical and knowledge foundation for practical entrepreneurship; To strengthen the simultaneous development of ability cultivation and physical and mental quality construction, and to provide a basis for the smooth development of entrepreneurship with excellent entrepreneurial endowment.

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