

Research on the Growth Path of College Student Entrepreneurs

—A Case Study of Chengdu City in China

Yufeng Li

College of Management, Sichuan Agricultural University, Chengdu, China

Email: Phewl_22@163.com

ABSTRACT

Understanding the growth process of college students' entrepreneurs is of great significance for giving full play to the role of entrepreneurship in promoting employment and release innovation and entrepreneurship. Based on the grounded theory, this paper selected 32 college student entrepreneurs, proposed five core categories, including entrepreneurial motivation, entrepreneurial spirit, entrepreneur internal ability, entrepreneur external ability. The study divided the growth stage of college student entrepreneurs into accumulative period, formative period and developing period, then obtained the growth path model and summarized the growth characteristics.

Keywords: Student entrepreneurs, Growth path, Grounded theory

1. INTRODUCTION

For the past few years, with the need for industrial upgrading and the people's pursuit of good quality, China's higher education has transformed from "elite education" to "mass education". According to the latest data from the National Bureau of Statistics of China, the number of college graduates in China is increasing gradually, reaching 7.59 million in 2019. However, due to the COVID-19 pandemic, the global economy is experiencing downward pressure, decreasing job opportunities for college students. Therefore, it is necessary to give full play to the role of entrepreneurship in promoting employment, especially to cultivate a group of college students with entrepreneurial vitality and potential, and release innovation and entrepreneurship. Chinese college students are currently facing problems including lack of career planning, insufficient understanding of entrepreneurship, and lack of resources available for integration when they try to start their business. To promote the success of college student entrepreneurs and to provide them effective guidance, what we need to do first is to have a deep understanding of the growth process of college student entrepreneurs.

The academic research on the entrepreneurial process started early. Based on the enterprise life cycle theory, researchers divides the entrepreneurial process into four stages(Holt, 1992; Wang, 1995); Timmons proposed that

the entrepreneurial process was a highly dynamic balancing process among entrepreneurial opportunities, entrepreneurial team and resources, which has had a broad impact on subsequent research(Timmons, 1999; Lu, 2009); In the unique economic and social environment of China, the research on college students' entrepreneurs is mainly carried out from three aspects: entrepreneurs' personal characteristics, entrepreneurship environment, entrepreneurship education, and support(Fei, 2009; Zhu et al., 2012; Zhu, 2014; Guo et al., 2008; Huang et al., 2013). Based on the grounded theory, this paper aims to examine the growth path of college students' entrepreneurs in Chengdu area. By investigating the factors of the path, including entrepreneurs' personal behaviors and characteristics and the entrepreneurial environment, this study intends to provide theoretical basis and policy suggestions for better services for college students to manage their own businesses.

2. RESEARCH METHOD AND PROCESSES

2.1. Research Method

Grounded theory was first proposed by Barney Glaser and Arrselm Stauss. It is a qualitative method for data analysis and research, advocating construct and developing theory based on the study of survey or observational data(Glaser & Strauss, 1968). Instead of

deducing testable hypotheses from existing theories, this method constructs theories from the bottom up, makes an exhaustive analysis of data, excavates concepts and categories, and thus forms an empirical theory.

Different from general business leaders, college students entrepreneurs have greater uncertainty in their entrepreneurial process and are easier affected by their environment. This requires researchers to minimize the influence of the document deduction model and empirical research methods, using induction to extract the basic theories in this field from objective phenomena to gradually build and improve the theoretical system (Zheng et al., 2019). In order to deeply understand the social phenomenon of the growth of college students entrepreneurs and explore the corresponding laws, this paper adopts the research method of grounded theory and uses systematic procedures to develop and to guide the grounded theory according to a certain phenomenon inductively.

2.2. Source of Data

The following three principles were used while selecting interviewees: 1. Principle of representativeness, this paper requires the selected interviewees to be entrepreneurs with stable business at present and foreseeable future. 2. Principle of multi-formity, the diversity of participants can provide positive external benefits for the framework of theoretical models. This paper tries to cover samples in different industries and

geographical locations. 3. Principle of availability, the availability of data is the basic guarantee for theoretical model construction. Based on the above principles, this paper selected 32 college students in Chengdu area who are studying and graduating within 5 years and collected data by face-to-face interview.

2.3. Data Analysis

According to the grounded theory of Strauss, the collected data are encoded from bottom to top with Nvivo11. The processes consisted of open coding, axial coding, and selective coding.

2.3.1. open coding and axial coding:

In the initial stage of analysis, open coding was used to categorize data by researchers who review the data and find recurring words, themes, or concepts. Axial coding is the coding of the original open code, which is the process of reintegrating the decomposed original data. The data of growth interviews of college students entrepreneurs in Chengdu were collated, connected, explored, and identified. Fifty-six subcategories were abstractly identified and then formed 20 main categories. The relationships among categories were analyzed in depth and genera were established. The specific genera relationships were shown in Table 1.

Table 1. Genera relationships among categories

Core category	Main category	Subcategories
Entrepreneurial motivation	Survival motivation	self-dependence, wealth obtained
	Achievement motivation	reputation, satisfaction, life value creation, success of career
	Spirit of adventure	enjoying a challenge, adventurousness, confidence
	Sense of social responsibility	leading farmers to get rich, job creation, driving students' income increase, social service
Entrepreneurial spirit	Hardworking	persistence, willing to bear suffering
	Risk awareness	awareness of unexpected development, risk averse
	Credit consciousness	integrity management
	Learning awareness	introduction of new technologies, long-term learning
	Innovation consciousness	continuous innovation
Entrepreneur	internal	Planning ability
		strategic planning, plan formulation

capability	Pressure bearing capacity		under great pressure, misunderstanding and suspicion
	Organization management ability	and	benefits distribution, management system, rational division of labor, mutual trust, resource integration
	Innovation ability		develop new products, optimize organizational system
Entrepreneur capability	Coordinate ability		coordinate relations with the government, suppliers, and competitors
	Marketing ability		market research, market prediction, develop new markets, maintain sales channels
	Opportunity capability	recognition	identify policy opportunities, identify business opportunity, future trend of layout
Entrepreneurial environment	Competitive		homogenous, low technical level, fierce price competition, enterprise competition
	Restrictive		financing difficulty, staff shortage, prejudice and distrust
	Dynamic		market changes quickly, consumer demand diversification, great development potential, high risk
	Incentive		policy support, entrepreneurship education, new technology provision

2.3.2. selective coding:

Selective coding is to analyze and deal with the relationship between categories, synthesize the core categories, and then build a theoretical framework. Investigating 20 categories abstracted by axial coding, the paper puts forward three entrepreneur characteristics of

college students' entrepreneurs, which are entrepreneurial spirit, entrepreneur internal capability and entrepreneur internal capability. Additionally, two internal and external driving factors were proposed, namely, entrepreneurial motivation and entrepreneurial environment. The growth evaluation model of college student entrepreneurs formed is shown in Figure 1 below.

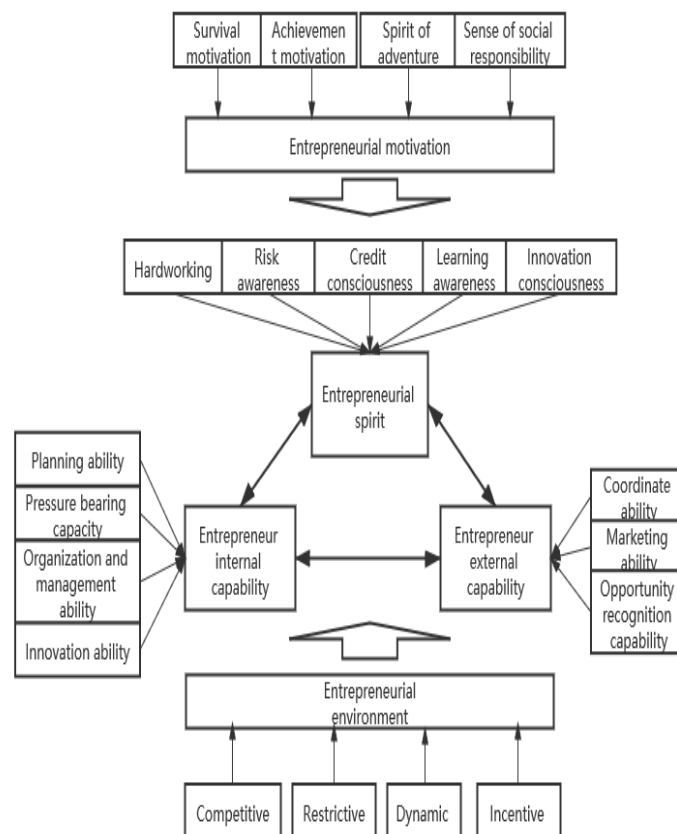


Figure 1 Growth evaluation model of college student entrepreneurs

3. RESULT AND DISCUSSION

Different internal and external factors are reflected in different growth stages of college student entrepreneurs, thus producing various characteristics of entrepreneurs. For all the main categories in different stages, this study assumes that the traits and behaviors reflected in the previous stage will not disappear in the latter stage, and only the newly added traits and behaviors will be represented. However, when the subcategories of the main category are changed, the main category will still be represented in this stage.

According to grounded theory, through the aforementioned triple coding analysis and the network relationship built around core categories, main categories and subcategories, as well as all concepts, the growth stage of college student entrepreneurs can be divided into: ① Accumulative period, the accumulative period of the entrepreneur before and at the beginning of the establish the business. ② Formative period, innovate and explore a stable source of profit by using a variety of resources and conditions. ③ Developing period, the period that develops new business, widen living space of enterprise. As shown in Figure 2, the growth path model of college student entrepreneurs is established based on the growth characteristics of college student entrepreneurs.

The main differences of the three stages are as follows:

- ① Accumulative period, At the beginning of entrepreneurship, in addition to basic needs such as capital and talent, system formulation, value proposition, strong support from the government and schools are also particularly important. In this stage, initial accumulation is weak, and development is relatively slow.
- ② Formative period, with the accumulation of experience and skills, entrepreneurs pay more attention to their product positioning. They started building consumer trust, expanding the scale, and improving the overall control ability and coordination ability. The enterprise basically formed a stable business model, the development shows abrupt growth.
- ③ Developing period, as the business model of the enterprise is mature, entrepreneurs would like to invest more resources to build a brand, resolve internal and external conflicts of the enterprise, and train successors. At the same time, the enterprise is more committed to take more social responsibility.

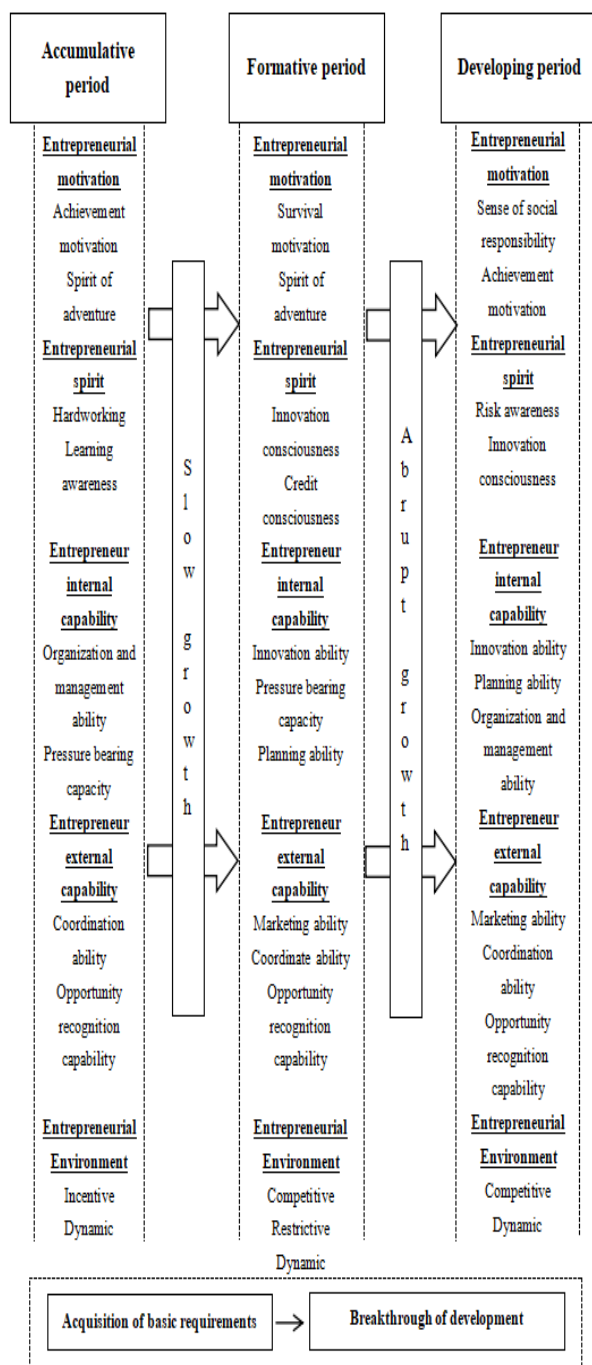


Figure 2 Growth path model of college student entrepreneurs

3.1. Accumulative period

College students often start their own businesses based on their wishes to realize life value through entrepreneurship and their characteristics of daring to take risks and not fearing failure. Before starting the business, entrepreneurs should learn professional knowledge including products and marketing, seek for potential business partners, make use of capital and policy support provided by the government and the school for college students, allocate the technology and market channel resources. In the early days, leaders are

not clear about where they want to go and what the future would be. At this point, the entrepreneur will start to manage within the enterprise. Limited by entrepreneurial resources and enterprise influence, more work needs to be completed by entrepreneurs themselves, and they need to be able to bear hardships. Entrepreneurs making clear the value proposition of the enterprise, seeking for partners and coordinating the relationship to build a team, gradually develop the organizational system of the enterprise. They need master the operation process and management mode, accumulate information, social relations, wealth, ability and other beneficial resources. In terms of external interaction, college students need to find the pain point of market value demand and establish a good cooperative relationship. At this stage, the main environment for college entrepreneurs is the rapidly changing market and the support from the school.

3.2. Formative period

After entrepreneurs allocate internal and external resources and establish a matching system design, they begin to explore a stable profit model that can support the survival and development of enterprises, thus entering into the formative stage of college student entrepreneurs. During this period, entrepreneurs are facing with great survival pressure and are in urgent need of a feasible business model to support cash flow. They pay more attention to the external management of enterprises, and the core is to adapt to market to form a sustainable business model. Entrepreneurs win consumer's satisfaction by broadening their social networks, establishing deeper and more stable relationships, constantly innovating technologies and models, improving enterprise management systems, and focusing on improving the cost performance of products. It is worth noting that this period was not a smooth sailing. In fact, entrepreneurs often need to carry out this internal and external management cycle constantly, identify the value demand points of the market through repeated trial and error, accurately find their own existing problems, creative reform, and then provide more effective solutions. Therefore, the internal enterprise might happens more violent shock at this time. Entrepreneurs may also face difficulties in capital turnover, lack of talent and other development bottlenecks, and in this process quickly strengthen their coordination and marketing ability. At this stage, entrepreneurs mainly perceive the fierce market competition, limited access to financing and other resources, as well as the uncertainty of expectations after the change.

3.3. Developing period

After an enterprise has formed a revenue channel in a long term, entrepreneurs try to seek greater development space for the enterprise. However, this process is full of difficulties, and breakthroughs are needed to enter a

developing period. Entrepreneurs need to seek new growth points and expand their industrial chains. On the one hand, entrepreneurs can extend the value network of enterprises horizontally or vertically through optimizing planning, establishing cooperative relations, set up alliances, mergers and other measures. They use brand influence to link the value network, and maintain the team through detailed rules and regulations, so as to achieve a more optimized economy of scale and scope; On the other hand, entrepreneurs have gone through the most difficult part of the entrepreneurial process, they are more likely to put more energy into the pursuit of a sense of achievement and satisfaction, and begin to feed the school and feed the society consciously. They provide funding and material support to schools, to achieve their own social value. The fulfillment of social responsibility in this stage is partly due to the higher requirements of the government and society, and more to the sense of achievement and mission of entrepreneurship themselves. At this stage, the entrepreneur ability of planning and organizing have been gradually discover and cultivate. All aspects of entrepreneurs in the experience and ability is at the best state. They has solid variety of networks. Their ability can be well applied during the work, skilled allocating resources, accurate identification of internal and external short board, make up for in a timely manner. At this stage, the main environment is the competition and uncertainty of entering new market areas.

3.4. Summary

As shown in Table 2, each stage of the college students' entrepreneurs' growth has obvious characteristic changes. ① From the perspective of school role, in the accumulative period, the school mainly act as a leader. By providing entrepreneurship education and fundings to college students, the school strengthens students' correct understanding of entrepreneurship and encourages them to start their own businesses; In the formative period, the school mainly acts as a partner, with the help of startup platform for transformation of scientific and technological achievements to increase the daily business cooperation. This kind of cooperation can help the college students entrepreneurs at formative period in looking for possible business model and improve the success rate of the entrepreneur. On the other hand, it can reduce transaction costs because the cooperation is more likely to establish mutual trust. During the developing period, the school gradually becomes the one being helped in the cooperative relationship. College students' entrepreneurs gradually form a mature business model and gain a certain popularity. They begin to share entrepreneurial experience in the school as an example of entrepreneurship and repay the entrepreneurial help provided by the school. ② From the perspective of resource demand, in this period, college students entrepreneurs mainly need basic entrepreneurial resources such as product-related technical information,

initial capital, and competent entrepreneurial team. College student entrepreneurs need to establish relationships with all parties, expand their relationship network, and obtain market information to establish marketing channels They also hope to obtain financing to relieve the pressure of the capital chain; In the period of developing, college student entrepreneurs have the practical need to expand the business scope, so they have to find reliable partners to seek further development, and start to cultivate excellent talents. ③ In terms of talent structure, entrepreneurial college students have the leadership, organizational ability, and other basic entrepreneurial ability. In the formative period, college student entrepreneurs are good at exploiting market potential, observing policy trends, and innovating products and services to match the market. With the development of the enterprise in this period, leaders have possessed relatively complete knowledge structure. They can timely solve internal and external conflicts. Having a stronger sense of accomplishment and mission, entrepreneurs will invest more resources and energy into the fulfillment of social responsibilities.

Based on the differences of management emphasis in different stages of the growth, this paper proposes three important reasons for the transformation: ① In the early stage of starting a business, what leaders consider most is the establishment and survival of the business. However, with the development of enterprises, entrepreneurs will consider more about improving efficiency of value creation and the reasonable distribution of benefits from the perspective of industry or society. ② From the accumulative period to the formative period, attention is transferred from the inside to the outside. The business model is then adjusted according to the changes in the market. Entrepreneurs first pay attention to the design of the organizational system so as to allocate all the available potential resources. After the transformation, they tend to form the model with the highest efficiency and profit. For the market changes, entrepreneurs continuous innovate mode, trial and error, reduce redundancy cost, to create new value for the enterprise. ③ From formative period to developing period, after a series of bottleneck breakthrough, entrepreneurs will form a relatively stable mode to develop of well internal and external circulation. Achieve sustainable development through they optimize internal system and training reserve talents. Leaders expand industries and innovate business models through docking project, team cooperation and other external resources, to seek new business growth point, obtain bigger development space.

Table 2. The growth characteristics of college entrepreneurs at different stages

	Accumulative period	Formative period	Developing period
School role	Leader: Provide entrepreneur ship education and funding	Partner: Increase equal cooperati on in technolo gy, projects and business	The one being helped: Receive entrepreneu rial experience and funding from great entrepreneu rs
Resource demand	Technical information, funding, team	Market channel, relationsh ip network, financing	Partners, talented people
Talent structure	Leadership, organizational skills and other basic entrepreneur ship	Marketing and innovation ability	Complete knowledge structure and strong sense of social responsibilit y
Managem ent emphasis	Form the internal structure of the enterprise	Matching external markets	Strive for greater developme nt space and broaden the scope of business

4. CONCLUSION

Using grounded theory to investigate the growth process of college students entrepreneurs, this paper proposes five core categories, including entrepreneurial motivation, entrepreneurial spirit, entrepreneur internal ability, entrepreneur external ability, and entrepreneurial environment. Twenty main categories such as survival motivation and achievement motivation, self-dependence and other 56 subcategories, establish the growth

evaluation model of college student entrepreneurs. On these basis, along with precious research, the study divides the growth stage of college student entrepreneurs into accumulative period, formative period and developing period. Then the growth path model is obtained and the growth characteristics is summarized.

The study found that distinct stage characteristics is reflected in the growth process of college students entrepreneurs. According to the development status of different stages, the basic needs such as talents and resources are the main factors affecting the initial stage. Management, marketing and innovation ability are the most important constraints in the formative period. Strategic planning, continuous innovation, and talent training are the important guarantees for the developing period. In different growth stages, the role of schools, the resource demand, and talent structure of entrepreneurs vary. The emphasis of management constitutes an important factor for the transformation of these three stages of college students entrepreneurs growth.

REFERENCES

- [1] National Bureau of Statistics. (2019). The number of graduates from all kinds of schools. <https://data.stats.gov.cn/easyquery.htm?cn=C01&zbs=A0M0H03&sj=2019>
- [2] Holt, D. H. (1992). Entrepreneurship: new venture creation. Prentice-Hall, Englewood Cliffs, NJ.
- [3] Wang, Z. P. (1995). Describe the 'life cycle of entrepreneur'. Shanghai Management Science, (05):25-26.
- [4] Timmons, J. A. (1999). New venture creation: entrepreneurship for 21 century. Irwin, Illinois.
- [5] Lu, X. W. (2009). Research on entrepreneurship Process Model of Chinese College Students based on Timmons Model. Heilongjiang Research on Higher Education, (5):13-16.
- [6] Fei, Y. Q. (2009). Survey on entrepreneurship Quality of College Students in Capital City. Education and Vocation, 000(025):46-48.
- [7] Zhu, Y. Y., Hu, B., & Sun, P. (2012). Research on the evaluation of entrepreneurial environment for college students based on factor analysis. Heilongjiang Research on Higher Education, 30(003):97-101.
- [8] Zhu, L. L. (2014). The Research of entrepreneurial environment influence on college students' entrepreneurial intention [Unpublished master's thesis]. Shandong University of Finance and Economics.

- [9] Guo, L. J., Liu, Q., & Lu, X. Y. (2008). Comparative analysis of entrepreneurship education policies of Chinese and foreign college students. *Higher Education Exploration*, 000(001):132-135.
- [10] Huang, Z. X., & Wang, Z. Q. (2013). On the integration between entrepreneur education and professional education. *Educational Research*, (12):59-67.
- [11] Glaser, B., & Strauss, A. L. (1968). The Discovery of Grounded Theory: Strategy for Qualitative Research. *Nursing Research*, 17(4):377-380.
- [12] Zheng, K., Wang, Y. L., Lu, Y., & Xiang, W. X. (2019). Recognition of new rural entrepreneurial cognitive characteristics based on grounded theory. *Studies in Science of Science*, 37(12):2222-2230.