



Nascent Team- Entrepreneurship in China: A CPSED Based-Data Evidence

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Abstract

The purpose of this paper was to study nascent team-entrepreneurship in China based on the data from Chinese Panel Study of Entrepreneurship Dynamics (CPSED). We focused on analyzing the characteristics of nascent team-entrepreneurs and their behavioral patterns from the perspective of the entrepreneurs, the entrepreneurial opportunity, entrepreneurial activities and entrepreneurial performance. In this regard, the relative position of team-entrepreneurship in China was identified compared to those of solo-entrepreneurship. Finally, some implications were pointed out, and we pointed out some future research directions.

Keywords: Nascent Team-Entrepreneurship, Entrepreneurial Team, Entrepreneurial Process, Entrepreneurial Opportunity

Introduction

Entrepreneurship propels technological innovation, solves problems of employment, and promotes economic development. It plays an important role in the institutional transformation in China. A great number of people participate in new venture creation.

According to the Global Entrepreneurship Monitor 2011 Global Report, Chinese TEA (Total Entrepreneurial Activity) was the first among the 54 member countries that participated in Global Entrepreneurship Monitor project. Most new ventures were created by team entrepreneurs. Teach, Tarpley and Schwartz (1986) investigated 237 enterprises and found that only 68 enterprises were established by one person, others were created by two or more people. In China, solo-entrepreneurship counted for 39.5% while team-entrepreneurship was 60.5%.

It is difficult to explore the essence of entrepreneurship from the sole-entrepreneur's perspective. Therefore, a number of scholars have focused on team-entrepreneurship as it has become more and more universal. They analyzed the nature and pattern of team-entrepreneurship based on organizational behavior theory, resource-based theory, institutional

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theory, social capital theory, etc. And the main samples in these researches were existing enterprises. However, they may have survival bias and hindsight bias. And it is difficult to reveal the pattern of entrepreneurial behavior before new ventures emergence.

Paying attention to the early period of life cycle and analyzing the uniqueness of entrepreneurship activities play an important role in exploring the paths of new venture creation and growth. Paul Reynolds, who is a professor of George Mason University in America, has conducted an investigation. He launched a Panel Study of Entrepreneurship Dynamics (PSED) in 1998. The logic of the project is sampling representative nascent entrepreneurs randomly and following up their entrepreneurial process through multi-wave. At present, PSED has become an influential international project. It has been carried out in Australia, Canada, China, Sweden, the Netherlands, and Norway. Using the data from PSED, we obtained numerous papers and dissertations which deepen our understanding of entrepreneurship. They also provide directions for entrepreneurs to manage entrepreneurship and for the government to draw up a policy.

The Research Center of Entrepreneurial Management in Business School of Nankai University initiated, organized, and carried out the Chinese Panel Study of Entrepreneurship Dynamics (CPSED) project. CPSED is the first project which focuses on the entrepreneurial behavior at micro-level in China. Based on learning foreign PSED project design and considering the Chinese institution transformation and cultural tradition, CPSED adopted a stratified sampling and a random digital dialing. It identified and followed up the adult nascent entrepreneurs through telephone interviews. After exploratory research, CPSED was implemented in the eight cities of Beijing, Tianjin, Hangzhou, Guangzhou, Chengdu, Wuhan, Shenyang, and Xi'an from July to September in 2009. After being in touch with 69990 families, we interviewed 22045 people by telephone, and identified 974 nascent entrepreneurs. At the first-wave, we interviewed 601 nascent entrepreneurs. Among them, there were 316 nascent team-entrepreneurs.

According to the data from the first-wave telephone interviews of CPSED, this paper analyzed uniqueness of nascent team-entrepreneurs as well as entrepreneurial opportunities, and described their matching processes. It showed the patterns of Chinese entrepreneurial activities and the growth aspirations of Chinese nascent team-entrepreneurs. This paper contributes to deepening of our understanding of nascent team-entrepreneurs and team-entrepreneurship in China. It also tests the limitation of organizational theories emerging from modern Western societies in Chinese context, and then the boundaries of existing organizational knowledge can be extended.

Literature Review

Team-entrepreneurship

As team-entrepreneurship is widespread in practice, more and more scholars became interested in it. Beitrag et al. (2007) reviewed the papers which were published in *Academy of Management, Entrepreneurship: Theory and Practice, Journal of Business Venturing, Journal of Small Business Management* in the period from 1990 to 2006. As they found out that there were 37 papers about entrepreneurial teams, it counted for 1.1% of all papers which were published in the four journals. Furthermore, there were only 11 papers about the entrepreneurial team for the ten years from 1990 to 1999. After 2000, the number of

these papers increased dramatically. There were 10 papers about an entrepreneurial team in 2006. An entrepreneurial team then became a hot issue.

As for the concept of team-entrepreneurship, many scholars analyzed team-entrepreneurship from different perspectives. Kamm, Shuman, Seeger, and Nurick (1990) analyzed team-entrepreneurship from the ownership perspective. They suggested that the entrepreneurial team included two or more people participating in new venture creation having the same ownership. In human resources, Mitsuko Hirata (2000) pointed out that the member of the entrepreneurial team should be full-time entrepreneurs to support each other and share the entrepreneurial courage. External consultants such as lawyers and accountants do not take part in new venture creation full time so they are not members of the entrepreneurial team. Ensley et al. (2006) defined the entrepreneurial team from the perspective of their participation. An entrepreneurial team member should take the following steps including taking part in new venture creation, being stock holders and making some strategic decisions. Schjoedt and Kraus(2009) described that the entrepreneurial team was composed of two or more persons who were active in a new venture creation and had the faith that the venture would be successful.

Recently, many scholars have paid attention to the performance of team-entrepreneurship which is measured by financial indexes. Lechler (2001) found out that the new ventures which were created by an entrepreneurial teams can grow better than those of solo-entrepreneurs. Moreover, Timmons (2002) found that solo-entrepreneurial ventures' annual turnover was hard to reach millions of dollars, while it was not the same for team-entrepreneurship. It can be concluded that the performance of team-entrepreneurial ventures was better than that of solo-entrepreneurship.

However, there are still many problems in the formation of team-entrepreneurship. For example, high loss of team-members becomes a universal problem. And entrepreneurs and entrepreneurial opportunities are the key factors of the entrepreneurial team formation. Smith (2007) found out that entrepreneurs were likely to rationally build their entrepreneurial teams if they recognized an innovative opportunity. They preferred to invite more people to form the team, so the team members were more diverse. Through field research, Lipinski (2007) evaluated the relationship between prior experience and the formation of the entrepreneurial team. Experienced entrepreneurs preferred to build entrepreneurial teams in a rational way with team members having more resources and knowledge.

Chandler and Hanks (1998) investigated 12 entrepreneurial teams, and found that only 2 teams remained unchanged for 5 years since the venture was created. Furthermore, it demonstrated that the performance of team-entrepreneurship was affected by team members and their interpersonal relationship. Cooper and Daily (1997) indicated that efficiency would be higher if team members' skills, knowledge and abilities were complementary. And in practice, only a few teams consider capability diversity and complementarities. The majority of teams start up their businesses because of similar interests or opportunities (Chandler and Hanks, 1998). Interpersonal relationship of team members also affects the performance significantly (Waston et al., 1995).

In a word, research on team-entrepreneurship is becoming more and more popular. It expands the field of research to become another important research area. At present, the foundation of entrepreneurial theory is frail. There are few researches analyzing the behavioral patterns of team-entrepreneurship based on an entrepreneurial theory. Especially, there are few researches

which focus on the early period of ventures' life cycle to explore the differences between new ventures.

New Ventures' Emergence

In the 1980s, Gartner (1988) explained new ventures' emergence from the behavioral perspective. Until recently, this view has become a hot issue in entrepreneurial research field. And the research on new ventures' emergence is in a transitional stage from an emerging to a mature field. Empirical studies become the main research method. The data from PSED provide a solid foundation for the explanation of new ventures' emergence. Some interesting findings can be concluded from the PSED-type research. Through reviewing the literature on the new venture emergence published in top entrepreneurship magazines like *Journal of Business Venturing*, *Entrepreneurship Theory and Practice*, *Journal of Small Business Management*, *Small Business Economics*, we found out that the researches about new ventures' emergence mainly focused on entrepreneurs, entrepreneurial opportunities, entrepreneurial activities and outcomes.

First, human capital and social capital influence new venture emergence. Some researches focused on prior experience and found that industrial experience, entrepreneurial experience, managerial experience and functional experience had a great impact on opportunity recognition, resource acquisition, strategy making, entrepreneurial tendency and performance (Delmar and Shane, 2006; Ucbasaran, Westhead and Wright, 2009; Burton, Sorensen, and Beckman, 2002; Beckman, 2006; Tian and Long, 2009).

Second, many researches focused on entrepreneurial opportunities, especially the opportunity recognition pattern. Some scholars associated them with self-efficacy, environmental munificence, prior experience in order to analyze why and how some people and not others identify opportunities. Tang (2008) found that few nascent entrepreneurs searched opportunities systematically in a munificent environment. Furthermore, those who had higher self-efficacy search less systematically.

Lastly, there were some researchers who studied the pattern of new ventures' emergence through analyzing the dynamic entrepreneurial process. They analyzed the entrepreneurial activities pattern by exploring finished numbers and priorities. Liao, Welsh and Tan (2005) calculated the time of finished 20 entrepreneurial activities among American nascent entrepreneurs. They found that the time was a normal distribution. The average duration was 76 months, and the median was 32 months. Samuelsson and Davidsson (2009) indicated that the innovative ventures were significantly different from imitative ones, and, in a set time, the number of finished entrepreneurial activities in innovative enterprises was more than that of imitative enterprises.

Methodology

Design of Sample

Before carrying out the formal investigation, we had conducted a three-round tentative survey in order to forecast the distribution rate of the nascent entrepreneurs among adults and to estimate the cost of the investigation. At the same time, we made further modification, deletion and addition of the questions of the interview in the light of the feedback from the interviewees so that we could make sure of its validity. Stratified sampling was applied in CPSED program,

and China was categorized into four levels including the East, the West, the North-East and the Central China according to the entrepreneurial activity. Considering the differences in interregional entrepreneurship, Beijing, Tianjin, Hangzhou and Guangzhou were chosen to represent the East, Wuhan to represent the Central, Shenyang to represent the North-East and Chengdu, and Xi'an were chosen to represent the West. In total there were 8 cities where the survey was launched. The CPSED sampled citizens aged above 18 year olds. And it defined the sampling weight by the number of citizens in each city. In the city being investigated, CPSED applied the random sampling by telephone to contact the interviewees. Nascent entrepreneurs were selected according to the established standard and then a telephone survey was followed, and in the next two years, the whole process of these entrepreneurial activities was contacted by tracking a survey through telephone calls three times.

Sample Identification

There were three standards in selecting the nascent entrepreneurs in CPSED: (1) being active in entrepreneurship; (2) being engaged in entrepreneurial process, and having some ownership; and (3) the venture should have become operational, but no profit has been gained through its products or services in the past one year. Respondents who met all of the standards were considered as nascent entrepreneurs. The first-wave survey selected 601 nascent entrepreneurs. Furthermore, based on answers to this question "*Did you create the enterprise independently or in a team?*", 316 nascent team-entrepreneurs and 252 nascent solo-entrepreneurs were selected, and those 33 people who had not made sure how to start-up, was not counted in.

Sample Descriptions

Table 1 lists the distribution of the sample. The distribution of the nascent team-entrepreneurs' sample indicated: Beijing (59, 18.7%), Shenyang (32, 10.1%), Wuhan (33, 10.4%), Guangzhou (44, 13.9%), Xi'an (35, 11.1%), Tianjin (42, 13.3%), Hangzhou (27, 8.5%), Chengdu (44, 13.9%). And the distribution of the nascent solo-entrepreneurs' sample showed: Beijing (45, 17.9%), Shenyang (22, 8.7%), Wuhan (30, 14.7%), Guangzhou (34, 15.95%), Xi'an (19, 7.5%), Tianjin (37, 14.7%), Hangzhou (26, 10.3%), Chengdu (39, 15.5%). Among the team-entrepreneurs, 41.1% of them were in tech-entrepreneurship, and 58.9% of them were in non-tech-entrepreneurship. Among solo-entrepreneurs, 32.1% of them were in tech-entrepreneurship and 67.9% of them were in non-tech-entrepreneurship. From the perspective of new ventures, establishing a new enterprise independently was the most popular and the percentages of the team-entrepreneurs and solo-entrepreneurs were both more than 60%. Joining a chain businesses and franchising ranked second and the percentages of team-entrepreneurship and solo-entrepreneurship were 23.4% and 25.8%. Furthermore, in team-entrepreneurship, 22.2% of them had already finished establishing the team, 38.9% were in the process of formation, and 38.9% were planning to establish. In a word, the distribution of the samples was widespread, this reflected the characteristics of Chinese team-entrepreneurs, and it had external validity.

Table 1. The Distribution of the Sample's Characteristics (%)

Items		NTE	NSE	Items		NTE	NSE
Type of Entrepreneurs	tech	41.1	32.1	The Way of Establishing a New Venture	To establish a new enterprise independently	67.1	61.1
	No-tech	58.9	67.9		To acquire or to take over other existing enterprises	7.0	8.3
City	Beijing	18.7	17.9		To join chain a business and to franchise	23.4	25.8
	Shen yang	10.1	8.7		To be invested by large enterprises	2.5	2.8
	Wuhan	10.4	11.9	others	0	2.0	
	Guangzhou	13.9	13.5	Stage	Finished	22.2	-
	Xi'an	11.1	7.5		Being established	38.9	-
	Tianjin	13.3	14.7		Have not started	38.9	-
	Hangzhou	8.5	10.3				
	Chengdu	13.9	15.5				

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

Results

In order to demonstrate Chinese nascent team-entrepreneurs' characteristics and the entrepreneurial opportunity as well as the pattern of the team-entrepreneurial activities, this paper used Chi-Square test to compare the Chinese nascent team-entrepreneurship with the nascent solo-entrepreneurship. And the frequency analysis was used in this paper.

The Characteristics of Chinese Nascent Team-entrepreneurship

Entrepreneurs play an important role in activities and the performance of a new venture. Many scholars focused on analyzing the characteristics of entrepreneurs. In the early times of studying entrepreneurship, the scholars paid their attention mainly to demography, and analysed what kind of a person was more likely to become an entrepreneur from the perspective of gender, age, etc. Then, the scholars turned their attention to the psychological and cognitive characteristics. In the 1990s, some scholars started to focus on the factors which could be acquired through learning and experiences. Therefore, the study extended to the experiences which an entrepreneur had gained before his entrepreneurial activity. This research analyzes the characteristics of Chinese nascent team-entrepreneurs by comparing with those of the nascent solo-entrepreneurs from the three dimensions of demography, motivation and prior experiences.

Demographic Characteristics

Table 2 illustrates the distribution of the demographic characteristics of nascent team-entrepreneurs in China. Chinese nascent team-entrepreneurs have the same characteristics as the nascent solo-entrepreneurs in the following aspects. Most of them are males. They are young, and the average age is about 30 years. Furthermore, employees and students constitute

the main source of nascent entrepreneurs. Using Chi-square test to compare the demographic characteristics of nascent team-entrepreneurs with those of the nascent solo-entrepreneurs, we found out that the Chinese nascent team-entrepreneurs received more education than the nascent solo-entrepreneurs ($p < 0.05$). 73.5% of the team-entrepreneurs had college diplomas. However, only 51.2% of the solo-entrepreneurs had. Thus, we can conclude that Chinese team-entrepreneurs are better-educated.

Table 2. The Demographic Characteristics of Chinese Nascent Team-Entrepreneurs

Items		NTE	NSE	Chi-square	Sig.
Gender	Male	68.0%	67.1%	0.061	0.806
	Female	32.0%	32.9%		
Age (14 missing value)	18-24	29.9%	25.2%	2.819	0.094
	25-34	45.1%	42.7%		
	35-44	15.3%	18.7%		
	45-54	5.5%	9.8%		
	above 55	4.2%	3.7%		
	Average age	30.3	31.7		
Education	Junior High School and Below	5.1%	15.1%	41.791	0.000
	Senior High School	21.5%	33.7%		
	Junior College	28.2%	26.6%		
	Undergraduate	39.6%	22.2%		
	Graduate and Above	5.7%	2.4%		
Occupation before Entrepreneurship	Farmers	2.8%	7.9%	2.401	0.122
	Workers	5.7%	13.5%		
	Employees	47.8%	38.1%		
	Teachers	2.2%	1.2%		
	The unemployed	2.8%	7.5%		
	Researchers	1.6%	0.8%		
	Peasants	1.3%	1.2%		
	Students	19.6%	10.3%		
	Others	16.2%	19.5%		

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

Motivation of Chinese Nascent Team-entrepreneurs

The motivation of the team-entrepreneurs was not significantly different from that of nascent solo-entrepreneurs ($p > 0.05$). The aim of the most entrepreneurs was to seize a good opportunity; 28.2% of the entrepreneurs were motivated by making a living. It was revealed that only a few of Chinese nascent team-entrepreneurs exhibited high growth aspiration and tended to pay more attention to controlling their businesses. Furthermore, 59.5% of them preferred to keep their enterprises in a manageable size.

Table 3. The Motivation and Cognition of Chinese Nascent Team-Entrepreneurs

Items	NTE	NSE	Chi-square	Sig.
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Motivation of Entrepreneurship	Making a Living	28.2%	29.0%	0.320	0.572
	Seizing a Good Opportunity	54.4%	49.2%		
	Others	17.4%	21.8%		
Cognition of Entrepreneurship	Looking Forward to Making the Enterprise Bigger and Bigger	39.6%	42.5%	0.657	0.418
	Keeping the Enterprises in a Controllable Size	59.5%	57.1%		
	No Ideas	0.9%	0.7%		

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

The Prior Experience of Chinese Nascent Team-entrepreneurs

As shown in Table 4, the prior experience of Chinese nascent team-entrepreneurs and solo-entrepreneurs had some identical characteristics. First, the majority of the nascent entrepreneurs had prior experience for about less than 5 years. Second, private enterprises, state-owned enterprises, joint ventures and overseas-funded enterprises constituted the important sources of prior experiences, especially, private enterprises were the main source. Finally, most of them had the middle-level managerial experience. CPSED investigated 10 kinds of functional experiences, then we found that most of the nascent entrepreneurs had some experiences in sale, administration, marketing and purchasing. More than half of nascent entrepreneurs had worked in relevant industries. About 70% of nascent entrepreneurs were involved in entrepreneurship for the first time, so they did not have any entrepreneurial experience.

Using Chi-square test to compare the structure and the source of the prior experiences between Chinese nascent team-entrepreneurs and solo-entrepreneurs, the following findings of Chinese nascent team-entrepreneurs can be included. On the one hand, the nascent team-entrepreneurs had gained more functional experiences than the solo-entrepreneurs especially in the area of marketing ($p < 0.05$). On the other hand, the nascent team-entrepreneurs' experiences were relatively insufficient ($p < 0.05$), 77.7% of them had no entrepreneurial experiences.

Table 4. The Structure and Sources of Nascent Team-entrepreneurs' Prior Experiences

Items		NTE		NSE		Chi-square	Sig.
		n	%	n	%		
Having Experience	Yes	316	79.4	252	79.4	0.000	0.985
	No		20.6		20.6		
The Years of Experience:	≤5years	249	59.4	199	49.7	3.533	0.061
	6-14years		24.9		30.7		
	>14years		15.7		19.6		
Sources of Experience ¹	Private business	251	70.5	200	73.5	0.488	0.485
	State-owned enterprise		38.2		34.0	0.865	0.353
	Joint venture		29.9		25.5	1.059	0.304
	Overseas-funded enterprise		25.5		18.5	3.144	0.077
	Government organization		16.7		16.5	0.004	0.947
	University		13.1		8.0	3.052	0.081
	Research Institution		5.6		4.0	0.595	0.441

	Others		6.4		4.0	1.244	0.265
Managerial Experience	Top-level Manager	247	14.2	198	11.1	0.655	0.419
	Middle-level Manager		41.3		41.9		
	Supervisory		27.5		28.3		
	No Managerial Experience		17.0		18.7		
Functional Experience ²	Sales	237	59.1	188	64.4	1.236	0.267
	Administrative Management		43.5		41.0	0.268	0.605
	Sales Planning		39.7		30.3	4.014	0.046
	Purchasing		33.3		40.4	2.277	0.132
	Human Resources Management		31.6		23.9	3.083	0.080
	Quality Controlling		27.4		29.8	0.286	0.593
	Manufacture Management		24.9		28.7	0.785	0.376
	Financing		23.2		18.1	1.660	0.198
	Strategic Planning		21.1		16.5	1.441	0.231
	R & D		13.9		13.3	0.035	0.852
Industrial Experience	0 Year	250	48.4	199	51.8	0.033	0.857
	1-5 Years		36.4		33.7		
	6-14 Years		11.2		8.0		
	Above 14 Years		4.0		6.5		
Entrepreneurial Experience	No Entrepreneurial Experience	314	77.7	250	68.8	4.658	0.031
	1-2 Times		16.9		24.0		
	Above 3 Times		5.4		7.2		

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

Notes: 1. Respondents might be working in different types of enterprises. 2. Respondents might be engaged in different functional areas.

Opportunities of Chinese Nascent Team-entrepreneurship

Opportunity is the key to entrepreneurial process, and discovering the opportunity is necessary for carrying out entrepreneurial activities (Shane & Venkataraman, 2000). Kirzner (1997) suggested that opportunities emerge from the market demand which is not defined accurately, or from unused resources and capacities. Scholars, like Chandler, Dahlqvist and Davidsson (2003) summarized that solving real problems and balancing unsatisfied demands were problem-oriented, and using available resources and capacities sufficiently relied on being resource redundant stimulation-oriented. The results of the survey showed that the resource redundant stimulation was the main source of Chinese nascent team-entrepreneurial opportunities. A few opportunities emerged from imitating similar successful enterprises ($p < 0.05$).

Opportunity discovery patterns had a great impact on the entrepreneurial process and performance (Dahlqvist, Chandler & Davidsson, 2004). And many scholars were concerned about the question of how entrepreneurs recognized the entrepreneurial opportunity. Scholars like Kirzner (1997), Shane (2001) and Fiet (2008) categorized the pattern of discovering opportunity into systematic search and fortuitous discovery. From Table 5, we can see a

systematic search is the main way for Chinese nascent team-entrepreneurs to discover entrepreneurial opportunities and this applies to nascent solo-entrepreneurs ($p>0.05$).

Table 5. Chinese Nascent Team-Entrepreneurial Opportunities

Items		NTE	NSE	Chi-square	Sig.
Source of Opportunity	Problem-Oriented	31.6%	26.6%	3.929	0.048
	Resource Redundant Stimulation-Oriented	53.8%	51.1%		
	Imitating Similar successful Enterprises	14.6%	31.3%		
Opportunity Discovery Pattern	Systematic Search	74.4%	72.2%	0.361	0.548
	Fortuitous Discovery	21.5%	23.0%		
	Unclear	4.1%	4.8%		

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

The ventures started by the entrepreneurs who recognized profitable opportunities and decided to explore them. The link between entrepreneurs and the opportunity developed the initial conditions for entrepreneurial activities. As shown in Table 6, from the perspective of prior experience, the source of entrepreneurial opportunities and opportunity discovery patterns, we analyzed the link between nascent team-entrepreneurs and entrepreneurial opportunities, and we reached findings as follows: First of all, no matter whether Chinese nascent team-entrepreneurs had industrial experience or functional experience, there was no significant difference between the sources of their opportunities and the opportunity discovery patterns. They all identified opportunities by being resource redundant stimulation-oriented through systematic search. Second, experienced Chinese nascent team-entrepreneurs acquired some tacit knowledge in their work and social networks which shows they know where the opportunity is. They made full use of existing resources to recognize entrepreneurial opportunities in the process of solving real problems. Compared to experienced team-entrepreneurs, nascent entrepreneurs without experience were more likely to benchmark successful enterprises ($p<0.05$). Finally, nascent team-entrepreneurs with managerial and entrepreneurial experiences were more apt to systematic search opportunities than those without any experience ($p <0.05$).

Table 6. The Matching Between Nascent Team-entrepreneurs and Entrepreneurial Opportunities

Items		Sources of Opportunity					Discovery of Opportunity				
		PO	RRSO	ISSE	Chi-square	Sig.	SS	FD	Unclear	Chi-square	Sig.
Managerial Experience	Yes	28.4%	55.7%	15.9%	1.186	0.277	75.7%	20.5%	3.8%	5.631	0.018
	No	29.1%	43.1%	27.8%			63.3%	29.1%	7.6%		
Industrial Experience	Yes	24.2%	61.2%	14.6%	0.419	0.518	75.3%	20.3%	4.4%	0.576	0.449
	No	33.0%	46.0%	21.0%			71.9%	23.7%	4.5%		
Entrepreneurial Experience	Yes	41.4%	44.7%	13.9%	10.769	0.001**	80.9%	17.8%	1.3%	7.791	0.005
	No	25.0%	55.5%	19.5%			70.7%	23.8%	5.5%		

Functional Experience	Yes	28.7%	54.3%	16.9%	0.230	0.632	73.9%	21.9%	4.2%	2.281	0.132
	No	30.8%	46.2%	23.0%			61.5%	23.1%	15.4%		

(PO means problem-oriented, RRSO means resource redundant stimulation-oriented, ISSE means imitating similar successful enterprises, SS means systematic search, FD means fortuitous discovery)

Entrepreneurial Activities of Chinese Nascent Team-entrepreneurship

CPSSED investigated entrepreneurial activities including saving money, preparing a business plan and fifteen other activities. It showed that Chinese nascent team-entrepreneurs completed 5.69 activities on average. About 80% of Chinese nascent team-entrepreneurs completed less than eight entrepreneurial activities. Activities accomplished by the entrepreneurial team were significantly more than that of nascent solo-entrepreneurs ($p < 0.05$). We might infer that the implementation of Chinese nascent team-entrepreneurship activities was faster.

Table 7. The Stage of Chinese Nascent Team-entrepreneurial Activities

Items	Mean	S.D.	Min.	Max.	Median	The proportion of finished entrepreneurial activities				Chi-square	Sig.
						1-4	5-8	9-10	11-16		
NTE	5.69	3.14	0	15	5	38.9%	43.0%	8.5%	9.5%	16.301	0.000
NSE	4.68	2.68	0	14	4	54.4%	36.5%	4.8%	4.4%		

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

From the perspective of entrepreneurial activities' priorities, Chinese nascent team-entrepreneurship and solo-entrepreneurship had some identical characteristics in the following three aspects. Activities like collecting information about customers and markets, predicting financial risk and business planning were the first three similar characteristics, while external financing and application for a patent/trademark/copyright listed last. Secondly, concerned about the financial input, the entrepreneurs were cautious. About 70% of entrepreneurs saved money, but only about 40% invested money into enterprises, lower than that of collecting information about customers, predicting financial risk and contacting suppliers.

Table 8. The Priority of Chinese Nascent Team-entrepreneurial Activities

Items	NTE	NSE	Chi-square	Sig.
Collecting Information about Customers and Markets	72.5%	64.3%	4.394	0.037
Analyzing and Forecasting Financial Risk	69.3%	66.3%	0.591	0.442
Entrepreneurial Planning	69.0%	58.3%	6.990	0.008
Saving Money for Entrepreneurship	68.7%	69.8%	0.090	0.765
Contacting Suppliers	51.3%	46.4%	1.311	0.253
Investing Own Capital	44.3%	39.3%	1.447	0.229
Purchasing Raw Materials	28.5%	23.8%	1.573	0.210
Purchasing or Leasing Fixed Assets	25.0%	23.4%	0.191	0.662
Developing Models and Procedures	24.4%	11.5%	15.639	0.000
Marketing and Promotion	20.6%	17.5%	0.872	0.351
Registration	20.3%	13.5%	4.509	0.034
Hiring Employees	19.9%	17.1%	0.761	0.383
Getting External Financing	19.9%	9.1%	12.997	0.000
Patent/Trademark/Copyright Application	6.6%	4.4%	1.370	0.242

Announcing Their Phone Numbers, Websites, etc.	6.3%	3.6%	2.201	0.138
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(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

According to Table 8, the items regarding getting external financing, registration, customization market information, business planning, and developing products were completed more by Chinese nascent team-entrepreneurs than by nascent solo-entrepreneurs. Liao and Welsh (2008) divided the 26 entrepreneurial activities into 4 types including planning, resource integration, marketing behaviors and establishing legitimacy. Based on their research, this study classified and investigated 15 entrepreneurial activities, and items were coded 1 if the entrepreneurial activity had been completed, otherwise they were coded 0 so as to compare the entrepreneurial activities' pattern between Chinese nascent team-entrepreneurship and nascent solo-entrepreneurship. According to Table 10, the Chinese nascent team-entrepreneurs did not show any differences in the planning process where as they differed in resources, marketing behaviors and establishing legitimacy.

Table 9. Types of Entrepreneurial Activities

Planning	Saving Money, Analyzing and Forecasting Financial Risk, Entrepreneurial Planning
Resources Integration	Contacting Suppliers, Investing Own Capital, Purchasing Raw Materials, Purchasing or Leasing Fixed Assets, Hiring Employees, Getting External Financing and Patent/Trademark/Copyright Application
Marketing Behavior	Searching Information about Customers, Markets, Marketing and Promotion, Development Models and Procedures
Establishing Legitimacy	Registration and Announcing Their Phone Numbers, Websites

Source: Liao, J., and Welsh, H., (2008). Patterns of venture gestation process: Exploring the differences between tech and non-tech nascent entrepreneurs[J]. Journal of High Technology Management Research. 19(2): 103-113.

Table 10. Types of Chinese Nascent Team-entrepreneurial Activities

Items	Mean		S.D.		Chi-square	Sig.
	NTE	NSE	NTE	NSE		
Planning Activities	2.07	1.94	0.94	0.95	2.459	0.117
Resources Integration	1.96	1.63	1.76	1.63	4.967	0.026
Marketing Behavior	1.17	0.93	0.87	0.77	12.013	0.001
Establishing Legitimacy	0.27	0.17	0.57	0.46	4.629	0.032

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

Growth Aspirations of Chinese Nascent Team-entrepreneurs

As the ventures that CPSED investigated were still in the nascent period, the entrepreneurial outcomes could not be assessed. Growth aspirations, to a certain extent, can reflect the entrepreneurial efforts and forecast business performance. Therefore, in order to explore the entrepreneurial outcomes of Chinese nascent team-entrepreneurship, we analyzed their expected sales, expected proportion of export revenue to total sales, and number of new employees in a year.

The survey found out that Chinese nascent team-entrepreneurs' growth aspiration had the following characteristics (Table 11). First of all, more than half of Chinese nascent team-entrepreneurs expected that the sale in a year would be 10-500 million. And only 10% of

Chinese nascent team-entrepreneurs expected that it would be more than 5 million. Second, the majority of Chinese nascent team-entrepreneurs expected to focus on the domestic market in their early entrepreneurial period, so few of them expected to have export revenues in a year. Finally, the number of employees is an important index to measure the scale of business, and about 80% of Chinese nascent team-entrepreneurs expected to control the size in fewer than 20 employees. It can be concluded that only a few Chinese nascent team-entrepreneurs showed high growth aspirations and the majority of them emphasize steadiness. They did not deliberately seek high growth. At the same time, comparing the growth aspirations of Chinese nascent team-entrepreneurs to solo-entrepreneurs using Chi-square test, we found out that there was no significant differences ($p > 0.05$).

Table 11. Growth Aspirations of Chinese Nascent Team-entrepreneurs

Items		NTE (N=316)	NSE(N=252)	Chi-square	Sig.
Expected Sales (Unit: million)	≤10	33.3%	35.0%	0.019	0.890
	10-500	55.1%	59.9%		
	>500	11.6%	5.1%		
	Mean	413.36	452.41		
Expected Proportion of Exports Revenue to Total Sales	Without Exports	87.5%	90.4%	0.564	0.453
	<5%	1.9%	0.6%		
	5%-15%	2.8%	3.2%		
	15%-25%	2.3%	1.3%		
	> 25%	5.6%	4.5%		
Expected Number of Employees	<20 Persons	81.8%	89.8%	2.698	0.101
	20-100 Persons	16.8%	8.8%		
	>100人	1.5%	1.4%		
	Mean	20.96	12.80		

(NTE means nascent team-entrepreneurship, NSE means nascent solo-entrepreneurship)

Conclusions

This paper shows the characteristics of Chinese nascent team-entrepreneurs and explores their patterns of entrepreneurial behavior. We drew six conclusions through the research. First, there were more male nascent team-entrepreneurs, and the majority of nascent team-entrepreneurs were young, well-educated and experienced. Second, the nascent entrepreneurs were inclined to seize opportunities and preferred to keep the enterprise in a controllable size. Third, they tended to identify entrepreneurial opportunities through a systematic search, and most nascent team-entrepreneurs started their businesses by making full use of the available resources or abilities. Fourth, the nascent team-entrepreneurs and nascent solo-entrepreneurs did not differ significantly in planning activities, but the nascent team-entrepreneurs were mostly engaged in resource transformation, marketing and legitimacy establishment. Finally, most nascent team-entrepreneurs preferred steady development, and did not pursue high growth deliberately. However, compared to nascent solo-entrepreneurs, nascent team-entrepreneurs exhibited higher growth aspirations.

This paper helps scholars grasp the diverse and complex process of entrepreneurship. It also provides scholars with different disciplines to conduct empirical research with their own theories. The paper provides a theoretical basis and data for the development of entrepreneurial theory and practice.

This study has some important practical implications. For entrepreneurs, entrepreneurial behaviors are complex, mixed with challenges and risks. Entrepreneurs should focus on integrating resources, organizing entrepreneurial teams, trying to fulfill complementary advantages in entrepreneurial resources, skills and knowledge in order to take risk-sharing and improve enterprise' efficiency. As for entrepreneurial education, the majority of new entrepreneurs are young, well-educated mostly employees and students before taking part in entrepreneurship. it is a necessity to focus on youth entrepreneurship education, guiding nascent entrepreneurs in details such as how to obtain experience, how to systematically evaluate the entrepreneurial ideas and identify entrepreneurial opportunities, and how to pay more attention to priorities and phases during entrepreneurial activities. As to entrepreneurship policies, the government needs to identify the new ventures with high growth desires and potentiality, support them positively and provide guidelines for them. Moreover, in order to improve the survival rate of new enterprises, the government should optimize the allocation of resources, and help them to play an active role in promoting economic and social developments.

Future Research

This paper is the first to focus on analyzing the Chinese team-entrepreneurs' characteristics and their entrepreneurial process, but it still has some problems.

First of all, due to financial and time limitations, the survey area was confined to the urban areas of eight cities in China. Although the eight capital cities have representatives in their own regions, the sample size is still small at national level. This may limit the external validity. In the future, we can organize researchers to set up entrepreneurial research networks, expand the survey area to run trans-regional comparative studies on the entrepreneurial process.

Secondly, this paper studies how team-entrepreneurship emerges in general. However, analyzing the interactions between some factors deserves future research, for example, heterogeneity and diversity of nascent team-entrepreneurs, their experience, their experience types, their experience years and their experience nature as well as their influence on new venture creation and the relationship between entrepreneurial teams and entrepreneurial performance.

Thirdly, this study uses the cross-sectional data to explain Chinese nascent team-entrepreneurs' characteristics and their entrepreneurial behaviour. If we explore the team-entrepreneurial process longitudinally, it will deepen the understanding of entrepreneurial behavior pattern. More specifically, research themes, such as time and sequence of entrepreneurial activities, the relationship among entrepreneurial activities, new business strategies and new business growth expectations, deserve to be explored in the future.

Finally, international comparison needs to be made in the future. In the past 10 years, there have been more than 100 papers in PSED-type research. CPSED greatly enriches the data of PSED-type research. Especially, it provides unique data in the context of Chinese transition economies. Therefore, with the international-cooperation platform of PSED, we should draw a

universal comparison research to promote scholarship communication and better explore the unique entrepreneurial behaviors in China.

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