The Influence of Family Social Capital Networks on Their Entrepreneurial Propensity and Responses

-- An Empirical Analysis based on Chinese University Students

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Abstract

Carrying out entrepreneurial activities requires an active mindset, good social resources, excellent leadership and management skills. Undoubtedly starting a business is not an easy task, and nowadays, more and more university students choose to start their own businesses to cope with the enormous employment pressure. This paper examines the influence of family social capital networks on university students' propensity to start a business from the perspective of family social capital networks. A questionnaire was distributed to university students in Anhui Province and 264 valid questionnaires were collected. The data collected were analysed empirically using SPSS 20.0 and Mplus 7.0 software to investigate whether family social capital networks influence university students' propensity to start a business. The results of the study show that the family social capital network has a significant positive influence on the entrepreneurial tendency of university students. At the same time, gender and whether relatives and friends have entrepreneurial experience also have a certain influence on the entrepreneurial tendency of university students, and men have a higher tendency to start a business than women, and someone who has started a business around them also motivates university students to start a business. Finally, based on the findings of the study, it is suggested that in order to improve the entrepreneurial propensity of university students, the state should strengthen relevant publicity and education, families should provide both spiritual and material support for university students' entrepreneurship, and university students' entrepreneurs should make good use of their family social capital network to help their next innovation and entrepreneurship.

Keywords

Family Social Capital Networks; Entrepreneurial Propensity; University Students; Regression Analysis.

1. Introduction

Since the implementation of the innovation-driven development strategy, China has made great progress in the cause of innovation and entrepreneurship. As the driving force of innovation and entrepreneurship, the active participation of university students in innovation and entrepreneurship is essential to alleviate the pressure of employment, while helping to narrow the gap between the rich and the poor in urban and rural areas and promoting social and economic development. However, due to the influence of various factors such as capital, environment, family and self-psychological conditions, it remains difficult for university students to start their own businesses, resulting in their intention to choose entrepreneurship

being affected. Therefore, how to effectively help university students choose innovative entrepreneurship is an urgent problem to be solved.

Entrepreneurial propensity is a key factor in motivating entrepreneurial behaviour[1] and reflects the likelihood that a university student will choose to start a business, with a higher propensity to start a business meaning a higher likelihood of doing so. Studies have shown that family has a significant impact on entrepreneurship among university students. Family members can provide both material and moral support in the process of starting a business; students are more dependent on their families when they first enter society and the state does not provide enough conditions for them to start a business[2]; and students with a family business background have a higher propensity to start a business[3]. Based on these findings, this article divides the factors influencing the family's propensity to start a business into different dimensions, which are collectively referred to as the family social capital network, and investigates the influence of the family social capital network on university students' propensity to start a business and proposes relevant countermeasures in this way.

2. Literature Review and Research Hypothesis

2.1. Entrepreneurial Inclination

Entrepreneurial disposition is the desire to achieve a goal and is the beginning of all entrepreneurial activity. Krueger (2000) argues that entrepreneurial disposition is a psychological attitude that makes people willing to initiate entrepreneurial activity[4]. Chang et al. (2021) suggest that "entrepreneurial disposition is a key predictor of entrepreneurial behaviour"[5]. Chen, Congjun and Yang, Jin (2022) argue that the antecedent of entrepreneurial behaviour is entrepreneurial disposition and that if individuals do not have entrepreneurial disposition, they will not develop entrepreneurial behaviour[6].

2.2. Family Social Capital Network

Social networks are an important channel for entrepreneurs to expand their horizons and access information (Mei Qiang 2020)[7]. Huang (2020) suggests that social network is a key variable influencing entrepreneurial success[8]. Keat (2011) argues that the richer the social capital of the family, the higher the success rate of entrepreneurship. Scholars tend to examine family capital networks from three perspectives: cultural, social and economic, with social capital being only one aspect of family capital. Social capital is one of the most important components of the family social capital network, which plays a role in promoting entrepreneurial activities of university students (Xing Chao 2018)[9].

2.3. Influencing Relationships

The richer the social capital of the family, the more enthusiastic the entrepreneur is about starting a business. The entrepreneurial experience, connections and financial strength in the family social capital network provide a strong guarantee for college students to start their own business, thus making them more willing to start their own business (Guo Fengwei 2020)[10]. Chen, Congjun and Yang, Jin (2021) suggest that when parents are entrepreneurs, college students show a stronger willingness to participate in entrepreneurial activities, and that the entrepreneurial experience of relatives and friends also has an important influence on college students' propensity to start their own businesses[6]. Ng (2022) argues that family entrepreneurial resources will bring more entrepreneurial opportunities to college students, influence their entrepreneurial thinking, and contribute to the change of entrepreneurial intentions [11].

Family social capital networks play an important role in whether university students are willing to engage in entrepreneurial activities. The family environment and the entrepreneurial experiences of family members have a subtle influence on the growth of university students,

and families with previous entrepreneurial experiences are more likely to motivate their children's entrepreneurial tendencies. Research shows that entrepreneurial role models have a positive impact on students' entrepreneurial tendencies[6]. Relatives who are starting their own businesses and have achieved certain results can be role models for students to take the initiative to start their own businesses, and these role models are not only for students to emulate, but also provide them with entrepreneurial experience to increase their success rate. Both family business background and family entrepreneurial experience are part of the family social capital network, and students with a family business background are more likely to be entrepreneurial[3]. In summary, family social capital networks can provide much help to children in starting their own businesses and are an important factor in the propensity to start a business. Accordingly, this paper proposes the hypothesis that the better the family social capital network of university students, the more likely they are to develop entrepreneurial tendencies.

3. Study Design

3.1. Data Collection

The questionnaires were collected from university students currently studying in Anhui Province and were distributed through the Questionnaire Star platform. Before the formal questionnaire survey, the initial questionnaire was first distributed, and the initial questionnaire was modified and polished according to the results of the questionnaire to obtain more effective information. A total of 366 official questionnaires were distributed, and 264 valid official questionnaires were obtained after eliminating invalid questionnaires such as those with short response time, incorrect logic, and strong regularity of options. Among the valid questionnaires, 32.2% were completed by males and 67.8% by females; 34.1% of freshmen, 38.6% of sophomores, 17.4% of juniors, 2.7% of seniors and 7.2% of postgraduates and above; in terms of family location, 9.8%, 82.2% and 8.0% of university students came from the east, central and western regions respectively.

3.2. Measurement of Variables

Table 1. Variables and measurement question items

Variable type	Variable name	Title item	Reference	
		Your gender is		
		The grade you are in		
Control		Your family's provincial area	Li Guoyan et al.	
variables		Have your parents ever started a business	(2022)	
		Do you have a relative or friend who has started a business		
		I have many relatives who have started their own businesses		
Independent variable	Family Social Capital Network	I can find someone in my family to help me when I need it		
		I can get all the useful information resources I need to start my own business from my family	Zhang Chunxiao (2017)	
		My family keeps in touch with people from many different industries/professions	(2017)	
		My family keeps in touch with many people who are now in different geographical locations		
		I am keen to create my own business		
Dependent variable	Entrepreneurial tendencies (ENIN)	I understand the process of creating a new business	Chen, Wei	
		I will try very hard to start a business (2010)		
		I believe I can start a successful business		

The variables in the article contain three parts: control variables, independent variables, and dependent variables. To ensure the reliability and validity of the questionnaire, reference was made to other scholars' studies when designing the questionnaire items: referring to Li Guoyan et al. (2022), the control variables were selected with questions on gender, grade, and province of the family; the independent variable was family social capital network, and the question design referred to Zhang Chunxiao's (2017) study; the dependent variable was entrepreneurial tendency, and the question design referred to Chen Wei's (2010) study. The questionnaire items were designed using a seven-point Likert scale for both the independent and dependent variables, except for the control variables, with complete non-conformity set to 1 and complete conformation set to 7. The specific questionnaire items are shown in Table 1.

4. Data Analysis and Findings

4.1. Reliability and Validity Analysis

The SPSS 20.0 software was used to conduct exploratory factor analysis on the two latent variables of family social capital network and entrepreneurial propensity. The overall KMO value of the two latent variables was 0.907, which was greater than 0.800, indicating that it was suitable for factor analysis, and the p-value was 0.000 less than 0.050, and the results of the analysis passed the Bartlett spherical test. The nine question items were divided into two factors, corresponding to a cumulative post-rotation variance explained rate of 79.878%, and the two factors corresponding to a post-rotation variance explained rate of 43.370% and 36.508% respectively, which were relatively evenly distributed, indicating good results for factor analysis. The Cronbach's alpha coefficients for the two latent variables, family social capital network and entrepreneurial tendency, were 0.920 overall and 0.933 and 0.919 for family social capital network and entrepreneurial tendency respectively, both very close to 1, indicating that the reliability of the scale is Good.

Table 2. Table of validity tests for variables

Variable name	Entry	Standardised loads	CR	AVE
	1. I have many relatives who have started their own businesses	0.797		
	2. I can find someone in my family to help me when I need it	0.857		
Family Capital Network	3. I can get all the useful information resources I need to start my own business from my family 0.924		0.934	0.739
	4. My family keeps in touch with people from many different industries/professions			
	5. My family keeps in touch with many people who are now in different geographical locations	0.856		
	6. I am keen to set up my own business	0.871		
Entrepreneurial tendencies	7. I understand the process of creating a new business 0.804		0.920	0.743
	8. I will try very hard to start a business	0.916		
	9. I believe I can start a successful business	0.852		

Validated factor analysis was conducted using Mplus 7.0 software on two latent variables, family social capital network and entrepreneurial propensity, and the results are shown in Table 2. The models of interest fit well with a fit index of $\chi 2$ /df = 2.309 (less than 3.000), RMSEA

= 0.070 (less than 0.080), SRMR = 0.038 (less than 0.050), CFI = 0.983 (greater than 0.900) and TLI = 0.976 (greater than 0.900). In addition the standardised factor loading coefficients for family capital network and entrepreneurial propensity ranged from 0.797 to 0.924, the combined reliability (CR) ranged from 0.763 to 0.920 and the squared difference extracted (AVE) ranged from 0.521 to 0.775, all greater than 0.500, with good model convergence validity. The value of the correlation coefficient between the two variables (0.540) was calculated to be less than its AVE square root (0.860/0.862), leading to the conclusion that the discriminant validity of the scale was good.

4.2. Correlation Analysis

The correlation analysis of the two latent variables, family social capital network and entrepreneurial propensity, was conducted with the help of SPSS 20.0. The means of family social capital network and entrepreneurial propensity were first calculated separately, and then the correlation between them was analysed. The results of the correlation analysis yielded a correlation coefficient of 0.524 between the means of the two latent variables, which was significantly correlated at the p=0.010 level. The regression analysis that follows can therefore be conducted.

4.3. Regression Analysis

Set "Male" as value 1, "Female" as value 2. Set grade "Freshman" as value 1, "Sophomore" as value 2, and so on. Set "Eastern Region" is value 1, "Central Region" is value 2, "Western Region" is value 3. Set "Yes" as value 1, "No" as value 2. Set "complete non-conformity" as value 1, "complete conformation" as value 7. The sample size of the questionnaire was 264 and the descriptive statistics are shown in Table 3. The mean value of "gender" is 1.680, indicating that there are more female students filling out the questionnaire, the mean value of "family social capital network" is 3.980, and the mean value of "entrepreneurial tendency" is 4.414, which is close to the value of 4.

Table 3. Descriptive statistics

	Gender	Grade Level	Home province area	Have parents ever started a	Whether a relative or friend has started a business	Family Social Capital Network	Entrepreneurial tendencies
Average value	1.680	2.100	1.980	business 1.720	1.320	3.980	4.414
Standard deviation	0.468	1.124	0.422	0.448	0.467	1.324	1.231
N	264	264	264	264	264	264	264

The control variables were set as gender, grade level, area of the province where the family was located, whether the parents had started a business, whether a relative or friend had started a business, the independent variable was the family social capital network, and the dependent variable was the propensity to start a business. Regression models M1 and M2 were constructed and the linear regression results are shown in Table 4.

Model M1 was constructed for the effect of control variables on the dependent variable propensity to start a business. All control variables were negatively correlated with the dependent variable propensity to start a business, with a coefficient of -0.279 for gender, sig=0.000<0.010, and a coefficient of -0.159 for whether a relative or friend had started a

business, sig=0.012<0.050. The F-value for model M1 was 7.704, with sig=0.000<0.010, and the model fit was good.

Model M2 was constructed to show the effect of the control variable and the independent variable family social capital network on the dependent variable entrepreneurial propensity. After the inclusion of the independent variable family social capital network, the coefficient of the region of the province where the family is located becomes positive, and the effect of whether a relative or friend has started a business on the dependent variable is no longer significant. The coefficient of gender is -0.154, sig=0.006<0.010. Compared to model M1, the coefficient of the control variable gender is smaller, but it still has a significant negative effect on the propensity to start a business among university students, indicating that the propensity to start a business is stronger among males than females. The coefficient of family social capital network is 0.461, sig=0.000<0.010, indicating that it has a significant positive effect on college students' entrepreneurial tendency. The F-value of model M2 was 18.418, sig=0.000< 0.010, and the inclusion of family social capital network improved the fit of the model.

Table 4. Regression model for propensity to start a business

Models	M1	M2
Gender	-0.279***	-0.154***
Grade Level	-0.061	-0.043
Home province area	-0.025	0.010
Have parents ever started a business	-0.063	-0.047
Whether a relative or friend has started a business	-0.159**	-0.025
Family Social Capital Network		0.461***
R2	0.130	0.301
Adjustment of R2	0.113	0.284
F	7.704***	18.418***
Dependent variable: propensity to star	t a business	

Note: ** represents sig less than 0.05, *** represents sig less than 0.01.

5. Conclusions and Recommendations

5.1. Conclusion

Effect of control variables on college students' propensity to start a business: Gender affects the propensity of university students to start a business, with men having a higher propensity to start a business than women. On the one hand, it is likely that men are better able to translate their interpersonal skills into entrepreneurial ability; on the other hand, it is likely that men are more likely to be more proactive and women more likely to be more passive in their entrepreneurial endeavours due to factors such as experience, capital and role models[12]. The tendency to start a business is also strongly influenced by whether or not a relative or friend has started a business, with data showing that students who have had a relative or friend start a business have a higher tendency to start a business. This may be because, to a certain extent, university students can obtain various entrepreneurial resources and learn various entrepreneurial knowledge through their relatives and friends who have started their own businesses, and translate them into their own entrepreneurial abilities. The propensity to start a business is higher among university students in the eastern region than in the central and western regions. This may be because the eastern region has a higher level of economic development due to historical factors and geographical location, etc., and has more entrepreneurial opportunities, a broader entrepreneurial market and a greater concentration of talents.

The effect of the independent variable family social capital network on college students' propensity to start a business: The independent variable family social capital network can have a strong positive and significant effect on the entrepreneurial propensity of university students, with the better the family social capital network situation, the more likely it is that entrepreneurial propensity will arise. Having many relatives who have started their own businesses can increase the propensity to start a business. Having relatives with entrepreneurial experience often serves as a role model for university students, increasing their confidence in entrepreneurship and thus their propensity to start a business[13]. The propensity to start a business is higher among students whose families are able to provide various kinds of help related to starting a business. The main types of assistance that families can provide to university students in starting their own businesses include financial resources, information resources and moral support. The family can provide financial and information resources to help students to start their own business, which can save the time and energy of searching for resources and seeking help from the outside world; the family can provide spiritual support to students to start their own business, which can increase the confidence of students to start their own business and relieve the pressure of students to start their own business, thus promoting the entrepreneurial behaviour of students. The tendency to start a business is higher among students whose families are connected to many different people from different professions, industries and geographic areas. The existence of these relationships can provide students with a variety of knowledge and resources from different professions, industries and regions, thus providing students with a variety of entrepreneurial directions and stimulating their interest in entrepreneurship.

5.2. Recommendations

The government should strengthen the publicity and education for each family, either by visiting each family to introduce the meaning of innovation and entrepreneurship for university students and provide advice to each family according to the actual situation, or by organising lectures in each region and hiring experts to explain the relevant knowledge and provide advice to each family, so as to motivate families to encourage and support university students' innovation and entrepreneurship.

Relatives and friends who have experienced starting a business should be proactive in teaching their own entrepreneurial experiences and sharing entrepreneurial resources with the university students around them. College students have a strong ability to learn and think, and sharing these experiences and resources with them can stimulate their interest in entrepreneurship.

Families should provide both material and spiritual support and assistance for university students to start their own businesses. At the material level, families should set aside financial support for students to start their own businesses and collect and provide various entrepreneurial information resources. At the spiritual level, family education is very important, and it is important to instil correct and reasonable knowledge and ideas about entrepreneurship in the family education process, and to emphasise the importance of innovation and entrepreneurship among university students.

Individual university students need to make good use of the relationships they already have at home in different professions, industries and geographical areas. Through such relationships, students can learn about different fields and gain access to resources in different areas. This can provide themselves with a variety of entrepreneurial directions, thus enhancing the possibility of engaging in innovative entrepreneurship.

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