

An Empirical Study on the Relationship between Entrepreneurial Resources and Entrepreneurial Competence

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Abstract. This paper takes the entrepreneurs as the research object from 's colleges and universities and past 5 years graduates. Based on 285 onsite investigation data, this paper pays attention to the mechanism of entrepreneurial resource's influences on Entrepreneurial Performance, and introduces Entrepreneurial Ability as the intermediary variable to test the effect of Entrepreneurial Resources on Entrepreneurial Performance. The results show that Entrepreneurial Resources (Operating Resources, Human Resources and Technical Resources, Financial Resources) have a significant impact on Entrepreneurial Performance (Survival Performance, Innovation Development Performance); Entrepreneurial Ability plays a mediating role between Entrepreneurial Resources and Entrepreneurial Performance. Meanwhile, Entrepreneurial Ability partially intermediates among Human and Technical Resources, Operational Resources and Entrepreneurial Performance, and completely intermediates between Financial Resources and Entrepreneurial Performance. Referring to the above research, the author proposes several pieces of inspiration and suggestion in developing provincial Innovation and entrepreneurship to enhance the competitive strength of university students' innovational and Entrepreneurial Ability in Hebei Province.

Keywords: Entrepreneurial Resources; Entrepreneurial Performance; Entrepreneurial Ability; Intermediary Role.

1. Introduction

Enterprises are the driving source of contemporary economy which promotes the growth of new ventures and improves the performance of new entrepreneurship. There are important contents of enterprises concerned by global economists (Yin Feixiao, 2019). In the 2019 China's government work report of the state council, Premier Li Keqiang pointed out that innovation and entrepreneurship have become essential elements to implement the strategy of "making China powerful" through national innovation and creative talents. In recent years, under the conduction of federal government policies, the phenomena of entrepreneurship encouragement and potential opportunities seeking have taken place in China's entrepreneurial market, entrepreneurial activities and market participants. Encouraging university students to start their businesses can not only stimulate the economic growth, enhance their employability, but also provide the current labour market with more jobs. However, the actual situation is many university students obtain the entrepreneurial tendency, only few of them are successfully self-employed. Therefore, it is necessary to investigate the current scenario of self-employed university graduates in Hebei province, and conduct a detailed research on the relationship among Entrepreneurial Resources, Entrepreneurial Ability and Entrepreneurial Performance.

2. Research Review and Research Hypotheses

According to previous research, Entrepreneurial Resources are the basic prerequisite and key elements of entrepreneurial activities (Yu Shaozhong, 2012). An entrepreneur's ability of surrounding resource allocation, becoming the essential condition of achieving the success of entrepreneurial enterprises, is a significant indicator that judges the growth of an entrepreneurial enterprise and its performance (Gao Shijie, 2019). Chatterji A K. (2009) and Coombes et al. (2011) believe that Entrepreneurial Performance is an ultimate result of entrepreneurial behavior, which implies the initial goal's degree of achievement during the process of enterprise entrepreneurship. While the efficient implementation of Entrepreneurial Resources is not enough to make the enterprise

outperformed (i.e., $1+1>2$). This paper will explore the correlation between Entrepreneurial Resources and Entrepreneurial Performance by choosing Entrepreneurial Ability as the intermediary variable. It will enrich theoretical hypotheses and bring up suggestions on the acquisition of Entrepreneurial Resources and the realization of Entrepreneurial Performance for university students.

2.1 Entrepreneurial Resources and Entrepreneurial Performance

Entrepreneurial Resources are essential to the development of an enterprise. Caves (1980) put forward that Entrepreneurial Resources are the sum of tangible and intangible resources invested to achieve the goal of enterprise entrepreneurship. For entrepreneurial enterprises, during the process of enterprise's startup, development and growth, entrepreneurs have constantly use and consume the existing Entrepreneurial Resources to maintain company's survival and development. Meanwhile, they are obligated to acquire new Entrepreneurial Resources to support the long-term development trend and improve their Entrepreneurial Performance (Li Shuo, 2014). Li Ning (2007) pointed out in his research that the effective implement of information resources, policy compliance and opportunities seizing during the entrepreneurial process enables enterprises to create better Entrepreneurial Performance. Therefore, entrepreneurial enterprises' ability of accessing Operating Resources plays a critical element in enterprise's outstanding performance. Therefore, the following hypotheses are proposed:

Hypothesis H1: Entrepreneurial Resources have a positive correlation with Entrepreneurial Performance of university students.

2.2 Entrepreneurial Ability and Entrepreneurial Performance

Stroeve O G (1990) and Murphy (1990) believe that performance is inseparable from an individual's ability where such behavior is under the control of the actor and is adopted to achieve the behavioral goal. The proficiency level can measure performance. Only with high Entrepreneurial Ability, can Entrepreneurial Resources be effectively integrated, timely strategic decisions and strategic adjustments be made according to market changes, so as to make the development of enterprises conform to the development trend of society and economy, thus promoting the healthy growth of enterprises.

Hypothesis H2: Entrepreneurial Ability has a positive correlation with Entrepreneurial Performance of university students

2.3 Entrepreneurial Resources and Entrepreneurial Ability

Entrepreneurial Ability refers to the efficiency of entrepreneurs to find problems and solve them. Faced with the constraints of resources and abilities at the initial stage of entrepreneurship, entrepreneurial enterprises need to strengthen the integration of Entrepreneurial Resources and increase the possibility of entrepreneurial success to improve the viability and market competitiveness. The ability of sustainable development and the profitability of enterprises help to adjust company itself to the uncertainty of current environment and decrease the possibility of business bankruptcy. March (1991) describes Entrepreneurial Ability from its development and exploration, and applies it to all business activities in different fields to enhance the reliability and stability of Entrepreneurial Ability by refining existing knowledge and experiences.

Hypothesis H3: Entrepreneurial Resources have a positive impact and a positive correlation with college students' Entrepreneurial Ability

2.4 The Mediating Effect of Entrepreneurial Ability

Through the explanation of the terms and corresponding hypotheses above, the author finds that Entrepreneurial Ability may further indirectly affect Entrepreneurial Performance through the influence of Entrepreneurial Resources, which increases the positive influence of Entrepreneurial Resources on Entrepreneurial Performance. Obtaining strong opportunity recognition ability makes an enterprise get a first-mover development to create opportunities for the realization of the enterprise's goal; while obtaining resource integration ability make enterprises allocate internal and

external resources more efficient. These abilities make the cohesion and driving force of enterprises stronger. Meanwhile, the operation ability plays an important role in the survival and development of the enterprise, which keeps the activeness of the enterprise and lays the foundation for the sustainable development of the enterprise. In order to improve the intermediary role of Entrepreneurial Ability, the author puts forward the following hypothesis:

Hypothesis H4: Entrepreneurial Ability plays an intermediary role in the relationship between Entrepreneurial Resources and Entrepreneurial Performance

3. Data Resources

From January 2019 to February 2019, this study investigated the independent entrepreneurs in 21 colleges and universities in Hebei province by issuing online questionnaires and paper questionnaires. The main objects of the investigation are self-employment entrepreneurs who graduated from universities in the past five years. Among them, 400 questionnaires were distributed, and 342 questionnaires were collected (including 214 paper questionnaires and 128 online questionnaires). After sorting out, 285 valid questionnaires were obtained (including 178 paper questionnaires and 107 online questionnaires), with an effective rate of 71.25%. The questionnaire includes variable measurement items and characteristic data items. This study has a total of three variables: Entrepreneurial Resources, Entrepreneurial Ability and Entrepreneurial Performance. Among them, the independent variable is Entrepreneurial Resources, the dependent variable is Entrepreneurial Performance, and the intermediate variable is Entrepreneurial Ability. These three variables adopt Likert five-point scaling method to be scored, in which strongly disagree =1, disagree =2, not necessarily =3, agree =4, strongly agree =5.

3.1 Reliability and Validity Analysis

This study uses internal consistency reliability and factor analysis to test the reliability and validity of the questionnaire at three levels: Entrepreneurial Resources, Entrepreneurial Ability and Entrepreneurial Performance. It is analyzed through SPSS25.0 software, as shown in table 1.

Table 1. Reliability and validity test

Questionnaire variable	Mean	Standard deviation	Factor loading	Cronbach a coefficient	KMO	Bartlett sphericity test	Interpretation rate of cumulative variance
Entrepreneurial Resources	3.125	1.265	0.801	0.884	0.812	223.11*	61.12%
Entrepreneurial Ability	3.152	1.271	0.743	0.915	0.892	342.21*	67.34%
Entrepreneurial Performance	3.425	1.532	0.812	0.906	0.872	382.12*	63.23%

In general, Cronbach a coefficient greater than 0.7 meets the requirements of measurement, and this research scaling table meets the requirements. In addition, KMO value is greater than 0.7, Bartlett sphericity test shows significance, indicating that the questionnaire is suitable for factor analysis, and the cumulative variance is greater than 50%, which meets the requirement of extracting common factors from the surveying. Therefore, it can be shown that the questionnaires used in this study have good reliability and validity.

3.2 Regression Analysis

This paper uses SPSS25.0 software and adopts the regression model analysis to test the hypothesis. The regression results of the model are shown in table 2, model 1 regression equation of the relationship between Entrepreneurial Resources and Entrepreneurial Performance of college students as independent variables. From the equation, we know that Entrepreneurial Resources, the independent variable, has a significant positive impact on Entrepreneurial Performance, the

dependent variable ($=0.202$, $P < 0.001$). This shows that among college entrepreneurs, the stronger the entrepreneurial resource development is, the more obvious the Entrepreneurial Performance is. Hypothesis H1 is supported.

According to model 2, the relationship between Entrepreneurial Ability and Entrepreneurial Performance of college students can be known. As shown in table 2, Entrepreneurial Ability of college students has a positive impact on Entrepreneurial Performance ($=0.142$, $P < 0.005$). This shows that the stronger the Entrepreneurial Ability of college entrepreneurs is, the more significant the effect of their Entrepreneurial Performance will be. Hypothesis H2 is supported. According to model 3, the relationship between Entrepreneurial Resources and Entrepreneurial Ability can be known, the result shows that the richer Entrepreneurial Resources are, the more significant the Entrepreneurial Ability of college students is ($=0.213$, $P < 0.001$). Hypothesis H1 is supported. According to model 4, Entrepreneurial Ability mediates the positive effect of Entrepreneurial Resources and Entrepreneurial Performance of college students. By comparing model 1, it can be seen that after the addition of intermediary variables (Entrepreneurial Ability), the regression coefficient of Entrepreneurial Resources on Entrepreneurial Performance becomes smaller and significantly decreases, indicating that the intermediary effect of Entrepreneurial Ability on Financial Resources and Entrepreneurial Performance is completely mediated.

Table 2. Multiple regression analysis

	Entrepreneurial Performance	Entrepreneurial Performance	Entrepreneurial Ability	Entrepreneurial Performance
Entrepreneurial Resources	0.202**		0.213**	0.112*
Entrepreneurial Ability		0.142*		0.151*
Adjusted R ²	0.693	0.763	0.759	0.759
Sample size	285	285	285	285
F value	523.448(0.000**)	354.692(0.000**)	467.199**	365.750**
VIFmax	4.334	1	2.534	1

Acknowledgements

This paper hypothesizes and verifies the relationship between Entrepreneurial Resources and Entrepreneurial Performance of past five years' university graduates in Hebei province. The results show that Entrepreneurial Resources have a significant effect on Entrepreneurial Performance; Entrepreneurial Ability plays an intermediary role between Entrepreneurial Resources and Entrepreneurial Performance. The innovation of this paper is that this study makes up for the oneness of Entrepreneurial Ability and Entrepreneurial Performance, according to the needs of this study, Entrepreneurial Ability is divided into three dimensions, namely opportunity identification ability, resource integration ability and operation ability, to discuss the influence mechanism of Entrepreneurial Performance. Second, this study takes the self-starters that graduate from colleges and universities in Hebei province as the research objects, which provides a reference for the entrepreneurship education in Hebei and plays a guiding role in the future entrepreneurship.

This paper also has some shortcomings, for example, the cross-section data is used in the data analysis, and common method deviation exists. Through this research, it can be seen that abundant Entrepreneurial Resources and sufficient Entrepreneurial Ability play an important role in college students' entrepreneurship. Therefore, in terms of Entrepreneurial Ability, the guidance and deepening of entrepreneurial courses for college students should be pointedly conducted, and entrepreneurship practices should be strengthened to continuously improve the various abilities required for college students to start their own businesses; in terms of Entrepreneurial Resources, the government and the society should attach importance to the entrepreneurial activities of college

students, and support and reward them for Entrepreneurial Resources. Quaternity of the government, society, schools, and individuals work together to create a group of a new generation of college students with innovation and practicalness, adding fresh blood to the innovative entrepreneurs in Hebei province, and contributing to the future development of the motherland.

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