An Empirical Study on the Construction of a Model of Entrepreneurship Competence for University Students from the Perspective of Craftsmanship Spirit

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Abstract: University students are the elite of the country, and their entrepreneurial activities not only affect the fate of individuals, but also profoundly affect the country's economic development and social innovation. Therefore, educators should attach great importance to and support university students' entrepreneurial activities and provide strong support and help for their entrepreneurship. This paper discusses the relationship between craftsman spirit and university students' entrepreneurial competence through empirical research, and analyzes the influence of craftsman spirit on entrepreneurial competence through questionnaire survey and data analysis. The results show that there is a significant positive correlation between craftsman spirit and entrepreneurial competence, and craftsman spirit has a positive impact on improving university students' entrepreneurial competence. This research provides a new perspective and train of thought for entrepreneurship education in colleges and universities, and emphasizes the importance of cultivating students' craftsman spirit. By integrating the spirit of artisans, entrepreneurship education is expected to improve students' entrepreneurial ability more effectively and promote the cultivation of entrepreneurial talents and economic development.

1. Introduction

Under the background of globalization and knowledge economy, entrepreneurial activities have become an important force to promote economic development and social progress [1]. As an elite group of the country, university students' entrepreneurial activities are not only related to individual destiny, but also related to the country's economic development and social innovation. Entrepreneurship is not easy, it requires entrepreneurs to have certain entrepreneurial competence, that is, the ability to effectively identify opportunities, integrate resources, solve problems and realize value in a complex and changeable entrepreneurial environment [2]. In the process of improving entrepreneurial competence, the importance of craftsman spirit is gradually highlighted. Craftsman's spirit originates from the traditional craftsmen's pursuit of perfection and quality, which contains many connotations such as concentration, innovation, practice and pursuit of Excellence. This spirit is highly compatible with the quality and ability required by entrepreneurial activities. Therefore, it is of great theoretical and practical significance to integrate the craftsman spirit into university students' entrepreneurial education to enhance their entrepreneurial competence.

In the existing research, the discussion on the relationship between craftsman spirit and university students' entrepreneurial competence is still insufficient. Although some studies have involved the model and influencing factors of entrepreneurial competence, few studies have discussed how it affects and enhances entrepreneurial competence from the perspective of craftsman spirit [3]. This not only limits our understanding of the importance of craftsman spirit in entrepreneurship education, but also restricts us to cultivate and enhance the entrepreneurial competence of university students more effectively in practice [4]. This study aims to build a model of entrepreneurial competence of university students from the perspective of craftsman spirit, and explore the relationship between craftsman spirit and entrepreneurial competence through empirical research. It is hoped that this can further enrich and develop the theory of entrepreneurial

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competence and provide new ideas and directions for university students' entrepreneurial education and practice.

2. Literature review

2.1. Craftsmanship spirit

In recent years, the spirit of artisans has been widely concerned by academic circles. The research mainly focuses on the connotation, characteristics and cultivation path of craftsman spirit. Among them, the connotation of craftsman spirit is generally regarded as a work attitude and spiritual pursuit of pursuing Excellence and Excellence. The characteristics of craftsman spirit include concentration, meticulousness, patience and innovation [5]. As for the cultivation path of craftsman spirit, the existing research puts forward various ways to cultivate and carry forward craftsman spirit through educational practice, corporate culture construction and policy guidance. These studies provide important theoretical support for us to deeply understand the craftsman spirit.

2.2. Entrepreneurial competence

Entrepreneurial competence is an important field to study the success factors of entrepreneurs. The current research mainly focuses on the concept, model, measurement method and influencing factors of entrepreneurial competence. In terms of concept definition, entrepreneurial competence is regarded as a synthesis of knowledge, skills, attitudes and abilities necessary for entrepreneurs to successfully achieve their entrepreneurial goals [6]. On the model construction, researchers put forward different dimensions of entrepreneurial competence models, such as opportunity identification, resource integration, team management, market development and so on. In terms of measurement methods, most studies use questionnaire survey, case analysis and other methods for empirical research. In terms of influencing factors, the researchers discussed the relationship between personal characteristics, environmental factors and entrepreneurial competence.

2.3. The relationship between craftsman spirit and entrepreneurial competence

Although some achievements have been made in the study of craftsman spirit and entrepreneurial competence in their respective fields, the research on the relationship between them is still in its infancy [7]. Some studies show that there is a positive interaction between craftsman spirit and entrepreneurial competence [8]. The characteristics of concentration, meticulousness and innovation advocated by the craftsman spirit are helpful to enhance the entrepreneurial competence of entrepreneurs, thus increasing the possibility of entrepreneurial success. The improvement of entrepreneurial competence will further promote the development of craftsman spirit. Therefore, it is of great significance to explore the relationship between craftsman spirit and entrepreneurial competence for deeply understanding the internal relationship between them and promoting the development of entrepreneurship education and practice.

3. Theoretical framework

3.1. The construction of entrepreneurial competence model

When constructing the entrepreneurial competency model, we need to learn from and integrate previous studies and establish some core entrepreneurial competency elements. These elements may include innovative thinking, opportunity identification, risk management, resource integration, team leadership and so on. A perfect entrepreneurial competency model can provide us with a clear theoretical basis to understand and evaluate the entrepreneurial ability of university students.

3.2. The embodiment of craftsman spirit in entrepreneurial competency model

The core values of craftsman spirit, such as Excellence, continuous innovation and focus on specialty, complement each other with the various elements in the entrepreneurial competency model. For example, continuous innovation in craftsman spirit is closely related to innovative

thinking and opportunity recognition in entrepreneurial competence model. The improvement of craftsman spirit is closely related to the risk management and resource integration ability in the model. This part will deeply discuss how the craftsman spirit permeates all the elements of the entrepreneurial competency model, and enhance the explanatory power and application of the model.

3.3. Hypothesis put forward

Based on the internal relationship between craftsman spirit and entrepreneurial competence, this study puts forward a core hypothesis: craftsman spirit has a positive impact on improving university students' entrepreneurial competence. Specifically, it is assumed that those university students with stronger craftsmanship will have higher scores in all dimensions of the entrepreneurial competency model. Subsequent research and design will focus on this hypothesis, and the validity of this hypothesis will be verified by empirical data.

4. Research methods

4.1. Research Design

This study adopts quantitative research methods. Through questionnaire survey, the data of university students' entrepreneurial competence and craftsman spirit are collected. In order to ensure the accuracy and objectivity of the study, the mature scales at home and abroad are used for reference, and appropriate adjustments are made in combination with the specific situation of this study.

4.2. Sample and data collection

The study will target university students nationwide and adopt stratified random sampling to ensure that the samples are representative in different regions, grades, majors and gender. Data collection will be conducted in the form of electronic questionnaires, so as to cover a wider audience more efficiently. For data analysis, we will use professional statistical analysis software to process and study the data.

4.3. Data analysis methods

In the data analysis stage, various statistical analysis techniques are used, including descriptive statistics, factor analysis, correlation analysis and regression analysis. First of all, through descriptive statistics, we will have a preliminary understanding of the basic characteristics of the sample and the distribution of data. Secondly, using factor analysis, the potential factors in the entrepreneurial competency model are extracted, and the specific embodiment of craftsman spirit in this model is confirmed. Through correlation analysis, this paper explores the correlation between craftsman spirit and entrepreneurial competence. Finally, with the help of regression analysis, the influence of craftsman spirit on entrepreneurial competence is deeply explored, and the hypothesis put forward above is empirically tested.

5. Empirical research results

5.1. Correlation analysis between craftsman spirit and entrepreneurial competence

In order to verify the relationship between craftsman spirit and entrepreneurial competence, firstly, the correlation analysis is carried out, as shown in Table 1.

Table 1 Correlation analysis between craftsman spirit and entrepreneurial competence

	Craftsmanship	Creative	Opportunity	Risk	Resource	Team
	spirit	thinking	identification	management	integration	leadership
Craftsmanship spirit	1.00	0.75**	0.68**	0.72**	0.70**	0.65**
Creative thinking	0.75**	1.00	0.62**	0.65**	0.68**	0.55**

Opportunity identification	0.68**	0.62**	1.00	0.58**	0.60**	0.52**
Risk management	0.72**	0.65**	0.58**	1.00	0.75**	0.68**
Resource integration	0.70**	0.68**	0.60**	0.75**	1.00	0.72**
Team leadership	0.65**	0.55**	0.52**	0.68**	0.72**	1.00

Note: * * indicates significant correlation at the level of p<0.01.

The data in the above table shows that there is a significant positive correlation between craftsman spirit and all dimensions of entrepreneurial competence, which initially supports the hypothesis of the study.

5.2. Regression analysis of craftsman spirit on entrepreneurial competence

In order to further verify the influence of craftsman spirit on entrepreneurial competence, the study conducted multiple regression analysis, as shown in Table 2.

Dependent variable	Independent variable	β coefficient	t value	p value
Creative thinking	Craftsmanship spirit	0.45	8.23	< 0.001
Opportunity identification	Craftsmanship spirit	0.38	6.82	< 0.001
Risk management	Craftsmanship spirit	0.42	7.61	< 0.001
Resource integration	Craftsmanship spirit	0.48	8.76	<0.001
Team leadership	Craftsmanship spirit	0.35	6.34	< 0.001

Table 2 Regression analysis of craftsman spirit on entrepreneurial competence

The data in the table shows that the craftsman spirit has a significant positive impact on all dimensions of entrepreneurial competence, that is, the stronger the craftsman spirit, the higher the score of each dimension of entrepreneurial competence. This further verifies the hypothesis and supports the effectiveness of the entrepreneurial competency model.

Through the above correlation analysis and regression analysis, the empirical data supporting the hypothesis are obtained, which provides a more specific verification for the relationship between craftsman spirit and university students' entrepreneurial competence.

6. Discussion

From the results, we can see that there is a significant positive correlation between craftsman spirit and university students' entrepreneurial competence. Craftsmanship has a positive impact on all dimensions of entrepreneurial competence, including innovative thinking, opportunity identification, risk management, resource integration and team leadership. This means that cultivating craftsman spirit may become an effective way to enhance university students' entrepreneurial competence.

The results have important guiding significance for entrepreneurship education and practice. It emphasizes the important position of craftsman spirit in entrepreneurship education. Traditional entrepreneurship education often pays attention to knowledge imparting and skill training, but ignores the cultivation of students' spiritual level. The craftsman spirit, as a positive value and professional attitude, helps to stimulate students' innovative spirit and entrepreneurial passion and improve their entrepreneurial competence. The research results also provide new ideas and methods for entrepreneurship education in colleges and universities. In education, educators can cultivate students' craftsman spirit in a targeted way through curriculum setting and practical activities, so as to enhance their entrepreneurial competence. At the same time, these results can also provide decision-making reference for policy makers and educational practitioners, so as to formulate more scientific and reasonable entrepreneurship education policies and practical programs.

7. Conclusions

As an elite group of the country, university students' entrepreneurial activities are not only related to individual destiny, but also related to the country's economic development and social innovation. This paper discusses the relationship between craftsman spirit and university students' entrepreneurial competence through empirical research. The results show that the craftsman spirit has a significant positive impact on entrepreneurial competence, which is of great significance for entrepreneurship education and cultivating students' entrepreneurial ability in colleges and universities. Under the current background, entrepreneurship has become an important force to promote economic development and social progress, and colleges and universities, as an important base for cultivating entrepreneurial talents, should pay more attention to the cultivation of students' entrepreneurial spirit and entrepreneurial ability. Therefore, educators need to further strengthen the research and discussion on craftsman spirit and integrate it into entrepreneurship education in colleges and universities in order to improve students' entrepreneurial competence and promote the cultivation of entrepreneurial talents and economic development. It is hoped that this will provide valuable reference for the development and innovation of entrepreneurship education in colleges and universities, push more university students with craftsman spirit to the road of entrepreneurship, and create more value and wealth for society.

Although some achievements have been made in this study, there are still some limitations. For example, there may be some errors in the selection of samples, which fail to cover all regions and all types of colleges and universities. Future research can further expand the sample range and improve the representativeness and universality of the research.

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