

# The Influence Analysis on the Elements of Innovation and Entrepreneurship Culture Environment in the Universities——Based on the Quantile Regression Results about Entropy

Sheng-Juan HAN<sup>1,a,\*</sup>, Jing-Ping ZHU<sup>2,b</sup>

<sup>1</sup>School of Economics and Management, East China Jiaotong University, Nanchang, Jiangxi province, China

<sup>2</sup>School of Foreign Languages, Nanchang Hangkong University, Nanchang, Jiangxi province, China

<sup>a</sup>h254466346@163.com, <sup>b</sup>657152935@qq.com

\*Corresponding author

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**Abstract.** Through the decomposition of the elements of innovation and entrepreneurship culture environment in universities, measurement tables are formed. Based on the survey data, the entropy value is used to comprehensively measure the innovation and entrepreneurship culture environment of universities. It is found that the components of innovation and entrepreneurship culture in universities have not achieved collaborative construction. The construction of material elements is relatively optimal, the construction of institutional elements is lagging, and there are obvious differences in attitudes between spiritual elements and educational elements. By further using the quantile regression to investigate the impact of various components on the construction of innovation and entrepreneurship culture environment in universities, it is seen that the improvement of material, institutional and spiritual elements can significantly promote the construction of innovative and entrepreneurial cultural environment in universities. The innovation and entrepreneurship education can't meet the needs of the construction on innovative and entrepreneurial cultural environment in universities. Having participated in the practice of innovation and entrepreneurship or not is a significant factor affecting students' perception about the innovation and entrepreneurship culture environment. Students who have not participated in the practice of innovation and entrepreneurship have emphasized more the influence of external and objective conditions, such as the material factors and institutional factors. Both groups of students believe that the current role of innovation and entrepreneurship education has not yet promoted the construction of innovative and entrepreneurial cultural environment in universities successfully.

## Introduction

The world has entered the era of innovation and entrepreneurship in an all-round way, and the innovation and entrepreneurship has become the core driving force to promote economic growth and social progress. As a country's future builders, whether the college students have the consciousness of innovation and entrepreneurship is directly related to the sustainable and healthy development of a country or region in the future. It is one of the important tasks of higher education to provide the qualified personnel resources. In the face of this task, the universities generally offer innovative and entrepreneurial courses, support students to carry out innovative and entrepreneurial training, explore innovative and entrepreneurial education mode that runs through the whole process of talent training, and emphasize the important work of innovation and innovation education to improve the quality of higher education in an all-round way. In this process, universities have gradually formed a cultural environment centered on innovation and entrepreneurship.

The Silicon Valley culture that encourages innovation and entrepreneurship has fully explained the important role of the creative and entrepreneurial culture environment for economic growth. In view of the lasting and far-reaching impact of the innovative and entrepreneurial culture environment on

human values and comprehensive quality, scholars begin to pay attention to the culture of innovation and entrepreneurship, especially that in universities, which shoulder the training of talents, innovation of science and technology and the responsibility of serving the society. The research content is mainly concentrated in three aspects: the first one is to define the concept of innovative and entrepreneurial culture. Chen Xiangjun and Wang Ying think Joseph Inpet first put forward the culture of innovation and entrepreneurship [1, 2]. Wu Gang points out that the innovation and entrepreneurship culture of universities is the complexity of the belief, thought, value, material and other achievements of college students and teachers produced in the education and practice of innovation and entrepreneurship [3]. Hua Jian defines the innovation and entrepreneurship culture from the two aspects of internal and external factors [4]. And the second is the existing problems in the construction of innovative and entrepreneurial culture in universities, including the lack of creative and entrepreneurial cultural atmosphere, the imperfect system mechanism of innovation and entrepreneurship, and the unsatisfactory effect of innovation and entrepreneurship education. In the related study, some researchers have achieved many research contents on the construction of creative and entrepreneurial education ecological system (such as Xu Xiaozhou, Hu Jiabao, etc.) [5, 6]; the third is the research on the solution of the construction of innovative and entrepreneurial culture environment in universities. Gao Zhenfa discusses the construction countermeasures of innovative and entrepreneurial culture from the three aspects of concept culture, system culture and environment culture [7]; and Huang Yusu explores its possible path from the material culture, system culture spiritual culture and behavior culture [8]. From the three aspects of surface material culture, system culture and spiritual culture, the path of innovation and entrepreneurship in universities is put forward by Yang Yongjun [9].

From the combing of the literature, it's found that the scholars' views on the definition and existing problems of the innovative and entrepreneurial culture are more consistent, and there are some differences in the cognition of its forming elements. In the components there are two points (Hua Jian), three points (Chen Xiangjun), and four points (Huang Yusu). These studies are all qualitative discussions on the related contents; especially the lack of quantitative analysis on the path countermeasures is seen in them. On the basis of the culture components and combining the characteristics of the innovation and entrepreneurship culture of universities, this paper gives the forming elements of the innovation and entrepreneurial culture environment of universities and colleges, and constructs the measurement system, collects data and uses entropy method to obtain the evaluation of the elements of the cultural environment of innovation and entrepreneurship in universities. And in reference of the quantile regression, the influence degree of various components on the cultural environment of innovation and entrepreneurship in universities is analyzed. Based on the conclusion of quantitative analysis, the outstanding problems and solutions to the construction of innovative and entrepreneurial cultural environment in universities are discussed.

### **Dividing the Constituent Factors of Innovation and Entrepreneurship Culture Environment in Universities**

By combing the literature related to the innovation and entrepreneurship culture, it is believed that the creative and entrepreneurial culture environment in universities is formed in the process of the activities related to innovation and entrepreneurship. It's the complexity of all the elements which can influence the formation of the consciousness of innovation and entrepreneurship and the cultivation of innovative entrepreneurial ability. Its composition should conform to the structure of the general culture, namely, material, system and spirit. At the same time, as a special culture which limits the scope of the space and the core content of innovation and entrepreneurship in universities, its constituent elements also have their own particularity, this special nature embodied in the educational elements. Taking into a comprehensive consideration the two aspects of the cultural environment for the innovation and Entrepreneurship of universities, the constituent elements are divided into four categories:

First, material elements (M). Material elements are surface elements that can be most easily changed in all the factors affecting the creative and entrepreneurial culture. Now universities will provide some personnel, financial and material support to college students' innovative and entrepreneurial activities, which undoubtedly will lay a material foundation for the construction of innovative and entrepreneurial culture in universities. In addition, the material elements should also reflect the strength and availability of material support. Insufficient support or too high threshold will make the material elements unable to play a full role.

Second, the institutional elements (I). The institutional elements are the standard system of all rules and regulations related to the innovation and entrepreneurship activities of universities. The initial system is often connected with the provision of material elements, usually the institutional support of material support. On this basis, the system is continuously expanded, perfected and formed step by step. Besides the guiding system of government departments, their focus should be the concrete and operational system construction for the students' innovative and entrepreneurial activities. At the same time, the construction of the familiarization way of institutional elements should be covered, which directly affects the achievements of the construction of innovative and entrepreneurial culture in Universities.

Third, the spirit element (S). No matter it is the construction of material elements or institutional elements, it is ultimately to influence the values of the people, let the college students accept, approve and gradually set up the values of innovation and entrepreneurship. The cultural element of the innovation and entrepreneurial spirit of the university is the unique spiritual feature formed gradually in the process of long-term innovation and entrepreneurship education and practice. This is the most difficult thing to change. It needs long-term and continuous publicity, guidance and encouragement.

Fourth, innovation and entrepreneurship education elements (E). Universities as educational institutions have a congenital advantage in the development of innovative and entrepreneurial education to promote the construction of innovative and entrepreneurial culture environment. The theoretical education, practical education of innovation and entrepreneurship and its integration with professional education can effectively influence the formation of college students' awareness of innovation and entrepreneurship, the cultivation of new entrepreneurial values and innovative entrepreneurial ability. At the same time, we can accelerate the construction of the cultural environment of innovation and entrepreneurship through the publicity of material, system and spirit.

## **Entropy Analysis of Cultural Environment of Innovation and Entrepreneurship and Its Forming Factors**

### **Research Design, Data Sources and Research Methods**

Based on the division of the elements of the innovative and entrepreneurial cultural environment of universities and colleges, according to the contents involved, the measurement index system of each element is designed by the form of five-level Likert scale. The score 1-5 represents the recognition degree to the measurement index, and the higher the score is, the higher the recognition degree to the corresponding index. The five-level Likert scale is also used to design the overall measurement index for the innovation and entrepreneurship culture environment in universities to meet the need of the subsequent influence analysis.

In order to obtain the data of the measurement index, the students of six universities in Jiangxi province were selected as the investigation object. Considering the accumulation of time for the awareness of the cultural environment of the innovative and entrepreneurial culture of the university, the study was carried out mainly on the students of the junior and senior students in the university. Considering the investigated objects' personal feature impact on the recognition of the innovative and entrepreneurial culture, the three factors, gender, urban and rural areas, colleges, were selected by cross quota sampling method. A total of 450 questionnaires were issued. The questionnaires with incomplete information, no change in the answer of the project and logical errors in the answer were eliminated, and 442 effective questionnaires were obtained, and the effective recovery rate was

98.22%. From the collection data reliability test, it's found that the Cronbach coefficient was more than 0.8, indicating that the measurement system had an ideal reliability. Further exploratory factor analysis had found that the KMO statistic was 0.913, the Bartlett sphericity test was less than the significant level of 0.05, and the original hypothesis of not relating to the measurement index was refuted, indicating that the measurement system validity met the requirements.

In both the overall and the components' measurement forms of the cultural environment of the innovative and entrepreneurial culture of the university, every part consists of more than one index. In order to satisfy the need of the comprehensive evaluation and the analysis of the influence degree, it is necessary to solve the problem of multiple indexes first, and the key to solve the problem is to realize the aggregation of multiple indexes. The simplest method of equal right treatment is obviously inappropriate because it does not consider the difference between the index contributions. Entropy weight method determines the weight according to the difference of each index value, and the greater the difference is, the greater the weight of the index, i.e. the greater the attitude difference between the respondents, the higher the information volume of the project, the more important in the index system. The objective method of entropy weight is used to accomplish the multi- index weighting synthesis.

### **Entropy Calculation and Result Analysis**

According to the calculation steps of entropy weight method, the weights of the overall measurement index system of the innovation and entrepreneurial culture environment of universities and each component factor measurement index system are calculated, and the corresponding entropy scores are obtained based on the synthesis of weight number, and the entropy score of each part is described and analyzed in Table 1.

Table 1, Statistical description of entropy score of innovation and entrepreneurship environment in universities

analysis index	overall environment	spiritual factors	institutional elements	material elements	educational elements
mean value	3.1538	3.199	3.121	3.4708	3.4032
median	3.0947	3.1881	3.0000	3.4898	3.512
Coefficient of variation	0.2098	0.2102	0.2289	0.1783	0.2075

According to Table 1, the cultural environment of innovation and entrepreneurship in Universities has four characteristics:

First, the elements of innovation and entrepreneurship culture in universities do not achieve synergy.

The mean and median of the entropy score of the mental, material and educational factors are higher than that of the overall cultural environment of the university. Only the mean and median of the entropy score of the institutional factors are lower than that of the overall environmental entropy score. It can be concluded that there is no coordination among the elements. It leads to the recognition of a single factor by the respondents, but the recognition of the overall innovation and entrepreneurship culture remains in a low level.

Second, the construction of material elements is relatively well recognized.

Among all the elements, the entropy value score and the median of the material elements are the highest, and the coefficient of variation is the smallest. It shows that the degree of recognition of the material culture environment is higher than that of other factors, and the difference of attitude is relatively smaller. The construction of surface material elements is initially recognized by the students, but the gap to the highest (5 points) is big. A rather big promotion room still waits for the construction of material elements.

Third, the construction of institutional elements is lagging behind.

Among the entropy scores of the four elements, the mean and median of the entropy score of the institutional elements is the lowest, and the coefficient of variation is the highest. It shows that the

construction of institutional system in the innovative and entrepreneurial culture environment of universities is relatively lagged, which can not meet the needs of the construction of innovative and entrepreneurial culture environment in universities. The lag of the institutional factors is reflected in the two aspects: one is the system imperfection, and the other is the publicity channels of the system are not smooth.

Fourth, there is a significant difference in attitude between spiritual elements and educational elements.

Although the degree of recognition of spiritual elements and educational elements is slightly better than that of the overall cultural environment, the coefficient of variation is big, indicating that the respondents have a greater difference in the attitude of recognition to the spiritual and educational levels. These two elements are relatively more subjective, and the characteristics of individual attributes will have a greater impact on the score, which is the fundamental reason for the big difference in the entropy scores of both factors.

Table 2, Influence of participation in innovation and entrepreneurship practice or not on the score of innovation and entrepreneurship culture entropy

group mean	overall environment	spiritual elements	institutional elements	material elements	educational elements
Participating in practice	3.3354	3.3235	3.3148	3.5592	3.6227
Not participating in practice	3.0547	3.1310	3.0153	3.4226	3.2834
Mean equality t test (P-value)	4.348 (0.000)	2.743 (0.007)	4.111 (0.000)	2.228 (0.026)	4.955 (0.000)

The statistical hypothesis testing method is used to further investigate the influence of the attributes of the respondents on the entropy value score. Under the 5% significant level, it is found that sex and urban and rural areas and schools have no significant impact on the entropy value of the innovative entrepreneurial culture and its components. Whether the respondents have participated in the creative and entrepreneurial practice or not is a significant impact on the entropy value (see Table 2). The entropy score of the students who participated in the innovative entrepreneurial practice was significantly higher than that of the students who did not participate., i.e. in the process of innovation and entrepreneurship, the students will pay more attention to the elements and have a higher understanding of the factors, which results in all the elements and overall environment of innovation and entrepreneurship culture construction are more recognized.

## **Quantile Regression of the Factors Forming the Cultural Environment of Innovation and Entrepreneurship in Universities**

### **Designing of Calculating Model and Selection of Estimation Method**

The most commonly used statistical models are the addition model and the multiplication model, and the addition model emphasizes the independent influence of the influence factors, while the multiplication model assumes that the impact of the elements on the phenomenon is interacted. It is known from the above analysis that the four elements of the cultural environment of innovation and entrepreneurship are not independent, but interacted. In view of this, the multiplication model is set as the basic one of the influence factors of university innovation and entrepreneurship culture environment.

$$Y = M \cdot I \cdot S \cdot E \quad (1)$$

Another advantage of the multiplication model is the logarithmic linearization, that is, it has logarithmic additivity. Considering the defects in the integrity of the construction of the innovation and entrepreneurship culture of universities and the components of the test index system, which are



classified as the incomplete part, the factor influence model of the innovation and entrepreneurial culture environment of the university is set up as the following:

$$\ln(Y) = \beta_0 + \beta_1 \ln(M) + \beta_2 \ln(I) + \beta_3 \ln(S) + \beta_4 \ln(E) + \varepsilon \quad (2)$$

Because the quantile regression has no assumption of any distribution to the random disturbing in the model, it can effectively eliminate the extreme value interference, and the estimation results are more stable and can give the influence degree of the independent variable on the different quantiles of the dependent variable [10]. Therefore, the quantile regression method is selected to complete the model estimation.

### Results of Integral Quantile Regression

The quantile regression method was used to model all the sample data, and five representative sites (0.1, 0.25, 0.5, 0.75, and 0.9) were selected for the analysis of the results (see Table 3).

Table 3, Quantile regression estimation of impact model of innovation and entrepreneurship culture environment in universities

Variables	10%	25%	50%	75%	90%
C	1.52E-16 (1.0000)	0.0749 (0.4866)	0.1407 (0.0095)	0.3490 (0.0000)	0.4478 (0.0000)
Ln(M)	0.4323** (0.0000)	0.5236** (0.0000)	0.5339** (0.0000)	0.3290** (0.0000)	0.3935** (0.0000)
Ln(I)	0.1330** (0.0266)	0.1456** (0.0144)	0.1712** (0.0026)	0.1255** (0.0124)	0.0433 (0.2247)
Ln(S)	0.2480** (0.0310)	0.2265** (0.0032)	0.2844** (0.0000)	0.2982** (0.0004)	0.3403** (0.0001)
Ln(E)	-0.0108 (0.8085)	-0.0611 (0.5186)	-0.1147** (0.0155)	-0.0081 (0.9033)	-0.0548 (0.2322)
quasi LR	132.992 (0.000)	143.372 (0.000)	253.366 (0.000)	256.712 (0.000)	192.181 (0.000)

From the test results of Table 3, we can see that the quasi LR statistics of the quantile model are all lower than the obvious level of 5%, and the further comparison of quantile regression coefficients leads to the following:

First, the material elements and spiritual elements of innovation and entrepreneurship have passed the 5% significant test at all the quantiles, and the elasticity coefficient is positive. The improvement of the material elements and spiritual elements of the innovation and entrepreneurship in universities helps to promote the construction of the cultural environment of innovation and entrepreneurship there. At all the quantiles, the elasticity coefficients of the material elements are bigger than that of the spiritual elements, which reflects the improvement of the material elements are stronger than that of the spiritual elements in the promotion, and the construction of the cultural environment for innovation and entrepreneurship is in the initial stage. From the change trend of the elastic coefficients of the two factors, the elasticity coefficient of the material elements has been reduced from the low quantile point to the high quantile point, while the elasticity coefficient of the spiritual elements has risen. It shows that the contribution of material elements is more obvious when the innovative and entrepreneurial culture environment in universities is started. With the optimization of the cultural environment of innovation and entrepreneurship in universities, the role of spiritual elements is becoming more and more prominent.

Second, the coefficients of the institutional factors at the 10%, 25%, 50% and 75% quantile were tested under the 5% significant level, and the coefficients were positive. It shows that in the initial stage of the construction of the innovation and entrepreneurial culture environment in universities, the building of the institutional elements is beneficial to its improvement, but while the cultural environment of innovation and entrepreneurship in universities is in a more ideal stage, the influence of the institutional factors is not significant (90% quantile), and the regression coefficient of each

quantile shows a downward trend. It can be understood that with the optimization of the cultural environment of innovation and entrepreneurship in universities and the gradual perfection of the construction of relevant institutions, the space for further improvement is not large, which leads to its little effect on the cultural environment of the university's innovative and entrepreneurial culture.

Third, the education factors of innovation and entrepreneurship had negative impact on the construction of innovative and entrepreneurial culture environment, most of which were not significant. Only the median position regression coefficient was obvious under the significant level of 5%, which indicates that the current innovation and entrepreneurship education elements have negative impact on the improvement of the innovative and entrepreneurial environment, but it is not significant. In view of the driving effect of innovation and entrepreneurship education on other elements, the optimization of the education elements of innovation and entrepreneurship, the reversal of the current negative impact and the further promotion of its influence, are the keys to the construction of innovative and entrepreneurial culture environment in universities.

### **Results of Quantile Regression Groups: Distinguishing whether to Participate Innovation and Entrepreneurship Practice Activities or Not**

As mentioned earlier, whether to participate in innovation and entrepreneurship practice or not will have a significant impact on the entropy value score of the innovation and entrepreneurial culture and its components. Then, quantile regression analysis was conducted for the two groups: participation in practice activities and non-participation in practice activities, discuss the two groups of respondents' different views about impact areas and degree of the components in the construction of the innovation and entrepreneurial culture environment, so as to better guide it in universities.

Table 4, Comparison of the quantile regression results between two groups in the practice of innovation and entrepreneurship

variable	the group of participating in innovation and entrepreneurship practice					the group of not participating in innovation and entrepreneurship practice				
	10%	25%	50%	75%	90%	10%	25%	50%	75%	90%
C	0.266 (0.028)	0.243 (0.022)	0.114 (0.119)	0.345 (0.000)	0.444 (0.000)	-1.3E-16 (1.0000)	0.097 (0.480)	0.241 (0.009)	0.313 (0.000)	0.458 (0.001)
Ln(M)	0.566** (0.002)	0.284** (0.002)	0.312** (0.000)	0.171** (0.014)	0.200** (0.001)	0.402** (0.001)	0.556** (0.000)	0.589** (0.000)	0.544** (0.000)	0.421** (0.000)
Ln(I)	0.181* (0.080)	0.171* (0.079)	0.178** (0.045)	0.098* (0.083)	0.053 (0.455)	0.210* (0.067)	0.201* (0.064)	0.142* (0.066)	0.117* (0.098)	0.130** (0.037)
Ln(S)	0.444** (0.027)	0.557** (0.000)	0.504** (0.000)	0.418** (0.008)	0.308** (0.006)	0.226 (0.189)	0.084 (0.552)	0.247** (0.000)	0.314** (0.000)	0.307** (0.049)
Ln(E)	-0.217** (0.017)	-0.198** (0.004)	-0.093* (0.064)	0.072 (0.442)	0.163** (0.013)	-0.049 (0.650)	-0.040 (0.834)	-0.199** (0.013)	-0.201** (0.006)	-0.143** (0.013)
quasi LR	76.803 (0.000)	84.253 (0.000)	128.277 (0.000)	136.664 (0.000)	123.075 (0.000)	83.571 (0.000)	69.807 (0.000)	127.246 (0.000)	126.528 (0.000)	83.730 (0.000)

From the analysis results of Table 4, we can see that the quasi LR statistics of the quantile model are all lower than the obvious level of 5%. The further comparison of the quantile regression coefficient will lead to the following:

First, no matter the respondents have participated in the practice of innovation and entrepreneurship or not, material conditions as surface elements have a significant impact on the cultural environment of innovation and entrepreneurship in universities. However, for students who have participated in innovative entrepreneurial activities, the material factor coefficient of each quantile has a more obvious downward trend, while for the students who have not, the decreasing trend of the material factor coefficient is not obvious, but the value of the coefficient is higher than that of the former group. That is, the students who have not participated in the innovative entrepreneurial practice emphasize the promotion of the material elements to the construction of innovative and entrepreneurial culture more.

Second, the coefficients of the institutional elements of the group who did not participate in the innovative entrepreneurial practice group were all significant under the level of 10%, and the coefficients of the institutional factors of the group participating in the innovative entrepreneurial practice were not significant at the quantile of 90%. At the same time, the coefficient values of the group that did not participate in the innovative entrepreneurial practice were higher than that of the contrasting one. In combination with the relatively higher and smaller changes in the material factor coefficients of the group who did not participate in the innovative entrepreneurial practice group, it can be considered that the students who have not participated in the innovative entrepreneurial practice strengthen more the influence of external objective conditions on the cultural environment of innovation and entrepreneurship in universities.

Third, no matter at any quantile point, the students who have participated in innovative entrepreneurial activities believed that the construction of spiritual elements would help to significantly improve the cultural environment for innovation and entrepreneurship in universities. For the students who have not participated in innovative entrepreneurial activities, only at the quantiles over 50%, the spiritual elements are obviously helpful to the innovative and entrepreneurial cultural environment of universities. For those students who did not participate in the innovative entrepreneurial practice and thought that the creative and entrepreneurial cultural environment was not ideal, the spiritual elements had not a significant impact on the construction of the creative and entrepreneurial culture environment. At the same time, the mental factor coefficients of the group who participated in the creative entrepreneurial practice group were higher than those of the group who did not. That is, to participate in innovation and entrepreneurship practice activities was helpful to strengthen the influence of spiritual elements.

Fourth, the education factors of innovation and entrepreneurship are generally negative. It shows that no matter they have participated in innovation and entrepreneurship or not, it is generally believed that the current innovation and entrepreneurship education can not meet the needs of the construction of innovative and entrepreneurial culture in universities. However, in the 90% regression results of the group of innovative entrepreneurship practice, innovation and entrepreneurship education has a positive and significant promotion effect to the entrepreneurial culture environment of universities and colleges. That is, the students who participated in the creative and entrepreneurial practice and accepted its environment, held the view that its education factor had positive effects, and the role of innovation and entrepreneurship education was limited to the active use of the minority students.

## **Summary**

### **Main Conclusion**

Based on the survey data of the measurement scale of the elements of the innovation and entrepreneurial culture environment of universities, the comprehensive measurement of the subjective empowerment of the creative and entrepreneurial culture environment and the construction of various components of the university is realized by entropy value, and it is found that the elements of the innovation and entrepreneurship culture of universities have not been built collaboratively, and the construction of the material elements is recognized. Comparatively, the construction of system elements is lagging behind, and there are obvious differences of attitude between spiritual elements and educational elements.

Further using quantile regression to investigate the influence of various components on the construction of innovative and entrepreneurial cultural environment in universities, the study finds that the improvement of material elements and spiritual elements is beneficial to the construction of the cultural environment of innovation and entrepreneurship in universities; the improvement of material elements is stronger than that of the spiritual elements in the construction pushing of the cultural environment for the innovation and entrepreneurship of universities; the construction of innovative and entrepreneurial cultural environment in universities is in its infancy. The construction



of institutional elements can effectively promote the improvement of the cultural environment of innovation and entrepreneurship in universities, but the influence degree is still small. The education elements of innovation and entrepreneurship can not adapt to the needs of the construction of innovative and entrepreneurial culture environment in universities, and their influence is not only insignificant but still negative at present.

To participate in innovative entrepreneurial practice or not is a significant factor affecting college students' awareness of the cultural environment of innovation and entrepreneurship in universities. The students who have not participated in innovative entrepreneurial activities emphasized the influence of external objective conditions on the cultural environment of innovation and entrepreneurship in universities, while those who have participated in innovative entrepreneurial activities thought that the influence of the spiritual elements was more obvious. The two groups thought that the current innovation and entrepreneurship education elements had not yet been formed for the promotion of the construction of innovative and entrepreneurial culture environment.

### **Some Enlightenment**

Based on the above conclusions, the following improvements are proposed:

First, through the reform of innovation and entrepreneurship education, it can promote the construction of innovative and entrepreneurial culture environment in universities, and its influence is to be further expanded. For example, build an innovation and entrepreneurship education ecosystem in universities, promote the professionalization of innovative and entrepreneurial education, and reform the mode of innovation and entrepreneurship education.

Second, in the face of the starting stage of the construction of innovative and entrepreneurial cultural environment in universities, the continuous improvement of material elements and institutional elements has become a problem that must be paid attention to at the present stage. The constructions of material elements can be focused on the basis of providing basic material guarantee conditions and pushing the support and availability of material guarantee. The key of factor construction is to promote the continuous improvement of the system.

Third, a long and continuous propaganda, guidance, incentive and other means will promote the construction of campus culture at the core of innovation and entrepreneurship, and promote the spiritual elements to play a significant role in pushing the construction of innovative and entrepreneurial cultural environment in universities.

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