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# Analysis Model of Influencing Factors of College Students' Entrepreneurial Tendency Combined with SEM Model

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**Abstract:**

This paper uses the method of combining theory and empirical research to analyze the structural equation model of the influencing factors of college students' entrepreneurial tendency, and explores the effective ways to cultivate college students' entrepreneurial quality, so as to enhance the pertinence and effectiveness of entrepreneurship education in colleges and universities. Based on the conclusions of the tendency study, this paper aims to improve the entrepreneurial tendency of college students by improving their own, society, school and family. From the conclusion of the demonstration, we can see that compared with the previous research on the factors affecting college students' entrepreneurial tendency, the conclusion of this paper is slightly different. In addition, we should see that in the study of college students' online entrepreneurial tendencies, the influencing factors should still take into account the virtual side of entrepreneurship through the form of network, such as the role of social network relations on entrepreneurial tendencies is not significant and so on. Finally, we can conclude that the analysis model of influencing factors of college students' entrepreneurial tendency combined with SEM model can play a certain role in the analysis of college students' entrepreneurial tendencies, and can provide theoretical reference for the formulation of relevant policies.

**Keywords:** SEM model; college students; entrepreneurial tendency; influence analysis

## 1 INTRODUCTION

Entrepreneurship is the process of discovering opportunities and obtaining resources to create something valuable. Entrepreneurship of college students can not only drive employment, but also is the need for personal self-development and realization of life value, and it is also conducive to the formation of an entrepreneurial atmosphere in the whole society. The literature of college students' entrepreneurship shows that college students' personal background and personal characteristics are the main reasons to promote college students' entrepreneurship. The accumulation of material capital and social capital is important, but the accumulation of college students' entrepreneurial knowledge is also important. Since entrepreneurial knowledge can be formed through education and training, entrepreneurial education is also an important factor to promote college students' entrepreneurship.

Although individual students make entrepreneurial choices, the likelihood of such choices is constantly changing and dynamic. That is to say, "whether to make entrepreneurial choices" is a choice made by individuals under the influence of various internal and external factors. The level of entrepreneurial inclination reflects the degree to which an individual tends to start a business. In the same environment, a high entrepreneurial tendency indicates a higher degree of personal inclination towards entrepreneurship, and is more willing to choose entrepreneurship compared to other development paths; The opposite is also true. It can be seen that entrepreneurial inclination is the best predictor of entrepreneurial behavior.

Under the increasingly severe employment situation, influenced by these entrepreneurial projects and motivated by the success of their fellow students, the "innovation and entrepreneurship dreams" of college students have been fully stimulated. After graduation, they begin to shift from "independent career selection" to "independent entrepreneurship". According to public data, the proportion of college students starting their own businesses in developed countries in Europe and America is still higher than in China. From the current situation of entrepreneurship among college graduates in China, the quality of their entrepreneurial activities is not high, and they are mostly concentrated in low tech industries. This also indirectly indicates that although entrepreneurship among college students in China can create certain employment opportunities, in the long run, its role in economic structure transformation and growth is not significant, and there is still great room for growth. Therefore, it is necessary to scientifically study the entrepreneurial tendencies of college students, analyze the key factors that affect their entrepreneurship, and provide targeted guidance for their entrepreneurial tendencies.

Entrepreneurial tendency refers to the conscious tendency that plays a driving role in entrepreneurial practice activities, and the entrepreneurial tendency of college students determines their possibility of choosing independent entrepreneurship in the future. Understanding the entrepreneurial tendency and its influencing factors is the foundation and prerequisite for doing a good job in entrepreneurship education for college students. This article uses a combination of theoretical and empirical research

methods, and through the analysis of the structural equation model of the influencing factors of college students' entrepreneurial tendency, explores effective ways to cultivate their entrepreneurial qualities, in order to enhance the pertinence and effectiveness of entrepreneurship education in universities

The innovation of this paper lies in the combination of computer system and SEM model, and the use of intelligent data processing methods for real-time analysis of college students' entrepreneurial data, which changes the shortcomings of traditional analysis models that cannot achieve satisfactory sustainability.

## 2 RELATED WORK

Regarding the structure of entrepreneurial traits, scholars generally believe that it is composed of multiple personality traits, including risk-taking, internal control sources, independence, fuzzy tolerance, achievement needs, innovation, etc. Among them, the four dimensions that have been unanimously recognized and most frequently used by researchers are fuzzy tolerance, achievement needs, internal control sources, and risk-taking. Foreign scholars mainly consider the characteristics of entrepreneurs, such as achievement needs, sources of control, and risk-taking. Reference [1] proposes that entrepreneurs express their desire to create a business through three aspects: innovation, achievement needs, and risk-taking. Reference [2] found that cooperation, robustness, innovation, and autonomy are obvious characteristics of technology-based entrepreneurs. Reference [3] particularly focuses on and emphasizes the interaction between individual cognition, entrepreneurial scenarios, and entrepreneurial tasks, and divides entrepreneurial traits into three dimensions: entrepreneurial cognition, entrepreneurial sensitivity, and cognitive style.

The attitude of a person towards a certain thing or event directly affects their subsequent reactions and behaviors. Similarly, an individual's entrepreneurial attitude also has a diverse impact on their entrepreneurial activities, including the pursuit of independence, achievement needs and motivations, liking to face challenges, and pursuing power and position. Domestic researcher Huang Bingcang found that there are three value orientations in society that directly affect an individual's entrepreneurial attitude, namely, a proactive spirit, a thirst for success, and the pursuit of social status and power. Individuals with a positive and enterprising spirit enjoy facing challenges and competition, and their strong desire and demand for success make their entrepreneurial attitude more inclined. Individuals who pursue social status and power value the opinions of others and hope to gain social recognition.

In existing research on the entrepreneurial tendency of college students, literature [4] suggests that entrepreneurial tendency refers to the likelihood of individuals participating in entrepreneurial activities. Reference [5] found that the entrepreneurial tendencies of college students include two connotations: the possibility of starting a business during their time in school and the possibility of starting a business after graduation. Reference [6] proposes that entrepreneurial tendencies are a psychological state that drives individuals to pursue entrepreneurial goals. Reference [7] believes that entrepreneurial tendencies are the driving force for enterprises to seek development and innovation, and are the best predictive indicator of entrepreneurial behavior. Reference [8] suggests that entrepreneurial tendencies refer to an individual's degree of preference for entrepreneurial activities. Reference [9] suggests that entrepreneurial tendencies are a combination of interests, abilities, and traits. Reference [10] suggests that entrepreneurial tendencies are an intrinsic belief that can guide individuals to consciously create new businesses at some point in the future. Entrepreneurial tendencies are considered as individuals' perception of market demand and their understanding and grasp of feasibility. Reference [11] suggests that entrepreneurial tendencies are intrinsic tendencies that drive individuals to engage in entrepreneurship. Reference [12] suggests that entrepreneurial inclination is a thinking framework that includes an individual's subjective attitude, beliefs, interests, etc., and is a key factor affecting whether an individual engages in entrepreneurship or not.

Reference [13] proposed that entrepreneurial inclination includes two dimensions: perceived desirability and perceived feasibility. By adding extraordinary goals and opportunity assessment to these dimensions, a context specific entrepreneurial inclination model was established. Reference [14] established a planned behavior theory model, which suggests that entrepreneurial tendencies can be examined from three aspects: behavioral attitude, subjective norms, and perceived behavioral control. The entrepreneurial tendency scenario model in reference [15] divides entrepreneurial tendencies into two dimensions: rationality and intuition. Reference [16] provides comprehensive research on entrepreneurial tendencies and has developed the Individual Entrepreneurial Tendency Scale (IEIS), which includes initial preparation for entrepreneurship, the degree to which descriptive items match the actual situation, and the growth and operation of the enterprise

Entrepreneurial inclination is the possibility and prerequisite for individuals to engage in entrepreneurial activities. Entrepreneurs have certain personality traits that distinguish them from other groups, which give them a higher tendency and

likelihood of entrepreneurship. Research has found that when individual dimensions of entrepreneurial traits explain their impact on entrepreneurial tendencies, they are incomplete and one-sided. That is to say, domestic and foreign researchers acknowledge that the characteristics of entrepreneurs are not yet sufficient to fully explain individual entrepreneurial tendencies, and there must still be some or some factors that can more comprehensively and completely explain the relationship between the two. The planned behavior theory in reference [17] suggests that in the process of generating behavioral intention, individuals conceptualize the evaluation of a specific behavior influenced by background and traits to form attitudes, and together with subjective cognition of the external environment, they play a role in the occurrence of behavioral tendencies. In the study of the mechanism of the effect of entrepreneurial attitude on individual entrepreneurial tendency, literature [18] found a significant correlation between individual psychology, including personal traits, entrepreneurial attitude, etc., and the entrepreneurial tendency of college students. Among them, the personality traits of college students affect their entrepreneurial tendency through direct and indirect effects mediated by entrepreneurial attitude, and entrepreneurial self-efficacy indirectly affects their entrepreneurial tendency through the mediating effect of entrepreneurial attitude. Reference [19] pointed out in its research that personal basic information, personal traits, and entrepreneurial attitude are the main variables affecting the entrepreneurial tendency of college students. The personal traits of students indirectly affect their entrepreneurial tendency through their impact on entrepreneurial attitude.

To sum up, this study defines entrepreneurial tendency as the degree of interest and preparation of individuals to carry out and continue entrepreneurial activities. At the same time, this paper combines the SEM model to analyze the influencing factors of college students' entrepreneurial tendency, and constructs an intelligent data processing system to study these factors.

## 3 MODEL CONSTRUCTION

### 3.1 Management incubation platform of the entrepreneurship center

In the design and implementation of the management incubation platform of the entrepreneurship center, according to the overall functional requirements of the platform and the analysis of the requirements of each functional module, the overall functional structure of the platform, the design of the platform architecture, the design of the front-end module, the design of the back-end function module and the design of the platform database are mainly described. According to the platform plan, considering the data security, ease of use, and functionality of the system use and operation, the platform divides users into five roles: system administrators, project management approver, entrepreneur, venture capital company and evaluation expert, the five platform users are endowed with different operating rights by the system administrator, to ensure the safety of system functions and data security, which is conducive to the division of work and is also convenient for platform business management. According to the above functions, the decomposition diagram of the platform functional modules is shown in Figure 1[20].

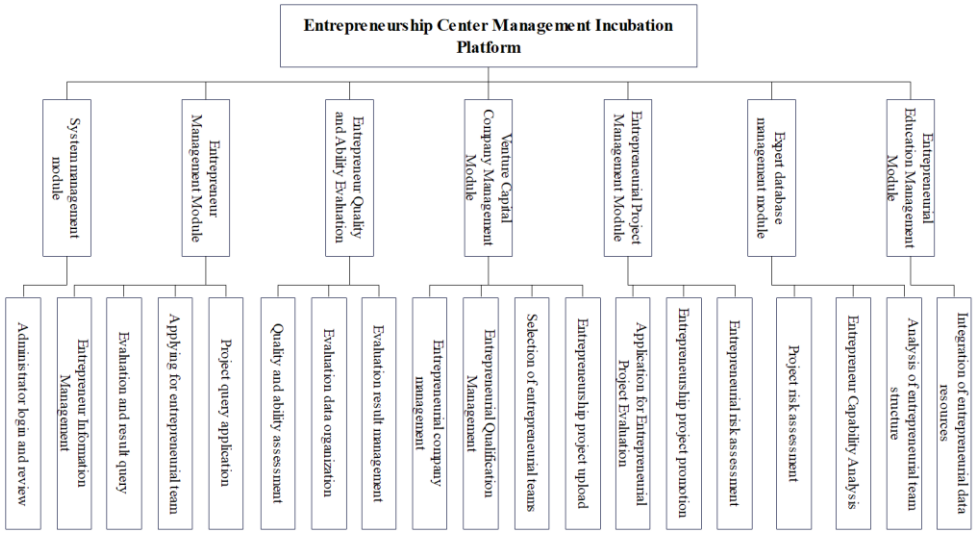


**Figure 1** Decomposition diagram of platform functional modules

In the database design, according to the number of database instances and file size, SQLserver is used as its DBMS, as shown in Figure 2.

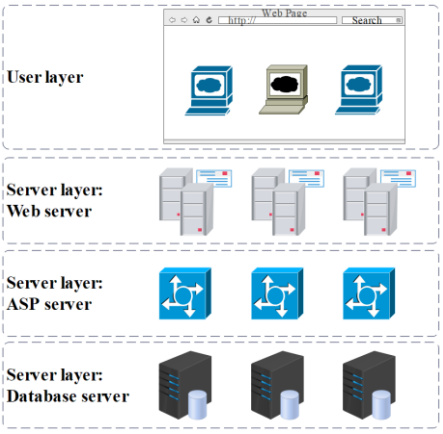


**Figure 2** Platform running environment diagram

From the perspective of the architecture of the platform, the platform is divided into the most basic three-tier structure. The bottom layer is the data support layer, which contains data information such as the database. The second layer is the platform control layer, which mainly processes the underlying data to complete the specific functions of the platform. Through the execution of the control layer, the platform outputs the result information and transmits it to the user output interface. The browser layer in the B/S structure outputs and displays the result data and data requests, as shown in Figure 3.

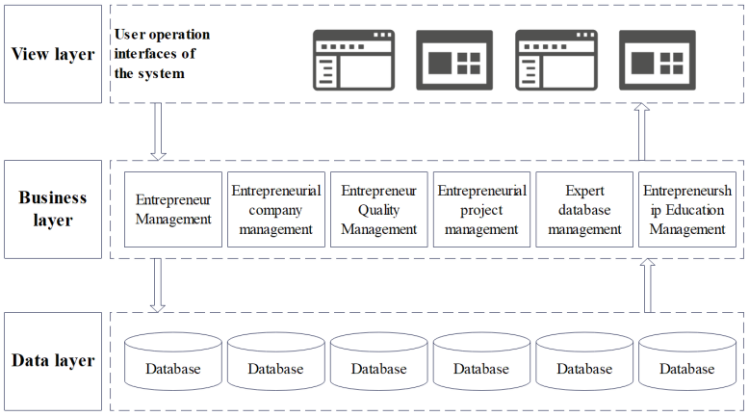


**Figure 3** Architecture diagram of the platform system

Entrepreneurship platform adopts B/S structure in architecture, and platform applications are deployed on WEB application server and ASP server. Generally, ASP server handles the results to WEB server, and then WEB server feeds back the results to the client browser. The platform database is deployed on the database server. Considering the security of the server system, necessary security access measures, such as firewalls, are taken between the server and the user to ensure its non-functional requirements. The platform network architecture is shown in Figure 4.

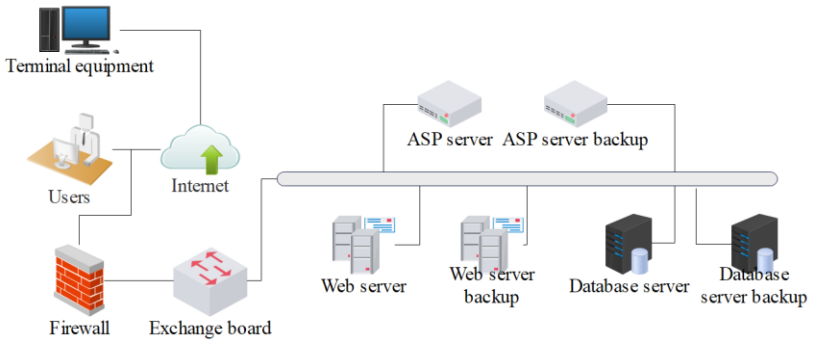


**Figure 4** Network architecture diagram of platform

### 3.2 Structural equation model

Structural Equation Model (SEM) is also known as latent variable model, which makes up for the shortcomings of factor analysis and path analysis. It not only allows the measurement errors of independent variables and dependent variables, but also makes the study more in-depth with the introduction of latent variables.

Structural equation model must first be a causal model based on a certain theory, which includes the following characteristics: First, it needs to have two types of variables, namely latent variable and measured variable. For the specific graphical representation of these two types of variables, in the structural equation model path diagram presented by AMOS software, latent variables are represented by ellipses, and measured variables are represented by rectangles. If we continue to use the terms in path analysis, the latent variables and measured variables in structural equation models can be subdivided into endogenous variables and exogenous variables. Second, it needs to have two models, namely the measurement model and the structural model. Structural equation models can be expressed by the following three matrix equations:

$$x = \Lambda_x \xi + \delta \quad (1)$$

$$y = \Lambda_y \eta + \varepsilon \quad (2)$$

$$\eta = B_\eta + \Gamma\xi + \zeta \quad (3)$$

Among them, equation (1) describes the relationship between the exogenous latent variable and the exogenous measured variable, and its coefficient $\Lambda_x$ is the factor load corresponding to the exogenous observation index on the exogenous latent variable. Equation (2) mainly focuses on the relationship between endogenous measured variables and endogenous latent variables, and $\Lambda_y$ is the corresponding factor load of endogenous measured variables on endogenous latent variables. Equation (3) describes the linear relationship between latent variables, called the structural equation, B and Γ both represent the effect sizes on different paths, and $\zeta$ is the error term of the structural equation. Third, it needs to have two paths. The paths between latent variables and measured variables and the paths between latent variables are two different paths described by measurement equations and structural equations.

Structural Equation Modeling (SEM) is a kind of model used to establish estimate and test causality, which has more advantages than traditional methods of understanding causality. At present, the methods of dealing with causality are regression analysis and path analysis. Both of them only deal with the relationship between measurement variables, but cannot deal with the causality between constituent concepts. Because of this, SEM has developed very rapidly in the field of applied statistical analysis. One of the typical applications is the Customer Satisfaction Index (CSI) evaluation model, and the corresponding core is SEM. Among the CSI evaluation models, the most successful is the America Customer Satisfaction Index (ACSI) evaluation model, as shown in Figure 5.

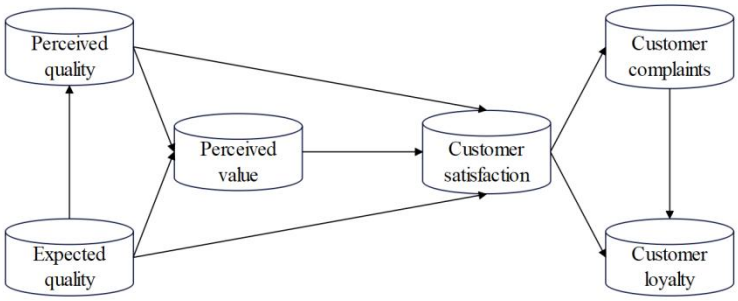


**Figure 5** ACSI evaluation model

The ACSI evaluation model contains 6 latent variables (first-level indicators). Among them, expected quality ξ1 is exogenous latent variable (independent variable), perceived quality $\eta_1$, perceived value $\eta_2$, customer satisfaction $\eta_3$, customer complaint $\eta_4$, customer loyalty $\eta_5$ are endogenous latent variable (dependent variable). The specific path relationship between the variables is shown in Figure 6.

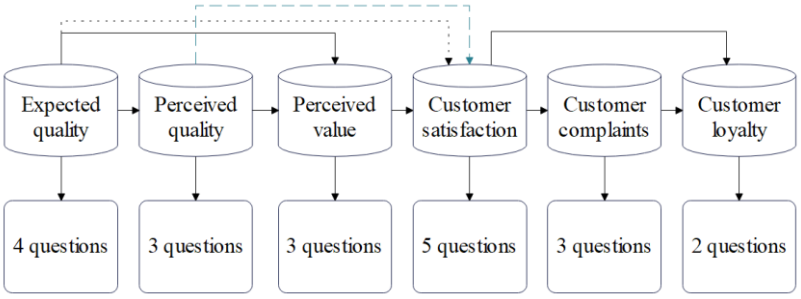


**Figure 6** Path relationship between latent variables and measured variables

The relationship between the latent variables in Figure 6 is represented by the structural equation as follows:

$$\begin{pmatrix}\eta_1\\ \eta_2\\ \eta_3\\ \eta_4\\ \eta_5\end{pmatrix}=\begin{pmatrix}0 & 0 & 0 & 0 & 0\\ \beta_{21} & 0 & 0 & 0 & 0\\ \beta_{31} & \beta_{32} & 0 & 0 & 0\\ 0 & 0 & \beta_{43} & 0 & 0\\ 0 & 0 & \beta_{53} & \beta_{54} & 0\end{pmatrix}\begin{pmatrix}\eta_1\\ \eta_2\\ \eta_3\\ \eta_4\\ \eta_5\end{pmatrix}+\begin{pmatrix}\gamma_{11}\\ \gamma_{21}\\ \lambda_{31}\\ 0\\ 0\end{pmatrix}\xi+\begin{pmatrix}\varepsilon_{\eta 1}\\ \varepsilon_{\eta 2}\\ \varepsilon_{\eta 3}\\ \varepsilon_{\eta 4}\\ \varepsilon_{\eta 5}\end{pmatrix} \quad (4)$$

In the equation, $\varepsilon_{\eta i}, i=1,2,...,5$ is the residual term. For a general structural equation, the number of latent variables is not always 6, and the number of exogenous latent variables in the latent variables is not only 1.

The analysis model of the influencing factors of college students' entrepreneurial tendencies proposed in this paper uses the ACSI evaluation model for reference to analyze the influencing factors of college students' entrepreneurial tendencies. The research methods will be given below.

3.3 Structural equation construction

Exogenous significant variables include entrepreneurship education, entrepreneurship practice experience, business management knowledge, family economic situation, understanding of network, interest in entrepreneurship, adventurous, innovation, be proactive, risk exposures, attribution of success or failure, policy support and financial support provided by the government, tolerance of society to college students' entrepreneurship, influence of entrepreneurship experience, entrepreneurship assistance, existence of entrepreneurship park, entrepreneurship policy in school, and entrepreneurship atmosphere in school. Endogenous significant variables include endogenous attitude, exogenous attitude, entrepreneurial possibility and entrepreneurial preparation. Figure 7 shows the initial structure simple equation model input AMOS. There are 4 paths to be tested, including path coefficients γfa, γea, βap, and γmp, as shown in Figure 7:

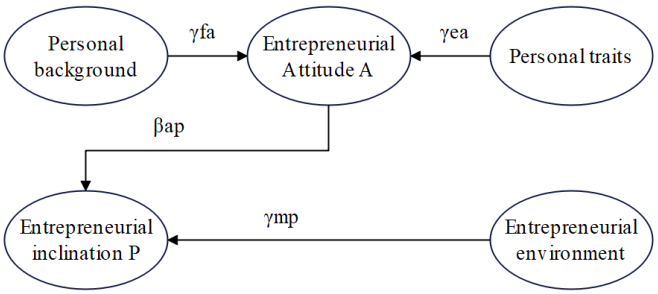


**Figure 7** Simple equation model of initial structure

Figure 8 shows the results of the confirmatory factor analysis for the three latent independent variables. The specific results of the confirmatory factor analysis are shown in Table 1. Since the degree of network understanding has no significant influence on the potential variables from the results of the path analysis, it is removed here. From the table, we can see that the standardized load coefficients of the index variables of the potential dependent variables exceed 0.50 and reach the significant level of 0.001. In addition, CMIN/DIF = 2.239 < 3, GFI = 0.902 > 0.9, NFI = 0.907 > 0.9, CFI = 0.945 > 0.9, RMSEA = 0.071 < 0.08. It shows that the confirmatory factor model of the three potential independent variables fits well with the actual

observed data, and the characteristics of the potential variables can be reflected by the measured variables. At the same time, it also shows that the measurement model of the potential independent variables has good validity.

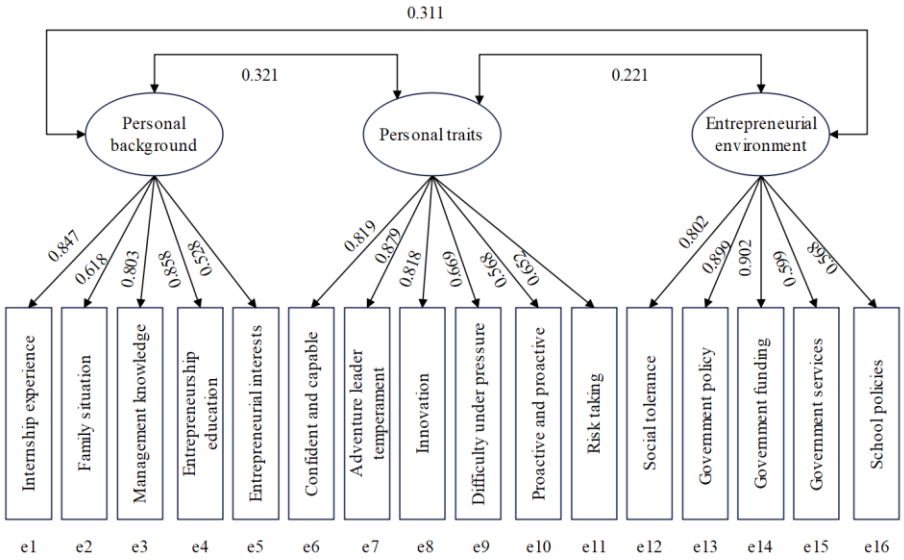


**Figure 8** Confirmatory factor analysis of latent independent variables

**Table 1** Results of confirmatory factor analysis for latent independent variables

| Measurement variable | Normalization factor | T value |
|---|---|---|
| Internship experience | 0.843 | 15.844*** |
| Family situation | 0.610 | 10.139*** |
| Management knowledge | 0.787 | 14.311*** |
| Entrepreneurship education | 0.847 | 15.939*** |
| Entrepreneurial interest | 0.521 | 8.389*** |
| Risk exposures | 0.644 | 10.859**** |
| Stress difficulty | 0.664 | 11.319*** |
| Innovation | 0.809 | 14.941*** |
| Adventure leader | 0.867 | 16.591*** |
| Confident and capable | 0.812 | 14.986*** |
| Be proactive | 0.561 | 9.061*** |
| Government funding | 0.885 | 17.321*** |
| Government services | 0.604 | 10.191*** |
| School policy | 0.565 | 8.881*** |
| Social tolerance | 0.792 | 14.611*** |
| Government policy | 0.889 | 17.381*** |

NOTE: CMIN/DIF = 2.239 < 3, GFI = 0.902 > 0.9, NFI = 0.907 > 0.9, CFI = 0.945 > 0.9, RMSEA = 0.071 < 0.08, * * * represents P < 0.001.

Figure 9 shows the confirmatory factor analysis of the two potential dependent variables of entrepreneurial attitude and entrepreneurial propensity.

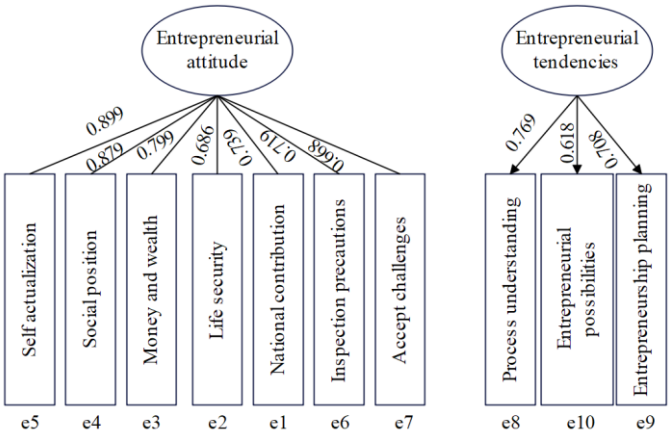


**Figure 9** Confirmatory factor analysis of latent dependent variables

The results of the specific confirmatory factor analysis are shown in Table 2 below. From the table, we can see that the standardized load coefficients of the index variables of the potential dependent variables all exceed 0.60, and reach a significant level of 0.001. In addition, CMIN/DIF = 2.199 < 3, GFI = 0.950 < 0.9, CFI = 0.976 > 0.9, RMSEA = 0.071 < 0.08. It can be seen that from the perspective of the test of the overall model fitness, the values of each adaptation index reach the acceptable standards of the model. It shows that the confirmatory factor model with three latent independent variables fits well with the actual observed data, and the measured variables can be used to reflect the characteristics of latent variables.

**Table 2** Confirmatory factor analysis results for latent dependent variables

| Indicators | Normalization factor | T value |
|---|---|---|
| Self-actualization | 0.890 | 17.111*** |
| Social status | 0.874 | 16.498*** |
| Money and wealth | 0.791 | 14.692*** |
| Living security | 0.684 | 11.728*** |
| National contribution | 0.731 | 13.152*** |
| Inspection idea | 0.709 | 12.667*** |
| Accepting the challenge | 0.659 | 11.548*** |
| Entrepreneurship possible | 0.609 | 9.081*** |
| Entrepreneurial process | 0.762 | 11.172*** |
| Entrepreneurial planning | 0.704 | 10.379*** |

NOTE: CMIN/DIF = 2.199 < 3, GFI = 0.950 > 0.9, NFI = 0.957 > 0.9, CFI = 0.976 > 0.9, RMSEA = 0.071 < 0.08, * * * represents P < 0.001.

The structural equation model is input into Amos, and after calculation and estimation, the index values of the response fit are obtained in Table 3. In addition, RMSEA (root mean square error of approximation) is used to replace RMR (root mean square of residual error, which is easily affected by sample size N) in this study. The other two value-added fitness indexes: comparative fit index CFI and non-norm fit index NNFI, will not be affected by the model sample size N. To sum up, this study will use the following indicators to test the model fit: Chi-square (CMIN value), degree of freedom d.f., CMIN/DIF, CFI, NNFI, RMSEA.

**Table 3** Fit indicator table of initial model

| Indicator name | Value of this model | Evaluation criteria |
|---|---|---|
| Chi-square value | 637.511 (p=0.000) | Not significant (corresponding p > 0.05) |
| Degree of freedom d.f. | 301 | >0.000 |
| CMIN/DIF | 2.160 | <3.000 |
| Comparative fit index CFI | 0.913 | >0.900 |

| | | |
|---|---|---|
| Non-norm fitting index NNFI | 0.904 | >0.900 |
| Root mean square error of approximation RMSEA | 0.088 | <0.080 |

It can be seen from Table 3 that the Chi-square value of the initial model is Chi-square = 637.511, and significance is P = 0.000. It rejects the nothingness hypothesis, indicating that the model cannot fit the data. When the observed value is larger, the significance P value will be closer to 0, so it cannot be used as the only basis for judging the model fit. Although the index CMIN/DIF and CFI of the fitting degree of the model have reached the required standards, most of them are still deviated. Through analysis and comparison, it is found that after increasing the path from entrepreneurial environment to entrepreneurial attitude, and increasing the residual value of some related indicators, the fitting indicators of the model can be significantly improved. The structural model after adding the corresponding path is shown in Figure 10:

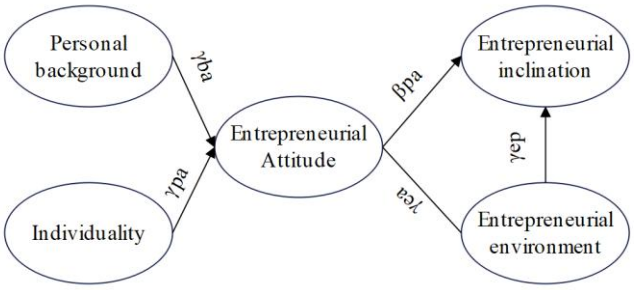


**Figure 10** Structural model after adding path

Then, the fitting test is carried out on the model, and the revised fitting indicators are shown in Table 4.

**Table 4** Display values of the index table of the modified model

| Indicator name | Value of the model proposed in this paper | Evaluation criteria |
|---|---|---|
| Chi-square value | 591.235 (p=0.000) | Not significant (corresponding p > 0.05) |
| Degree of freedom d.f. | 301 | >0.000 |
| CMIN/DIF | 2.024 | <3.000 |
| Comparative fit index CFI | 0.928 | >0.900 |
| Non-norm fitting index NNFI | 0.920 | >0.900 |
| Root mean square error of approximation RMSEA | 0.081 | <0.080 |

It can be seen from the data in Table 4 that after adding the path from entrepreneurial environment to entrepreneurial attitude, the Chi-square value of the modified model is Chi-square = 589.028, and the ratio of Chi-square value to freedom is CMIN/DIF = 2.024, and both values are slightly lower. At the same time, both CFI and NNFI increase slightly and both exceed the reference standard of 0.90, and the root mean square error of approximation RMSEA = 0.081 just meets the standard. Therefore, from the perspective of the overall fit of the model, it is considered that the fit degree between the model and the data is acceptable, and the overall model fit degree is tested. The final model is shown in Figure 11.

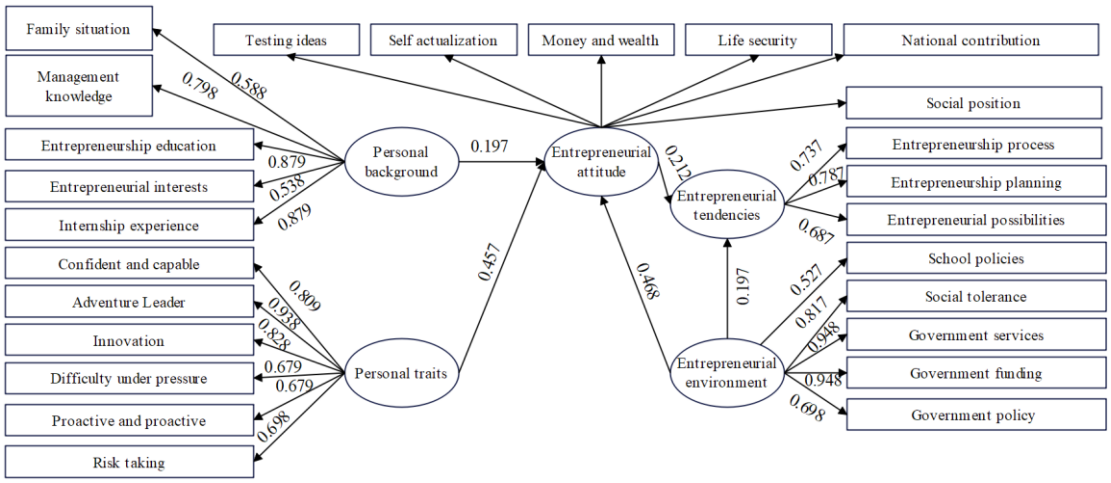


**Figure 11** Final structural equation diagram

The model passed the test of fitting degree after modification. Therefore, in the following paper, we can use the path coefficient to verify the assumptions proposed in this paper. The overall results are shown in Table 5. From the table, it can be seen that the five path coefficients all reach a significant level of 0.05, indicating that the five path coefficients are significantly not equal to 0 in the overall. Moreover, the absolute value of the critical ratio (T value) of each path is greater than 1.96.

**Table 5**.Standardized regression coefficients of potential variables in the analysis model of influencing factor of college students' entrepreneurial tendency

| Dependent variable | Independent variable | Path coefficient | T value | P value |
|---|---|---|---|---|
| Entrepreneurial attitude | Personal traits; | 0.453 | 6.164 | *** |
| Entrepreneurial attitude | Personal background | -0.203 | -2.931 | 0.003 |
| Entrepreneurial attitude | Entrepreneurial environment | 0.468 | 6.962 | *** |
| Entrepreneurial tendency | Entrepreneurial attitude | 0.207 | 2.073 | 0.035 |
| Entrepreneurial tendency | Entrepreneurial environment | 0.200 | 1.976 | 0.045 |

Note: * * *represents significant at 0.01 level.

Because the value of path coefficients in structural equation model can indicate that the relationship between factors is closer, this paper finds out the key factors that affect the entrepreneurial tendency of college students through the size of the path coefficient value, so as to put forward targeted improvements. Standardized regression coefficients for each measured variable as shown in table6.

**Table 6** Standardized regression coefficients for each measured variable

| Measured variable | Path coefficient | Measured variable | Path coefficient |
|---|---|---|---|
| Family situation | 0.584 | Confident and capable | 0.802 |
| Management knowledge | 0.792 | Adventure leader | 0.931 |
| Entrepreneurship education | 0.871 | Innovation | 0.822 |
| Entrepreneurial interest | 0.535 | Stress difficulty | 0.673 |
| Internship experience | 0.851 | Be proactive | 0.673 |
| Government Services | 0.693 | Risk exposures | 0.693 |
| Government funding | 0.941 | Accept the challenge | 0.802 |
| Government policy | 0.941 | Inspection idea | 0.792 |
| School Policy | 0.525 | Self-actualization | 0.911 |
| Social tolerance | 0.812 | Money and wealth | 0.931 |
| Entrepreneurship possible | 0.683 | Living security | 0.881 |
| Entrepreneurial process | 0.733 | National contribution | 0.911 |
| Entrepreneurial planning | 0.782 | Social status | 0.950 |

### 3.4 Analysis and Discussion

(1) Personal background

From the above table, it can be seen that among the influencing factors of personal background, the influence coefficients of economic and management knowledge, entrepreneurial education, and internship experience have reached more than 0.8, which has a relatively large influence. It can be seen from the previous section that its attitude towards entrepreneurship has a reverse effect, that is, the existing entrepreneurial education and practical experience will make students tend to be cautious in their entrepreneurial attitudes, lack confidence in the future of entrepreneurship, and dare not start a business. In view of the fact that there are more forms of entrepreneurship education and practice than essence at present, it is proposed that schools should start with reforming the existing entrepreneurship education, improve the entrepreneurship training and practice system, and strengthen students' practical ability as the basis. From the perspective of students, it is required to learn more and be familiar with network-related knowledge at ordinary times, so as to reduce the misinterpretation of network entrepreneurship. At the same time, students need to participate in more social practice, accumulate experience and knowledge, and prepare for their own entrepreneurial career.

(2) Personal traits

From the above table, it can be seen that among the indicators related to personal characteristics, six factors, such as self-confidence and ability, daring to take risks, leadership temperament and innovative spirit, have achieved significant influence, indicating that students are generally recognized by themselves. The influencing factor of daring to take risks has reached 0.94, which shows that students will not look forward and backward and shrink back when facing opportunities. In the interviews, the students also generally reported that the idea of starting a business is in the sophomore and junior stages. At this time, students not only have plenty of time to use, are already familiar with the school and the surrounding environment, but also do not need to face employment pressure, and can devote themselves to starting a business after school. At the same time, daring to take risks is also a true portrayal of businessmen in southern Fujian who "fight hard to win". Since these factors have a greater influence, schools should strengthen the cultivation of this aspect in the growth of their students, especially in terms of self-confidence, ability, innovation, and leadership temperament, so as to improve students' entrepreneurial quality and increase students' entrepreneurial ability.

(3) Entrepreneurial attitude

It can be seen from the above table that each observation variable in entrepreneurial attitude has reached the level of significance, indicating that each indicator variable has a good fit with the potential variables. We should see that in terms of students' entrepreneurial attitude, social status and obtaining money and wealth have a greater influence, which is also consistent with the performance of the interview with middle school students. Compared with ordinary students, students with entrepreneurial ideas show more desire to obtain wealth, and also show a more active attitude towards learning and life. Therefore, schools and society should pay attention to guiding students to establish a correct entrepreneurial attitude in order to promote their entrepreneurial success. At the same time, we should also see that in terms of factors affecting entrepreneurial attitudes, the awareness of self-realization and serving the country is also relatively strong. Combined with the above description that the age group of the tested sample is mainly between 20 and 25 years old, it can be seen that although the new generation of young people is generally considered to be more self-centered, they are not ambiguous in terms of national responsibility.

(4) Entrepreneurial environment

It can be seen from the above table that among the observation variables of the entrepreneurial environment, they have basically reached the level of significance. In the macro environment, the path coefficients of government supporting services, government policies, government funds, and social tolerance are all above 0.6. It shows that they have a greater influence on the entrepreneurial environment. In addition, from the previous analysis, we can see that the entrepreneurial environment of college students has a significant influence on their entrepreneurial tendency.

## 4 CONCLUSION

Intention is a mental state that leads people to pay attention to a specific object (goal) or the way to achieve something. Entrepreneurial intention is a more specific category, which is a psychological tendency to establish a new organization, a new enterprise, or create new value for the original enterprise or organization. Referring to the existing data, many research scholars

have conducted a considerable number of empirical studies on college students' entrepreneurial intention as a dependent variable, making its pre-acting factors present diversity. Through the analysis of the factors affecting college students' entrepreneurial tendencies by the structural equation model, this paper explores the effective ways to cultivate college students' entrepreneurial quality, so as to enhance the pertinence and effectiveness of college entrepreneurial education. Through the experimental research, it can be seen that the analysis model of influencing factors of college students' entrepreneurial tendencies combined with the SEM model proposed in this paper can play a certain role in the analysis of college students' entrepreneurial tendencies, and can provide theoretical reference for the formulation of relevant policies.

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