

## Research Article

# Construction of Incentive Mechanism for College Students' Innovation and Entrepreneurship Based on Analytic Hierarchy Process

Tong Shen, Yao Yao, Lihua Liu , and Wei Guo 

College of Innovation & Entrepreneurship, Shanghai Jianqiao University, Shanghai 201306, China

Correspondence should be addressed to Wei Guo; 02027@gench.edu.cn

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In order to solve the current problem of low willingness of college students to innovate and start a business, this paper puts forward the method of college students' innovation and entrepreneurship incentive mechanism based on analytic hierarchy process, improves the innovation and entrepreneurship incentive system for college students, optimizes the evaluation index of innovation and entrepreneurship of college students through the analytic hierarchy process, combines the triangular fuzzy number to express the weight evaluation value of the enterprise environmental behavior index, uses the binary semantics to express the evaluation value of the evaluation subcriteria to the enterprise environmental behavior, optimizes the evaluation algorithm, and selects a reasonable college students' innovation and entrepreneurship incentive scheme. The experimental verification results show that the data of innovation and entrepreneurship activities of the proposed method based on analytic hierarchy process for the construction of incentive mechanism for innovation and entrepreneurship of college students are more than 70%, and the highest is 84.5%. The rationality of the method is more than 90%, and the highest is 96.1%. It has high practicability in practical application process and can better encourage college students to participate in innovation and entrepreneurship activities.

## 1. Introduction

In recent years, the number of college graduates has continued to rise, and the employment pressure of college students has increased sharply. The state has actively taken various measures to help college students get out of the employment dilemma [1]. Colleges and universities have opened entrepreneurship courses in response to national policies and established various entrepreneurship bases according to students' entrepreneurial needs [2]. However, many entrepreneurial bases in colleges and universities have problems such as late start-up time, insufficient operating funds, incomplete teachers, and incomplete entrepreneurial courses, which lead to college students unable to systematically master entrepreneurial knowledge, and their enthusiasm is not high. The role of ability is not obvious, and social support has no obvious incentive effect on college students' entrepreneurship [3]. As a result, college students

have low entrepreneurial enthusiasm and do not actively participate in innovative and entrepreneurial activities.

Zheng et al. [4] proposed an incentive mechanism for college students' employment and entrepreneurship under the background of "mass entrepreneurship and innovation." The rate of innovation and entrepreneurship of college students is low, but the rationality of this method is low. Zhang [5] proposed an incentive mechanism for college students' innovation and entrepreneurship, analyzed the problems existing in the incentive mechanism for college students' entrepreneurship, improved the incentive mechanism for college students' innovation and entrepreneurship, and constructed the incentive mechanism for college students' innovation and entrepreneurship. The principle of compliance, the idea of optimizing the incentive mechanism of innovation and entrepreneurship in colleges and universities, and the measures of incentive mechanism for innovation and entrepreneurship in colleges and universities are as follows,

but this method is not comprehensive enough in the analysis of incentive mechanism, and there is one-sidedness.

Aiming at the above problems, this paper proposes a method for college students' innovation and entrepreneurship incentive mechanism based on AHP. The collaborative incentive mechanism of the elements, and through the analytic hierarchy process to optimize the evaluation indicators, optimizes the innovation and entrepreneurship incentive mechanism of college students from the aspects of innovation and entrepreneurship needs, organizational implementation procedures, and training evaluation indicators and realizes the innovation and entrepreneurship incentive mechanism of college students, in order to solve the difficult problem of college students' innovation and entrepreneurship, and contribute to the development of society.

## 2. Construction of Incentive Mechanism for College Students' Innovation and Entrepreneurship

The incentive mechanism of college students' innovation and entrepreneurship designed in this paper mainly consists of three parts, namely, the construction of college students' innovation and entrepreneurship incentive system, the evaluation algorithm of college students' innovation and entrepreneurship mechanism based on analytic hierarchy process, and the optimization of college students' innovation and entrepreneurship incentive mechanism. This paper mainly uses the analytic hierarchy process to improve the incentive mechanism of college students' innovation and entrepreneurship to provide help for college students' innovation and entrepreneurship.

*2.1. Construction of College Students' Innovation and Entrepreneurship Incentive System.* The incentive mechanism for innovation and entrepreneurship is based on a systematic system and gives full play to the initiative of students. Compared with other entrepreneurs, college students in colleges and universities, as special ages and social classes, are senior mental workers trained by the state [6]. College students have been engaged in mental work, with complex and flexible ideas, unique imagination and creativity, ability, and willingness to complete corresponding tasks and work independently. They can apply the scientific knowledge they have learned for so many years to practical activities and turn cultural knowledge into practice. However, due to the influence of exam oriented education, college students lack the awareness of innovation and entrepreneurship, and there is no common sense of finance, law, economy, and management related to entrepreneurship in textbooks [7]. They lack life experience, social experience, interpersonal skills, and correct methods to deal with things. Therefore, college education is needed to implement a necessary, feasible, effective, and targeted innovation and entrepreneurship incentive mechanism for college students. The entrepreneurial incentive mechanism of college students is essentially a process in which individuals form entrepreneurial will under the guidance of social environment and then transform it into entrepreneurial action. It can be

analyzed from the perspective of social cognitive theory. Analytic hierarchy process believes that only when individuals, behavior, and environment enter a harmonious state can they promote the process of learning and cognition. The theory of planned behavior further points out that the generation of individual behavior first needs the promotion of subjective will, and the consistency of subjective paradigm is behavior attitude, which is the key to the generation of subjective will [8]. Similarly, the generation of college students' entrepreneurial behavior first depends on entrepreneurial will, which requires the consistency and interaction of entrepreneurial ability, entrepreneurial education, and entrepreneurial environment. Through the analysis of relevant literature, it can be found that the research on college students' entrepreneurship mechanism is mainly carried out from four aspects, as shown in Figure 1:

Entrepreneurship education is an educational activity aimed at improving the entrepreneurial ability of college students, cultivating entrepreneurial talents, and opening up and expanding the development space in various fields. In essence, entrepreneurship education is a new kind of survival education, development education, innovation education, and lifelong education [9]. Entrepreneurship education is an external factor that promotes the entrepreneurial mechanism of college students and plays an incentive role through certain intermediary factors. Some scholars have confirmed that entrepreneurship education carried out by schools is closely related to the improvement of college students' entrepreneurial ability. However, there are some disputes about the impact of entrepreneurship education on entrepreneurship intention. Scholars generally believe that the impact of entrepreneurship education on entrepreneurship intention needs an intermediary role. In accordance with the requirements of the Ministry of Education, colleges and universities offer entrepreneurship training courses and hold various forms of entrepreneurship competitions [10]. Qualified colleges and universities have built entrepreneurship practice platforms and on-campus entrepreneurship incubation bases and set up majors or professional directions related to entrepreneurship. Based on the above factors, this paper decomposes entrepreneurship education into entrepreneurship courses and entrepreneurship services for empirical research. Entrepreneurship ability is a relatively broad concept, which can be divided into individual entrepreneurship ability, team entrepreneurship ability, and corporate entrepreneurship ability. This paper mainly studies the individual entrepreneurial ability of college students. Individual entrepreneurial ability refers to the comprehensive ability owned by individual entrepreneurs, which is conducive to entrepreneurial success and the growth of entrepreneurial enterprises, and brings entrepreneurial performance. Personal entrepreneurial ability can be acquired through training, not innate [11]. There are many studies on the composition of college students' entrepreneurial ability, and many scholars use different research methods, research perspectives, and survey objects to give different conclusions. At the same time, the research conclusions of many scholars have proved that college students' entrepreneurial ability plays a significant role in improving their

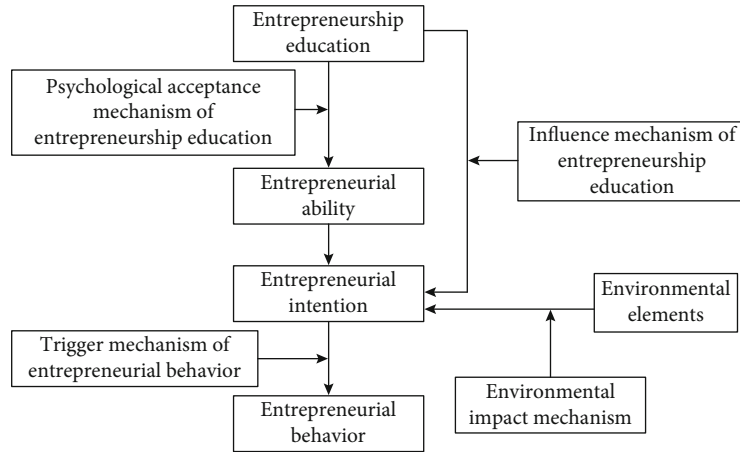


FIGURE 1: Research perspective of college students' entrepreneurship mechanism.

entrepreneurial willingness. This paper divides the dimensions of college students' entrepreneurial ability into opportunity exploration ability, organization and management ability, strategic decision-making ability, resource integration ability, innovation and creativity ability, and frustration tolerance ability [12]. According to the analysis of the constituent elements of college students' entrepreneurship incentive mechanism, we can get the theoretical model of college students' entrepreneurship incentive mechanism, as shown in Figure 2.

The research on the incentive mechanism of college students' innovation and entrepreneurship in China refers to that it is still in the early stage. Specifically, the content of the incentive mechanism of innovation and entrepreneurship is still in the stage of publicizing and learning from foreign countries [13]. The key point is to discuss the current situation and significance of the establishment and implementation of innovation and entrepreneurship incentive mechanism and also to discuss its importance and necessity, which is generally the interpretation stage. Although these discussions are very beneficial to the progress of the implementation of the incentive mechanism for college students' innovation and entrepreneurship, they are of little value in academic research and do not promote its development very much.

Lack of professional groups engaged in the research on the incentive mechanism of College Students' innovation and entrepreneurship [14]. In China, because most colleges and universities do not offer innovation and entrepreneurship courses and majors, researchers are generally people from other majors, and there is a lack of researchers in this major. In contrast, the number of foreign scholars specializing in the incentive mechanism of college students' innovation and entrepreneurship is very strong. For example, more than a dozen professors in Harvard Business School alone focus on the mechanism of entrepreneurship. There is a lack of professional platform to study the incentive mechanism of college students' innovation and entrepreneurship. Special magazines and newspapers play an important role as a communication platform for the incentive mechanism of innovation and entrepreneurship. There are hundreds of confirmed publications related to this field

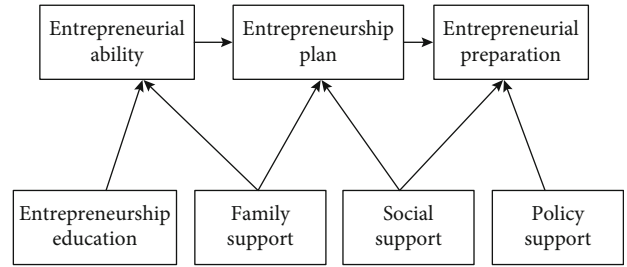


FIGURE 2: Theoretical model of college students' entrepreneurship incentive mechanism.

[15]. Based on my research and analysis, there is no exclusive research field on the incentive mechanism of college students' innovation and entrepreneurship in China's journals. Its research is mainly qualitative research, and most of them are a general overview of the current situation and importance. The research methods used lack quantitative methods. From the research methods, we can see the in-depth research degree of a country in a professional field. From this perspective, the research on the incentive mechanism of innovation and entrepreneurship in China is still in its early stage [16]. Our country needs to spend more time and managers to cultivate more innovative and entrepreneurial talents and new enterprises and promote the virtuous circle of employment and economic development. Incentive theory is the core theory used to deal with the relationship among needs, motivation, goals, and behavior in behavioral science. It is a summary of the principles and methods of how to meet people's various needs and mobilize people's enthusiasm. Modern western incentive theory was first summarized in the activities of incentive mechanism in the West. Its content can be divided into the following: content incentive theory, behavior transformation incentive theory, process incentive theory, and comprehensive incentive theory [17]. Content incentive theory refers to the theory of studying the reasons of incentive and the specific elements and methods of incentive function. The main task of this theory is to meet people's needs, that is, in order to

stimulate people's motivation, people can meet what they need. There are mainly the following four theories in Figure 3.

"Innovation" and "entrepreneurship" are two different concepts, but they are closely inseparable. Innovation refers to the use of known knowledge to break the tradition and find some new and unique things or ideas. The essence of innovation is to break the old thinking set, adapt to the new situation, and explore new ways or things. Entrepreneurship is the process of using one's own resources or platform to create greater economic or social value and achieve a certain goal [18]. Entrepreneurship must make its own characteristics, pay time and sweat, bear the corresponding economic and spiritual risks, and finally obtain wealth, a sense of achievement or the realization of dreams. From this point of view, entrepreneurship is actually the process of innovation, no innovation, and no entrepreneurship. Entrepreneurship must be based on the ability to innovate. Therefore, the two are organically unified. Therefore, the two are organically unified, which is interrelated and inseparable for college students.

During or after graduation, they choose their own entrepreneurial direction according to their interests and majors and use their own innovation and entrepreneurship ability and resource platform to open up their own career. College students are a group of thoughtful intellectuals who grow up in colleges and universities [19]. They receive examination oriented education from small to large and lack social practical experience and funds. Their innovation and entrepreneurship must have a great impact on the society and the country. They are entrepreneurs who come out of colleges and universities. Based on this, the comprehensive incentive theory of innovation and entrepreneurship is developed on the basis of the previous three incentive theories, which is their synthesis. Any incentive theory cannot meet people's needs in complex real life; so, it needs to be used comprehensively [20]. The content of this model is that people get two types of rewards after achieving certain results. First, external rewards include salary, promotion, and recognition. According to AHP, extrinsic rewards need to satisfy some needs. Because a person's achievements are difficult to quantify, these rewards consider many factors and do not entirely depend on the individual. Another kind of reward is internal reward. This is the reward for good work performance. For example, they feel valuable to society, understanding and ability, self affirmation, etc., and the corresponding number of high-level needs is met. However, it is not the internal and external returns that can satisfy them, and they are destined to rely on "fair return." In other words, a person will compare the reward he deserves and the reward he has received. If it is equal, he will feel happy and encouraged, and he will do better in his later work. If it is not "fair return," even if he gets more, he will not feel happy and affect his future work. It is roughly divided into four comprehensive incentive theories.

*2.2. Evaluation Algorithm of College Students' Innovation and Entrepreneurship Mechanism Based on Analytic Hierarchy Process.* Colleges and universities are an important social

Two factor theory	Incentive factors	Health factors			
Hierarchy of needs	self-realization	Respect	Ascription	Security	Physiology
ERG theory	Growth needs	Relationship needs	Need of existence		
Incentive need theory	Achievement needs	Power needs	Belonging needs		

FIGURE 3: Structure system of student innovation and entrepreneurship incentive mechanism.

institution, undertaking the important task of educating talents, an important link for college students to become talents, and an important transitional growth period for college students from middle school to society. In the four years of undergraduate education, college education affects college students' thoughts and dreams and even determines their life direction. At this age, college students have a strong desire to learn and acquire knowledge and ability. It has the awareness and desire to participate independently. They want to participate in various activities such as learning, culture, sports, and social practice in the school, exercise themselves, grow themselves, and realize their self-worth. Young people's thinking in this period has been greatly developed. They like independent thinking, flexible and broad thinking, and love innovation and personalization: strong self-esteem, strong need for self realization, expectation of recognition from the group and society, etc. Therefore, the four-year education of college students is particularly important.

In order to realize the innovation and entrepreneurship achievements of college students, colleges and universities need to establish a set of mechanism to encourage college students' innovation and entrepreneurship. The university's incentive mechanism for college students' innovation and entrepreneurship is a management mechanism that, on the basis of establishing the goal of cultivating innovative and entrepreneurial talents in the university system, the university implements a set of measures to exert influence on the college students' group, and this method makes the behavior of college students gradually approach the training goal and stimulates the internal identity and external behavior of college students through incentive measures, so as to achieve the goal of innovation and entrepreneurship. Incentive theory can be divided into traditional process incentive theory and content incentive theory. Process incentive theory focuses on the research of incentive process and holds that the purpose of behavior is to achieve their goals, and these goals exist outside the behavior. Enterprise managers should formulate measures to stimulate and guide people's behavior process and make it towards organizational goals with the help of the external goals pursued by people's behavior. It can be seen that the process incentive theory emphasizes the influence of external incentive factors on people's behavior, mainly including basic salary, bonus, insurance leave



and other benefits, allowances, and company policies. Content-based incentive theory guides employees' behavior by stimulating the internal incentive factors that affect people's behavior. These intrinsic incentive factors mainly include job rotation, job enrichment, and job challenge. The comprehensive incentive theory tells us that the motivation comes from the intrinsic value of the work task, the possibility of completing the work, the expectation of reward, and the possibility of obtaining reward. Therefore, in order to improve the incentive effect of employees, it is necessary to focus on the double improvement of internal incentives and external incentives. From this point of view, this paper divides incentive mechanism into internal incentive mechanism and external incentive mechanism. The restraint mechanism is divided into enterprise internal restraint mechanism and enterprise external restraint mechanism. As shown in Figure 4, the incentive and restraint mechanism system is an organic unified system of incentive mechanism and restraint mechanism.

Environmental factors are the synthesis of many external factors affecting college students' entrepreneurial willingness and behavior. They are the growth, education, and support environment faced by the formation and promotion of college students' entrepreneurial ability, including school, family, and social environment. Some scholars study college students' entrepreneurship from the perspective of ecological environment, and they believe that the internal ecological environment of college students' entrepreneurship includes entrepreneurial ideas and entrepreneurial quality, while the external ecological environment includes cultural environment, economic environment, and policy environment. Therefore, environmental factors are complicated, and because the environmental elements are more complex, and the relevance of each part is not obvious, and the promotion effect on college students' entrepreneurship is different, this paper divides the environmental elements into three elements: family support, social support, and policy support. School support overlaps with entrepreneurship education; so, it is not included in the entrepreneurial environmental elements. Family support focuses on the study of the attitude towards entrepreneurship in the family environment, financial support, and the impact of teaching entrepreneurial ability on college students' entrepreneurial ability and entrepreneurial plan. Social support focuses on the impact of social entrepreneurship atmosphere, social entrepreneurship training, and social entrepreneurship incubation on college students' entrepreneurship plan and entrepreneurship preparation. In terms of policy support, the focus is on the impact of the national entrepreneurial incentive policy and entrepreneurial guarantee policy on college students' entrepreneurial preparation. Entrepreneurial intention is a subjective attitude of potential entrepreneurs about whether to engage in entrepreneurial activities. It is a general description of people's characteristics similar to entrepreneurs and people's attitude towards entrepreneurship and entrepreneurial ability. It is considered to be the best predictor of entrepreneurial behavior. In order to facilitate the investigation, this paper characterizes entrepreneurial intention as entrepreneurial plan. Entrepreneurial preparation is the

behavior of college students to carry out practical activities related to entrepreneurship and make targeted preparations for entrepreneurship after graduation. It is the specific manifestation of college students' entrepreneurial behavior. Let  $A, B$  be a finite set  $P(S)$ , and  $\mu(S)$  be expressed as a power set of  $S$ . if  $\mu(\emptyset)$  is a set function, and if the following conditions are met, it is called "fuzzy measure defined on  $\mu(A)$  and  $\mu(B)$ "

$$\begin{cases} \mu(\emptyset) = 0, \\ \mu(S) = 1, \\ A, B \in P(S), \\ A \subseteq B \Rightarrow \mu(A) \leq \mu(B). \end{cases} \quad (1)$$

For finite sets  $\lambda$ , the following conditions are satisfied:

$$g_\lambda(D) = \begin{cases} \frac{1}{\lambda} \left( \prod_{i \in D} [1 + \lambda(\emptyset)] - 1 \right) \\ \sum_{i \in D} \mu(S) - AB \end{cases} \quad (2)$$

Because  $\mu(S) = 1$ , the value can be obtained by

$$\prod_{i=1}^n [1 + \lambda g_\lambda(D)] - 1 = p_l^n v(f, g). \quad (3)$$

The cost of implementing environmental protection actions  $p_h^{ea} h_y^{ea}$  by an enterprise shall be less than that of not implementing environmental protection actions  $p_n^{ea} c^{ue}$ , and the following conditions shall be met.

$$g_\lambda(D) + p_h^{ea} h_y^{ea} \leq p_n^{ea} c^{ue} + p_l^n v(f, g). \quad (4)$$

We can get

$$\left( \prod_{i \in D} [1 + \lambda(\emptyset)] - 1 \right) - p_l^n v(f, g) \left( p_h^n h_n^{ea} - p_h^{ea} h_y^{ea} \right) = c^m. \quad (5)$$

In the face of enterprise environmental protection action report, financial institutions have to decide whether to  $p_l^n$  evaluate and design enterprise environmental protection action report. Financial institutions do not have accurate grasp of enterprise environmental protection action. Assuming that the probability of enterprise implementing environmental protection action is  $p_h^n h_n^{ea}$  and  $p_h^{ea} h_y^{ex}$ , financial institutions are sure that the enterprise has not implemented environmental protection action;  $P = 1$ , financial institutions know exactly that the enterprise has implemented environmental protection actions. When the cost of financial institutions not  $v(f, g)$  evaluating the environmental protection actions of enterprises is less than or equal to the cost of financial institutions  $m$  evaluating the environmental protection actions of enterprises, financial institutions will not  $n$  evaluate the risk strategies of environmental protection

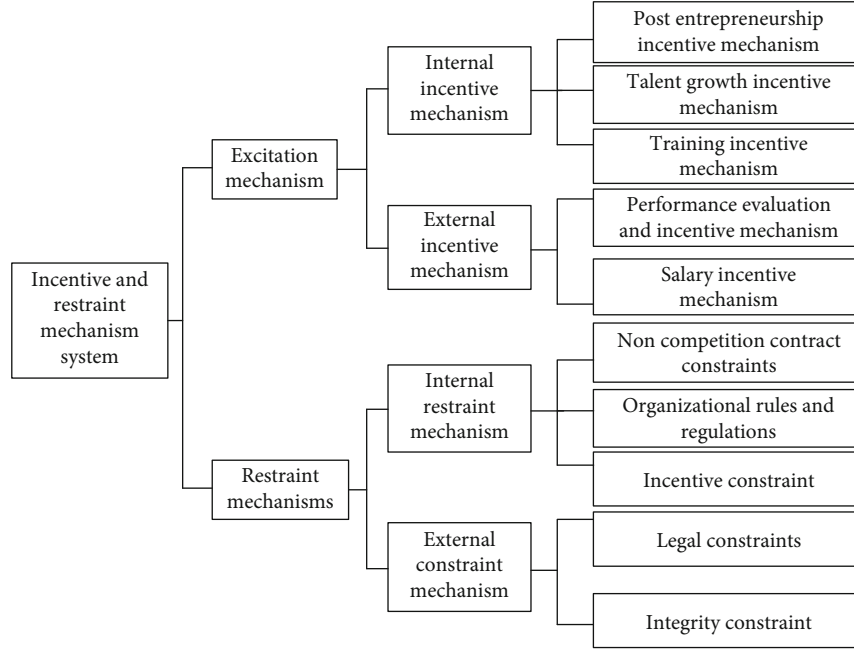


FIGURE 4: Research framework of incentive and restraint mechanism system.

actions of enterprises. At this time, the following expression shall be satisfied:

$$\left( c^m + v(f, g)(p_l^n - p_l^{ea}) + nm(p_h^n h_n^{ea} - p_h^{ea} h_y^{ex}) \right) \leq 1 - c^{vea}. \quad (6)$$

In the process of enterprise environmental behavior evaluation, due to the complexity and uncertainty of the evaluation object and the fuzziness of human thinking, it is difficult for decision makers to use an accurate value to describe the relative importance of evaluation criteria. Generally, they prefer to be given directly in language. Therefore, a more reasonable method is to use fuzzy number and binary semantics. Intuitionistic fuzzy numbers and other imprecise values are used to quantitatively express the subjective judgment of decision makers. Triangular fuzzy number is used to represent the weight evaluation value of enterprise environmental behavior index, and binary semantics is used to represent the evaluation value of enterprise environmental behavior of evaluation subcriteria:

$$M + N = (m_l + n_l, m_m + n_m, m_r + n_r), \quad (7)$$

$$M - N = (m_l - n_r, m_m - n_m, m_r - n_l). \quad (8)$$

The survey shows that among today's college students, boys are more inclined to start a business, boys prefer self challenge, while girls are more inclined to feel safe, find a stable job, and live a stable life: there are more boys majoring in science and engineering, and most of the start-up enterprises or companies are related to science and engineering; so, they know better and are more conducive to start a business. The college students who have just entered the univer-

sity have just entered the university from the middle school of examination oriented education temporarily, and there is no entrepreneurial concept. The college students who are close to graduation are more affected by the university and society and will consider employment. However, most graduates will still choose to find a job. Entrepreneurship is a field that many college students are not familiar with or have not contacted and considered at all. They prefer to find a job and accumulate social experience. In today's severe employment situation, there are also many people who choose to continue their further study. Among college students, although they have an attitude of appreciation and recognition for entrepreneurship, think entrepreneurship is a good choice and realize freedom and rich wealth, and entrepreneurs are still a minority.

*2.3. Optimization of Incentive Mechanism for College Students' Innovation and Entrepreneurship.* Most college students who start a business start their own business because they want to make a career, realize their self-worth, and be recognized by the society. At the same time, college students who have difficulty finding employment will also choose to start a business to gain profits. They think entrepreneurship is also a road, "all roads lead to Rome", but most graduates who find a suitable job will give up this road. Entrepreneurial college students generally have nothing to do with their majors in the field of entrepreneurship, which is related to China's higher education. On the one hand, it can be seen that our higher education still stays at the point of imparting textbook knowledge, lacks practical knowledge, and is divorced from society. On the other hand, it can also be seen that college students rarely participate in social practice and lack professional related practical experience. This requires that the higher education system should continue

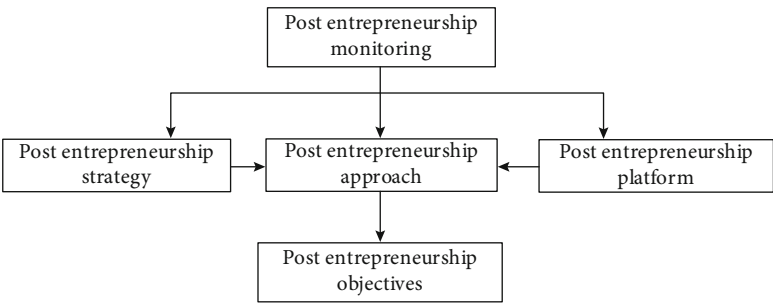


FIGURE 5: Strategic framework of enterprise post innovation and entrepreneurship.

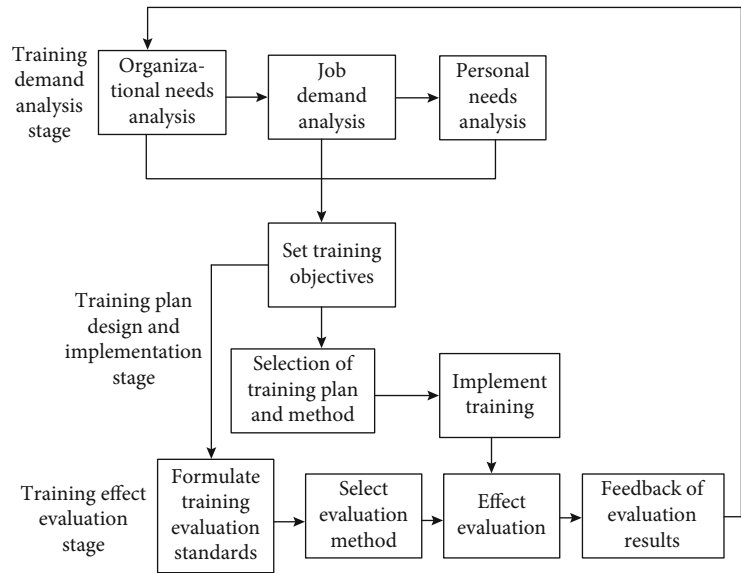


FIGURE 6: Operation mode of training mechanism of innovative and entrepreneurial enterprises.

to explore and improve, and schools should make reforms so that college students can learn their majors without choosing them. Theory must be combined with practice, so that college students are truly professional talents and can realize their self-worth and social value. From the above, it can be seen that the examination oriented education received for so many years still continues to colleges and universities, and colleges and universities have less publicity and education for college students' innovation and entrepreneurship. At the current stage, colleges and universities need to increase publicity efforts, combined with educational explanations, to improve college students' mastery of innovation and entrepreneurship. No matter doing learning or academic work, they cannot be divorced from reality. No matter how proficient you are in learning theoretical knowledge, the practice of theoretical knowledge must not be ignored. The knowledge and practical ability learned in practice are sometimes more important. As shown in Figure 5, the innovation and entrepreneurship mechanism of college students includes the following key elements: entrepreneurship platform, entrepreneurship radar, entrepreneurship approach, and entrepreneurship goal. The goal of innovation and entrepreneurship mechanism is to carry

forward the entrepreneurial spirit of enterprises, improve the overall innovation efficiency of enterprises, and promote development with innovation.

Innovation and entrepreneurship strategy is the guide, innovation and entrepreneurship platform is the foundation, innovation and entrepreneurship approach is the means, and innovation and entrepreneurship monitoring is the guarantee. Strategic positioning is the premise and guiding ideology of innovation projects; so, it must be consistent with the business strategy of enterprises. Based on the existing capital, technology, and other enterprise resource entrepreneurship platforms, enterprises can achieve their innovation and entrepreneurship goals through innovation and entrepreneurship. In this process, innovation and entrepreneurship monitoring plays a guarantee function of supervision, regulation, measurement, and early warning. Based on the design idea of management information system, the training system is divided into three stages: training demand analysis stage, training plan design and implementation stage, and training effect evaluation stage. The model of innovation and entrepreneurship training system is shown in Figure 6.

The needs mainly analyze three levels of needs, namely, organizational needs, work needs, and personal needs

TABLE 1: Analysis contents of innovation and entrepreneurship needs of college students.

Demand hierarchy	Content description
Organizational needs	Analyze the impact of the internal and external environment of the enterprise on the training system
Job requirements	Specific analysis of each post according to the work statement
Personal needs	Train employees

TABLE 2: Organization and implementation procedures of training under different training objectives.

Training objectives	Role cognition	Change of attitude and motivation	Impart knowledge and develop skills
Training content	Professional ethics	Organizational culture	Management knowledge, technical business, and operation skills
Type	Cognitive and behavioral training	Motivation training	Post and technical level training
Mode	Cosplay	Special lecture	Training and further study
Result	Organizational value experience	Attitude and emotional experience	Knowledge and skills
Assessment	Does it improve organizational commitment	Does it improve self-efficacy	Are training results applied to improve job performance

TABLE 3: Evaluation indicators of college students' innovation and entrepreneurship training.

Evaluation level	Describe	Evaluating indicator
Reaction level	Staff evaluation of teachers	Employee training satisfaction
Learning level	Evaluation of teachers and human resources departments	Attendance rate and completion of training survey
Work and behavior level	Changes in employees' work and behavior after training	Work enthusiasm
Performance level	Impact of training on performance	Absence rate, accident rate, productivity index, and quality status index

analysis. Organizational demand analysis is to clarify the short-term and long-term training requirements of enterprises and solve the problems of demand strategy. Job demand analysis refers to the training required according to the requirements of specific jobs. It solves the problems of training content and training methods. Personal need analysis is based on everyone's current work performance, which solves the problem of who should be trained and the determination of training objects. The contents of innovation and entrepreneurship demand analysis are shown in Table 1.

Enterprises use this to formulate corporate training objectives—the transformation of role perception, attitude, and motivation or impart knowledge and cultivate skills. This goal is also the basis for the effect evaluation of enterprise training and the feedback of the results. The innovation and entrepreneurship training funds are withdrawn according to 1.5% of the total wages of employees, and an appropriate part of the enterprise's own funds can be used for employee training. The organization and implementation procedures of innovation and entrepreneurship training under different training objectives are shown in Table 2.

Training evaluation can be carried out from two aspects: on the one hand, trainees evaluate training teachers. On the other hand, the training teachers and human resources department shall assess the participation, the learning effect

of the trainers in the training will be known, and whether there is any change in their work behavior after the training course. The evaluation level and indicators of innovation and entrepreneurship training are shown in Table 3.

The main purpose of the evaluation is to judge whether employees are competent or not through comprehensive evaluation and take it as the basic basis of human resource management, so as to effectively ensure the scientificity of employees' remuneration, promotion, transfer, vocational skill development, dismissal, and other work, so as to give employees a reasonable positioning. On the basis of performance evaluation, employees can understand what to do and how far they have achieved. This is a long-term incentive to encourage employees to work hard to improve their performance.

### 3. Analysis of Experimental Results

In order to prove the advantages of the proposed method, the existing methods are used to solve the above examples, and the generalized fuzzy integral ordered evaluation algorithm is proposed for comparative analysis. To facilitate comparison, the aggregation results are adjusted according to the  $\gamma$  parameter, ahp index instance information is summarized, and reaggregate them again by using operators and operators, as shown in Table 4.



TABLE 4: Fuzzy score of dual hesitation obtained by analytic hierarchy process index.

	S (d1)	S (d2)	S (d3)	S (d4)	S (d5)	Ranking orders
$y = 2$	-0.1032	0.7319	0.1587	0.5028	0.1828	A2 > A4 > A5 > A3 > A1
$y = 4$	-0.0655	0.7328	0.1652	0.5036	0.2056	A2 > A4 > A5 > A3 > A1
$y = 8$	0.0655	0.7561	0.1872	0.5065	0.2671	A2 > A4 > A5 > A3 > A1
$y = 10$	0.1398	0.7405	0.2092	0.5096	0.2953	A2 > A4 > A5 > A3 > A1

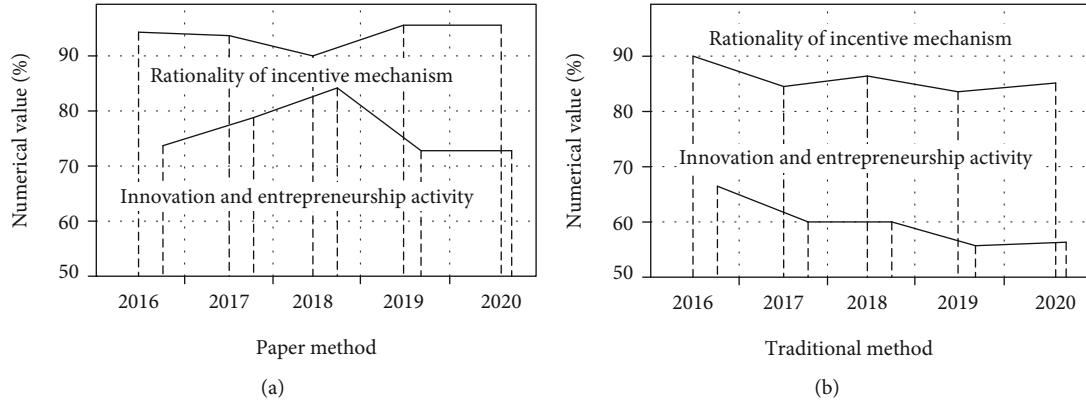


FIGURE 7: Comparison of entrepreneurial activity under different incentive mechanisms.

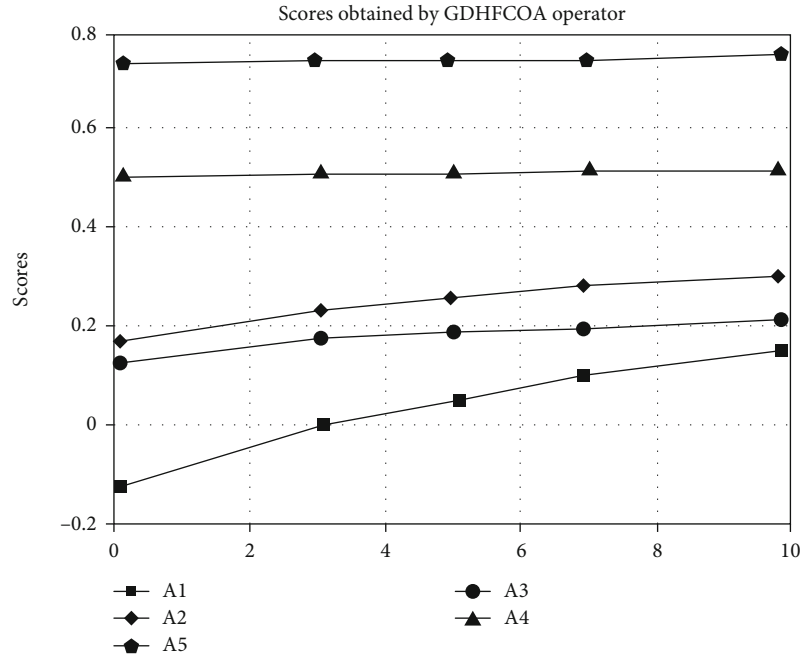


FIGURE 8: Comprehensive evaluation results of innovation and entrepreneurship incentive mechanism.

Compare the survey results with the economic development, calculate the entrepreneurial activity through the above algorithm, obtain the entrepreneurial activity value and incentive data, and draw a graph to obtain the following results.

Figure 7 shows that the proposed method of innovation of entrepreneurial activity data is over 70%, the highest reached 84.5%, its rationality is over 90%, the highest

reached 96.1%, but the innovation of the traditional method of entrepreneurial activity is below 66.7%, and rationality is lower than 90%; so, the rationality of the proposed method is higher, due to the traditional method. Through the above survey results, it is difficult to find that there is a positive correlation between innovation activity and the development of incentive mechanism, which has an important impact on the development of municipal economy. The analytic hierarchy

process is used to evaluate the environmental managers of five enterprises. The evaluation results are related to the value of parameters, as follows.

It can be seen from Figure 8 that the scoring function of the comprehensive fuzzy value of innovative and entrepreneurial enterprises has a certain value for the parameters, and decision-makers can choose different enterprises according to their own preferences. Although the comprehensive scoring function of the innovative and entrepreneurial enterprises increases with the value of the parameters, however, it is confirmed that the incentive mechanism for college students' innovation and entrepreneurship based on ANALYTIC hierarchy Process has strong practicability. Among them, the score of A5 enterprises is the highest, all above 0.72, and its score is very stable, which can effectively analyze the score of enterprises, provide reliable reference for college students, and fully meet the research requirements.

#### 4. Conclusion

College students' entrepreneurial ability, entrepreneurial willingness, and entrepreneurial behavior have a positive role, which is consistent with the conclusions of previous studies. At present, the main factors to stimulate college students' entrepreneurship in China come from family support and policy support. However, the effect of entrepreneurship education on the improvement of entrepreneurial ability of college students is not good, and the social environment does not recognize college students' entrepreneurship. Based on previous studies, the role of entrepreneurship education and social environment on college students' entrepreneurship incentive is controversial. Through empirical research, this paper proves that the above two factors have no obvious effect on the entrepreneurial incentive of college students in China. Generally speaking, the trigger mechanism in the entrepreneurship incentive mechanism of college students in China is relatively perfect, but there are deficiencies in the entrepreneurship ability training mechanism and environmental incentive and guarantee mechanism. This paper believes that we can further improve China's college students' entrepreneurial incentive mechanism from three aspects: optimizing the allocation of entrepreneurial incentive elements, improving the guarantee mechanism of college students' entrepreneurial environment, and strengthening the top-level design of college students' entrepreneurial incentive. In this paper, by constructing the theoretical model of college students' entrepreneurship incentive mechanism, constructing the structure system of students' innovation and entrepreneurship incentive mechanism, using the AHP to construct the research framework and evaluation algorithm of the incentive and restraint mechanism system, and through the optimization algorithm such as the operation mode of the innovation and entrepreneurship enterprise training mechanism, the innovation of college students is completed. In the follow-up research, we will conduct more detailed research on school-enterprise cooperation, strengthen the degree of school-enterprise cooperation, and further improve the success rate of college students' innovation and entrepreneurship.

#### Data Availability

No data were used to support this study.

#### Conflicts of Interest

These have no potential competing interests in our paper.

#### Authors' Contributions

And all authors have seen the manuscript and approved to submit to your journal.

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