ARE BU BACHELOR'S STUDENTS ENROLLED IN ART RELATED CURRICULUMS MORE CREATIVE THAN STUDENTS ENROLLED IN OTHER MAJORS?

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Are BU Bachelor's Students Enrolled in Art Related Curriculums More Creative than Students Enrolled in other Majors? (59 pp.)

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ABSTRACT

This research seeks to explore whether art students are more creative than students in other majors. Use the results and recommendations of this analysis as a guide to planning and categorizing creativity to better understand the factors that affect creativity. Using the questionnaire survey method and interview questionnaire method, N factors were collected, including: 1).....2) ..... 3) .....4)..... Use the data in these analysis results to summarize the BU Which major student is more creative, provides guidance and evaluates results.

Keywords: Relatively Before University Majors, Art Education, Creativity Factor, Creativity Scale, Investigation and Analysis

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Peizhen Jiao

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Creativity is the premise of all inventions and is the basis for a nation to keep its vitality. Our human society is a history of innovation, the development of human society is a history of innovation, is a history of creative thinking, practice, creativity. This is the truth that we have always recognized. After watching the teacher's lecture on creativity in foreign countries in class our became more clear about the importance of creativity. So what is creativity? Creativity is a uniquely human ability. Creativity is the people in the process of creative problem solving performance out of a personality psychological characteristics, is under the certain purpose, use all their own information, to play to their creative thinking, to produce a novel, unique, has the ability to social or personal value of product, its core is creative thinking ability. Simply put, creativity is the ability to innovate. Creativity plays an important role in a person, a nation, and even a country. In human society, only new things have vitality and new products have markets. Only with creativity can one make progress. If a person makes extraordinary achievements, his life will be full of innovation (Li, Zhao & Begley, 2015).

Creativity is the first to create something new. In Cihai creation is "creating something unprecedented." Creation is a complex human activity. Therefore, to define it effectively, it must take into account the fact that creation itself includes the process of creation and the results of creation. Creation must first be a practical process with a rich creative activity experience, and secondly, the practical process should have

original results. Therefore, creation is a practical process with a rich creative experience accompanied by the emergence of original results.

For people, creativity is not only a gift and talent, but also a responsibility. Creativity is not (an unexpected and unexpected solution to a difficult problem), nor can it be called out immediately. From the fruitful expression of creativity, creativity is the result of education, cultivation, and practice. The problem is to gain insight into the entire process of creative activity and create prerequisites for promoting creativity.

Creation is a very rich vocabulary, and people must not leave the innumerable achievements created by their predecessors. However, for a long time, people have a deep-rooted misunderstanding and preconceptions about creation in their minds and minds. They believe that creation is too esoteric, unattainable, too mysterious and unfathomable. It is the talent of a few "genius" inventors and scientists. What is done is beyond the reach of ordinary people.

Creativity refers to the psychological quality of using all known information for a certain purpose to produce a new, unique, social or personal product. It is the advanced form of human thought and the advanced manifestation of intelligence. From the perspective of creative process and results, creativity refers to the process in which individuals generate novel and unique ideas by extracting information, concept combination and concept generation, and the creativity level of individuals is mainly evaluated from three aspects: fluency, flexibility and originality. Through literature review, it is found that the current research on creativity mainly focuses on the connotation of creativity, theoretical model of creativity, influencing factors and creative education. Much attention has been paid to the influence factors of creativity research has been a large number of literature from the multilevel and multilingual to

delve into the influence factors of creativity, creativity has many influence factors, such as mental skills, knowledge, thinking style, personality characteristics, external environment support, intrinsic motivation, emotion, mental health, self-efficacy, etc. can be mainly classified as: individual characteristics, environmental factors and individual characteristics and environmental factors interaction (Zhang, 2002). Environmental characteristics such as organizational support behavior, organizational structure, etc. Individual characteristics such as: self-efficacy. The interaction between individual characteristics and environmental factors, such as: individual emotional state. Individual characteristics often influence individual creativity under the stimulation and induction of external environmental factors. Creativity is a kind of advanced mental function, it is associated with most of the internal and external factors, among them, the function is the most active emotional state, it is both individuality characteristic, and inseparable from the environmental cause, in addition, the mood has the function of information, motivation to promote function and cognitive development, the performance and development of individual creativity has a great influence.

Under the current education system, improving the creativity of college students in China urgently needs education innovation, and innovative education for students. From May 2nd to May 4th, 2010, in the discussion at the 4th China-Foreign University Presidents Forum on "University Creating an Innovative Human Growth Environment", Vice President of Shanghai University Zhou Zhewei said "The current problem is our school's Teachers, including principals, want to train this generation of young people with our model, and want to impose what we think is right on them. The responsibility of the university is not to let them inherit our mantle and not destroy

students. Creativity provides students with as many opportunities as possible, loosen them, and jump out of our frame." At present, the question that educators are very concerned about is whether the innovative ability and innovative spirit of the educated after innovation education can be to a certain extent to improve the level of creativity can be comprehensively reflected in the innovative ability and innovative spirit, so the innovative ability and innovative spirit of students can be measured by evaluating their creative ability.

1.2 Research Question

The question now is how to analyze and compare Baise University art students with other professional students to be more creative? Therefore, my research questions are as follows:

1.2.1 What are the factors that influence creativity?

1.2.2 What methods are used to test the creativity of students in Baise University?

1.3 Research Objectives

To compare student creativity, use the results and recommendations from this analysis as a guide to replanting and categorizing creativity to better understand the factors that influence creativity. Using questionnaire survey and interview questionnaire method, N factors were collected. This study took students of different majors in Baise University as research objects and made exploratory analysis. The comprehensive analysis summarizes whether the students' creativity is determined by internal factors or external factors. On this basis, use the data from these analysis

results to summarize whether art students are more creative, provide guidance and evaluate the results.

The purpose of this paper is to make an exploratory analysis of the undergraduates of Baise University by using the method of creativity test. Through the analysis of the evaluation results of Baise University students' creativity factors.

1.4 Scope of the Study

Undergraduate creativity research of Baise University

1.4.1 Research on the creativity of art students

1.4.2 Research on the creativity of non-art majors.

CHAPTER 2

LITERATURE REVIEW

2.1 Factors that Influence Creative Development

Wilford served as director of psychological association of the United States in 1950, in his inauguration speech, he took creativity as main point, advocating the importance of creativity, calling for academic circles the study of creativity. Ever since then, the creativity was increasingly brought to the attention of the psychological educational world.

In 1968, "genetic and genius" works of a British psychologist Bolton after between opened the correlation research between genetic and genius, and perspectives discussion of human creativity by part of the psychologists. On the definition of creativity, due to the difference of research interest and research perspectives, researchers tended to have different viewpoints. Rhodes (1961) collected the litterateurs of the definition of creativity, thinking the definition of creativity related with 4 P. Namely, the creator (Person), the created Process (Process), the created products (Product), the created circumstances (Place). Although on creativity scholars in China and abroad still have not had unanimous opinion, but in recent vats most scholars used the perspective of to define the judging standard of creativity such as: Amabile (1996); Guilford, (1950); Mayer (1999); Oldham & Cummings (1995) and Sternberg & Lubart (1995). After collecting definition of creativity of all the scholars, the consequence was that most of the scholars agreed to that creativity can observe from the point of view of the product.

Although scholars described with different words, but all thought creative

products should have two characteristics: (1) novel related words including new, Originality original, etc. (2) usefulness including the related words valuable, appropriate. Significant adaptive, utility and so on Zhan (2002) extends Mayer's (1999) analysis of the characteristics of a creative product, thought the classification just coincided with the evolution of concept of variation and selection, so with evolution view he sorted out two essential characteristics of creative products. The first second stand up some selective pressure. In other words, the creative products must be innovative and valuable. Therefore, from the perspective of product and creativity can be simply defined as: the ability to generate novel and valuable products (British Council, 2019).

2.2 Creativity Factor

Between 1994 and 2006, there were 511 articles on the creativity factor test. About the characteristics of the creative personality, Guilford (1967) expounds from the following eight aspects: a high degree of self-consciousness and independence; Have a strong thirst for knowledge; Strong curiosity; Knowledgeable and observant; Work stress regulations, accuracy, strict; Rich imagination and keen intuition, like abstract thinking and intellectual activities; Have a sense of humor; Strong willed and able to focus on activities of interest for long periods of time. Williams (1980) conducted an in-depth study on the creative personality and proposed four characteristics, also known as creative personality tendency, which included adventurousness, curiosity, imagination and challenge, and compiled the creative personality tendency test scale.

For research and creative force, because of the different research task as well

as the research object and research method of different can draw different conclusions, such as a cartel and others using 16 pf scale to the creative personality, outstanding American scientists found that they are curiosity, challenging, adventurous, scored significantly higher on imagination, scoring low on optimism. Liu, Zhang & Xie (1994) also adopted the 16 pf scale, and the research object was college students who had won the practical science and technology invention contest, then they obtained the creative personality characteristics of high creativity and low group.

Song (2011) used structural equation model to overcome the defects of mufti-purpose investigation in creative research. In this study, students from grade one to grade four in 10 universities of different types in eight administrative regions of China were taken as subjects. Creativity was taken as an endogenous latent variable and mental health and creative personality as an exogenous latent variable. Three hypothesis structural models were established for comparison and verification. The results show that the fitting index of model 3 is high and acceptable. The model shows that, the creativity of college students is positively influenced by their creative personality and mental health.

2.2.1 The creativity influencing factor test scale edited by Professor Li (2008).

According to the factor test scale of creativity, two major influence directions were proposed. Creativity is not a gift, it is an ability that we all have. Creativity is not fixed, it will develop like intelligence. According to the creativity factor, there are two effects.

1) External factors.

2) Internal factors.

2.2.2 In order to improve creativity, we will improve the two elements of creativity:

External factors include:

1) Family factors.

2) Educational factors.

3) Cultural factors.

Internal factors include:

1) Emotional factors.

2) Way of thinking.

3) Personality factors.

2.3 Embodiment of Creativity in Art Education

2.3.1 Students majoring in art design, due to the particularity of their major, pay special attention to students' creativity. However, schools generally do not attach importance to the cultivation of creativity for art design students. Every art student has the ability of innovation. They have the talent of art design, but more importantly, they need to be cultivated and educated to tap their potential of innovation. This paper studies the thinking characteristics of students majoring in art, and explores ways to develop creativity by adopting open teaching mode and cultivating thinking ability of students majoring in art design.

2.3.2 Art majors use open teaching, which is a process for teachers and students to participate in, as well as a process for teachers to improve students' basic

knowledge and cultivate students' innovation ability. Teaching is student-centered; therefore, the teaching mode should be changed according to the situation of students. For students majoring in art design, the main task of teaching is to cultivate students' innovation ability and improve their consciousness of independent innovation. The teaching content designed by teachers should also develop students' innovative thinking and innovation ability. In the teaching practice process excavates the student's innovation potential, pays attention to the student's divergent thinking cultivation. Teaching can be conducted in a variety of ways, mainly for the implementation of students in accordance with their aptitude, the use of theory and practice combined. Open teaching can be conducted in the form of one-to-one tutoring, group discussion and unified teaching, aiming at cultivating students' independent learning ability and teamwork spirit. Teachers act as mentors in teaching and play a guiding role when students encounter problems. At the same time, students' innovation ability is cultivated in teaching, students' potential is tapped, and various teaching forms are combined to enrich the teaching class, making the teaching content vivid, interesting and attracting students' attention. Inspiration is the most important source of creativity for art students. Teachers can take students outside to experience life and let them find inspiration in a relaxing environment. According to the teaching content design open teaching, help students to free nature, not to be bound, more can get good inspiration, so as to create good works.

2.3.3 The psychological space for learning and creativity depends on the many characteristics of the individual and its work, social, and learning environment. Learners' personal values, beliefs and perspectives are culturally influenced by family, friends, religion, society, gender, professionalism, discipline and biographical

experiences. These form the basis of filters that allow learners to use personal choices to decide how to participate in learning activities or creative processes. The mood or state of learners can affect learning or creativity (Martin, Morris, Rogers & Kilgallon, 2010).

2.3.4 Diversified school culture the university has a large pool of talents and profound culture. Thousands of outstanding young students from different regions, different cultures and different specialties gather here, forming a university culture with unique charm. Such as advocating human culture, freedom and independence, truth-seeking and pragmatic, and innovative spirit; diverse disciplines, strong faculty, beautiful campus environment, elegant cultural landscape and other architectural culture; high-level academic exchanges, high-quality literature Performance culture such as performances and sports competitions, high-density community cultural activities, and elegant behaviors and civilized words and deeds of young students. Local colleges and universities also have strong local characteristics and carry unique regional culture. This kind of college culture infiltrated with the atmosphere of the times has a rare advantage to broaden the horizons of primary school students, stimulate their motivation for learning, and form their personality.

2.4 Literature Review Summary

The cultivation of creativity includes creative cognitive behavior and creative effective behavior. Williams (1980) creative effective behavior refers to a person's positive psychological tendency towards creative activities, that is, creative tendency, which includes curiosity, imagination, challenge and adventure in personality. The tendency of creativity plays a regulating role in the psychological process of

individuals and provides a psychological background for the development of individual creativity. It plays a role in creativity by initiating, promoting, regulating and monitoring. Shen, Wang & Shi (2005) it can be seen that the tendency of creativity is an indispensable psychological guarantee for the development and development of creativity.

The tendency of creativity has been a hot topic in the academic world in recent years. However, there have been many researches on this topic among teenagers, primary and middle school students, and few among college students. As we all know, colleges and universities are the talent reserve base of social construction, and the creative potential and tendency of college students play a decisive role in building an innovation-oriented country. The purpose of this study is to understand the overall characteristics and differences of college students' creativity tendency, so as to provide some basis for innovative education in colleges and universities (Sheng, 2007).

Individuality and likeness are the common psychological characteristics of art design students. This is reflected in the process of creating their works, and they like to pursue things different from others. Art students have a strong ability to perceive the form and color of things. They like to show exaggerated and unique visual effects in their works, strive to create new ideas, and hope to get praise and approval from their classmates. Because of such psychological characteristics, the design works of art design students are generally more individual, bolder in design, giving a particularly exaggerated visual effect. Art design students usually use creative works as a vehicle for their emotional expression. The designed works are given with emotion, so that the designed works have vitality, and the teacher's teaching of

students is also a more perceptual teaching method.

Teaching is a part where teachers and students participate together, and it is also a process by which teachers improve students 'basic knowledge and cultivate students' creative ability. Teaching is student-centered. Therefore, the teaching mode should be changed according to the situation of the students. For students majoring in art design, the main task of teaching is to cultivate students' innovative ability and improve students' independent innovation consciousness. The teaching content designed by teachers should also be developed by cultivating students' creative thinking and creative ability. In the process of teaching practice, tap students 'creative potential and pay attention to the cultivation of students' divergent thinking. Teaching can be carried out in a variety of ways, mainly for students based on their aptitude, using a combination of theory and practice. It can be open-ended teaching such as one-on-one tutoring, creating group discussions, and unified teaching. It aims to cultivate students' autonomous learning ability and teamwork spirit. Teachers act as mentors in teaching. Play a guiding role. At the same time, students' innovative ability is cultivated in teaching, students' potential is tapped, and a combination of multiple teaching methods is used to enrich the teaching classroom, make teaching content vivid and interesting, and attract students' attention. Inspiration is the most important source of creativity for art students. Teachers can take students outdoors to experience life and let students find inspiration in a relaxed environment. Designing open teaching according to the teaching content will help students to liberate their nature, not to be restrained, and to get good inspiration, so as to create good works.

Due to the professional nature of art design, students are required to have some innovation ability. At present, the school does not pay much attention to the

cultivation of creativity of art design students, resulting in students lacking innovation ability. There are many ways to cultivate students' creativity. Adopt flexible and diverse teaching methods for students majoring in art and design, develop students' creative potential, and pay attention to the growth of students and the development of creativity in real time. Basic knowledge is the prerequisite for cultivating innovative ability. Teachers should pay attention to the cultivation of students 'basic knowledge. At the same time, because art design is a comprehensive subject, it needs to involve multiple aspects of knowledge. This requires schools to pay attention to students' development of. According to the characteristics of students 'thinking and personality, the school should stimulate students' interest and enthusiasm for creativity, and use the practice teaching mode in teaching to explore the creative potential of students. Whether it is now or in the future, the cultivation of students 'creativity should be something that the school always attaches importance to. It is the school's mission to improve students' innovative ability and comprehensive quality ability, and to deliver outstanding talents to society.

The development of human creativity is inevitably influenced by emotional factors, and the influence of individual emotional state on creativity is one of them. Emotion is a strong, transient state with a definite antecedent and a cognitive component. Similar to emotion is "state of mind", which is a diffuse and lasting emotional state. Emotion in a broad sense, including mood and mood, is a state of being. As for the research on the relationship between emotion and creativity, psychologists mainly grasp it from the three dimensions of emotional pleasure, activation and regulatory focus. The degree of pleasure refers to the degree of pleasure of emotional experience, and also refers to the valence of emotion, which can

be divided into positive, negative and neutral levels. Many studies have suggested that positive emotions contribute to creativity. For example, the research results of Kaufmann (2003) prove that positive emotions can promote the development of creativity. Isen, Johnson, Mertz & Robinson (1985) proved through experiments that when performing the concept classification task, the induced positive emotions caused the subjects to produce more concept categories and more unusual associations for neutral words. In 1995, Anderson, Arlett & Tarrant (1995) studied the effects of positive emotions, negative emotions and neutral emotional states on creative performance, and found that compared with negative emotional states and neutral emotions, positive emotions have obvious negative effects on creative performance. Due to the complexity of emotion and creativity, it can be seen that the research results on the influence of the pleasure degree of emotional experience on creativity are inconsistent. How does emotion affect individual creativity? What exactly caused the difference? Is the emotion induced by the experimental study the emotion the experimenter needs? Is the emotional situation consistent with the real situation in real life? or are there different cognitive pathways for the same emotional valence to affect creativity? In the future, it is necessary to combine the inner characteristics of emotion and specific emotion to explore the influence of emotion on creativity from cognitive and motivational paths.

Emotional activation degree (excited or inhibit) have an influence on creativity, high degree of emotional activation can hinder the cognitive flexibility, and low degree of activation of mood is advantageous to the cognitive consistency and focus, a moderate amount of arousal level, the individual can mobilize more mental function, actively seek and integration of information, generate and compare a variety

of alternative, is conducive to the understanding of innovation and problem. More studies believe that the emotion of middle arousal level is the most conducive to the development of creativity, and the emotion of low to middle arousal level can gradually improve the cognitive continuity, so as to have better and better creative performance. At present, there are other studies that combine the degree of emotional pleasure and activation to explore the impact of emotion on creativity, extending the previous research.

In order to further analyze the complex relationship between emotion and creativity, Gendolla & Brinkmann (2005) divided emotions into promoting and defending focusing emotions from the perspective of regulating and focusing emotions. Acceleration focus supports memory search related to new information, which enables individuals to have a wider range of attention, thus facilitating the development of creative activities; the emotion of defensive focus will narrow the attention range of individuals, and then inhibit the creativity of individuals.

In addition, about the specific emotions (like happy, depression, fear, anxiety, fear, etc.) affect the performance of creativity, the structure of the existing research on mood to three component analysis, the results can explain more individual creativity performance under different emotional state, but creativity is composed of a variety of psychological component integrated psychological quality, may have a different psychological mechanism of the different sides, affected by the emotional situation is different also. Studies have shown that fear inhibits the ability to pose creative scientific questions, while anger has little effect on the ability to pose creative scientific questions. It is believed that fear brings worry and cognitive arousal, which comprehensively determine the information processing efficiency of human beings.

Anger, which is often accompanied by frustration and self-reflection, has no significant effect on the ability to pose creative scientific questions. Existing research has inspired us to study the changes in different aspects of creativity from all dimensions of emotion, and to understand the specific effects of different emotional states on specific aspects of creativity.

Future research can define the antecedent variables of emotion in real situations from a more microscopic level by combining with the emotional event theory, so as to make the research more external validity. It is possible to examine the dynamic mechanism of emotion influencing the process of creativity. Strindberg found that people who are good at innovation and those who are not good at innovation have significant differences in the time allocation of different tasks. Amabile's research found that there is a buffer period of about two days before the effect of emotion on an individual's creativity actually occurs. Accordingly, can consider join the factor of time to undertake examination. The introduction of personality variables and the application of modern cognitive neuroscience research techniques make the research on the relationship between emotion and creativity more scientific, refined and comprehensive, so as to finally reveal its complex mechanism.

Individual characteristics tend to have an impact on individual creativity under the stimulation and influence of external environmental factors, and the psychological resources of individual creativity and the external positive promotion of behavior are integrated to produce creative results. Different emotional state, innovation on individual creativity is the influence of different level, but for the self, the relationship between emotional states and innovation, and how to interact with each other has yet to be further discussed, existing research from different stress

scenarios, discussed the individual creative self-efficacy in competition, evaluation and time three pressure situation influence on creativity, the results show that pressure does not change the individual creativity, medium creative self-subjects in stress situation is the best alternative. Emotional state and the closely related to pressure, different pressure source to produce different emotional experience, is not so much stress state of the individual self-innovation effect on creativity is different, as different emotional experience, individual self-innovation's influence on creativity, but only logical deduction, still needs further research. The investigation of emotional state includes not only different emotions, but also the influence of creative self on creativity under specific emotional state. Therefore, future research can explore the influence of creative self on creativity in different emotional states.

The class organization environment belongs to the external system, which influences the individual through the interaction with the small system. Empirical studies have shown that students in an open classroom environment score higher in creativity and maintain their creativity for a longer time. First of all, open class can promote students to form critical thinking, enhance the ability of independent learning, but also stimulate the role of students' curiosity, conducive to creativity (Zhang, 2002). Secondly, the creative classroom layout helps to create a relaxed and open atmosphere and provides a superior external environment for students to give full play to their creativity.

The teaching curriculum belongs to the medium system, which is the medium of creativity education. It is the best way for college students to develop their creativity to link the large system with the small system. First of all, the rich and challenging course content is beneficial to motivate students to participate in

classroom activities. Secondly, the flexible and diversified assessment methods are conducive to the development of students' creativity. For example, the evaluation criteria based on multiple intelligence's can help students to explore their various talents. Finally, creative activities, games, competitions and other forms are very beneficial to the development of students' creativity, such as open garden tour activities, creative activities without theme, etc.

Teacher factors include teaching strategy, teacher's attitude or expectation, teacher's personal quality and so on. Firstly, teachers' understanding and understanding of creativity and teachers' views on creativity cultivation will affect their creative teaching behavior and thus affect students' creative performance. Secondly, teaching methods such as problem teaching method, activity teaching method and situation teaching method are conducive to the development of students' creativity. Teachers can actively use these methods in teaching to cultivate and enhance students' creativity.

Maoyuan (2020) believes that the campus culture has the function of developing creativity, "developed and rich campus cultural life, including a variety of knowledge content, full of vivid and fresh creative vitality, high spirit of exploration and enterprising pioneering spirit, further stimulate the possibility of teachers and students in the teaching activities to create. Cultural activities in colleges and universities is more entertaining extracurricular activities such as welcome party, can make the students communicate, edify sentiment, and more professional contest of extracurricular activities such as challenge, business negotiation, etc., can make college students expand their horizons, the expanded aspect of knowledge, adjust the structure of knowledge, and on the basis of the understanding of knowledge,

knowledge, creative use of knowledge further.

Campus culture plays an important role in cultivating college students' creativity. Whether a school's students have innovative thinking should first see whether the school's cultural atmosphere is inclusive. It is difficult to cultivate students with extraordinary creativity with a dull and single campus culture. Therefore, colleges and universities should never ignore the construction of a colorful campus culture (Hawley, 2016). On the one hand the content of campus culture construction covers many aspects, including the strengthening of the moral cultivation of teachers and students, the advocacy of pluralistic values, and the development of various campus cultural activities. Students are the main body of campus cultural activities and the innovator of campus culture. Campus culture needs students' participation. The backbone of students is selected from the school associations, and students are encouraged to lead students to participate in various creative activities. On the other hand, to create a democratic and free academic atmosphere is the goal of modern universities and educators, and also the premise of creativity cultivation. Creative and novel campus culture can also provide a tolerant and positive cultural atmosphere for cultivating college students' creativity.

Our university administrators and teachers should have the courage to develop their own creativity on the basis of self-reflection, so as to make our universities full of vitality, vitality and creativity, instead of being the fetters in the cultivation of college students' creativity. Only when the students we train have vitality, vitality and inexhaustible creativity, can our school and our country never lose their spirit to move forward.

Provide students with the environment and conditions they create from the

perspective of the educational environment, schools should provide students with an environment and conditions with a strong scientific research atmosphere. In terms of teaching content and teaching methods, we cannot simply emphasize students' study of book knowledge and single emphasis on examination results. It is necessary to give full attention to the cultivation of students' scientific research ability, and to eliminate the bad habits of students who study hard. Many foreign universities attach great importance to the creation of an environment for students to use their creativity. They take advantage of existing experimental equipment that is not necessarily advanced, and let students think for themselves and find ways to solve difficult problems with simple equipment. Create an impression for students, that is, the knowledge in books is not almighty, and sometimes imperfect. If you want to improve your knowledge structure and level, you must achieve it through further thinking and research. In addition, in order to cultivate students 'creativity, teachers must first have creative thinking and creative ability, and have a strong research interest, so as to influence students, drive students, let students realize why they want to create, and stimulate students' creative desire (Hawley, 2016).

We know that many scientific research projects are completed by the efforts of many people, and individual creativity alone is not enough. Therefore, we must educate students to actively participate in collective work, seriously learn from others, and ask others for advice to make them stand. The consciousness of cooperating with others, so that the individual creativity of students can be better performed under the reminder and guidance of collective members.

A person’s strong desire to create is not just an innate characteristic of the individual. It is largely stimulated by the external environment or conditions. We must

take the creation of competitions, establish scientific student performance standards, and vigorously promote the creative Advantages and other measures stimulate students' creative consciousness, making them realize that without a certain creative ability, they will not have the ability to grasp development opportunities, and there will be no broader development space.

Due to the differences in IQ and learning habits, learning environment, learning experience, etc. of different college students, the creativity of different students is different, that is, some are stronger and some are weaker. Schools and teachers should be fully aware of this, and different approaches should be adopted to encourage the strong to be stronger and the weak to catch up. Cannot take the extreme way, let alone discriminatory thinking, from the perspective of training people, emphasize the overall effect of the creativity of all students.

Teachers 'behavior and consciousness in university music courses can have the most direct impact on students. Therefore, it is very important for students to cultivate and promote teachers' innovative consciousness and creativity. First, teachers should strictly ask themselves, strive to update their teaching concepts, explore boldly, deepen the study of music course culture, and continuously expand professional knowledge; second, change the traditional single teaching methods and models, so that students become masters of the classroom, strengthen Communication with students, encourage students, create a good classroom atmosphere, use advanced music teaching methods, based on their own innovative consciousness, guide and tap students' potential creativity; finally, on the basis of theoretical knowledge, pay attention to Practice courses that enable students to participate more actively in some music practice activities, inspire inspiration and creativity in the activities, support

and encourage students with new ideas, so that their new ideas can be put into practice more quickly and form gratifying the results.

The key to success is interest, and interest is the best teacher. In order to cultivate students 'musical creativity in university music teaching, we must first find ways to increase students' interest. Only when students have a strong interest in music and a creative spirit, can they be more actively involved in music culture. Therefore, to cultivate students' interest in learning, first of all, there should be sufficient hardware facilities to provide students with more comprehensive basic teaching facilities, such as multimedia equipment or DVD players, so that students can feel the beautiful melody from their hearing (D'Amore, 2010). Visually understand the fascinating picture, psychologically generate a sense of identification with music, and gradually arouse students 'desire for knowledge and curiosity, and then stimulate students' interest; Secondly, teachers should organize more outdoor music collective activities and apply theoretical knowledge to it At the same time, by participating in different practical activities, students can learn about different forms of music and learn music culture in depth. They can also discover their own hobbies and activities in the activities, open up music perspectives, and promote the formation and development of creative thinking. In short, university music teachers should use all available resources to effectively utilize limited classroom teaching, strive to stimulate students' interest in learning, cultivate students' feelings about music, stimulate interest in music learning, and better cultivate students' music creation force.

College students are groups with self-thinking and consciousness, and they have their own uniqueness and highlights in music cognition. Teachers should give students more freedom, encourage students too freely and actively display and

exchange musical works, and teachers should respond to active display (Pflaum, 2012). Music students are encouraged. Secondly, teachers should respect the creative consciousness of students in the process of exchanging musical works, and give students more time to explain the story behind music, so that other students can better understand music and understand the meaning of music in this real case. It is hoped that other students can empathize, inspire potential creativity and create better musical works. Finally, teachers in the music class should record the students' work, use it as a teaching case and template if the student allows it, explain to other students more about the relationship between creative music thinking and real life, and give students sufficient freedom Space, use imagination, and constantly create your own works.

The emphasis on cultivating students' musical creativity in university music teaching is a realistic requirement for the continuous development of modern society and the deepening of educational reforms, and it is an important embodiment of the teaching reform of university music courses (Pflaum, 2012). University music teaching should no longer be limited to improving students 'ability to appreciate music. What's more important is to let students understand music culture, experience the charm of music, stimulate learning interest, and cultivate students' musical creativity and expression. Although there are some problems in the music teaching of university, such as weak teachers and low investment, through analyzing the causes of the problems, we can find out solutions to these problems. In short, only by stimulating students' interest in music, deepening their understanding of multiple music cultures, and continuously experiencing the impact of real society on music creation from practice, can students learn the charm of music from multiple senses and tap their own potential the creative power of music, so as to enhance its overall

innovative thinking, enhance its overall competitiveness, and lay the foundation for future development (Pflaum, 2012).

If teachers lack innovative ideas and qualities, it will directly affect the cultivation and improvement of students' creativity. Under the guidance of the traditional education model, some teachers have the goal of teaching profound and thorough knowledge. Although students have some existing knowledge, they have seriously restricted the development of students' creative thinking. At the same time, the author's own concept of authority inhibits the development of students' creative potential. The university classroom should be a classroom full of freedom, looseness, and democracy, encouraging innovation and focusing on personality development, but the actual university classroom is still talked by teachers, students listen, lack of teacher and student communication and exchange, and do not show students wisdom and talent opportunity. This teaching method will inevitably inhibit the development of students' personality and hinder the development of their creative talents.

Most college students are accustomed to accepting and mastering the original knowledge in books, and have never questioned some of their opinions and conclusions, and have never doubted or challenged authority. Even though they also attach importance to the solution of some questions and answers, they rarely explore and study the methods of solving problems. Some college students believe that innovation and development are just a matter for scientists and inventors, and ordinary people simply do not have the ability to create. Many college students can't correctly understand what creativity is, and never believe that they also have unlimited creative resources. In addition, college students lack knowledge about creativity. Under the constraints of teachers' teaching methods and ideas, college

students are only willing to accept the existing knowledge and conclusions. They have little knowledge of some creative aspects of creativity, such as how humans discover the truth step by step and how to distinguish it Little is known about the transformation process of errors and their contradictory movements, as well as on discovery, analysis, induction, and conjecture (Yan, 2014).

In recent years, teaching management methods in universities have remained relatively fixed and simplistic. There is also lack of innovation in the form of teaching organization, and students do not have enough places and places to carry out practical activities and scientific research activities. In addition, the teaching philosophy, teaching methods, and curriculum settings of some schools are incompatible with China's plan to cultivate creative talents. Most classrooms in China's higher education still follow traditional teaching methods, and the curriculum review method is Compared with a single closed book exam, students only take notes in class, review notes before the exam, and learn college courses by rote memorization (Yan, 2014). This makes students accustomed to follow the teacher, lacking the spirit of skepticism and criticism. In terms of curriculum structure, there is a lack of due overlap and integration between curriculums. Natural science and humanities and social science education are too separated. This has caused many college students to restrict themselves to their own professional fields and fail to understand new research in cross-discipline field. On the other hand, campus culture has failed to form a positive impact on the development of students' creativity. "Good campus culture itself has guiding, stimulating, and invisible educational functions" Did not play a good function and role.

Create creative courses. Creativity is an emerging discipline, and more

emphasis should be placed on practical training in the teaching process. We systematically explained creative thinking, creative engineering, creative education, and creativity development in the training of students, focusing on training students' flexibility the ability to think sexually, to seek opposite sex, divergent thinking and reverse thinking. Develop students' thinking fluency, thinking flexibility, thinking accuracy, thinking sensitivity, thinking flexibility. In this way, the creative potential and initiative of college students can be activated, allowing students to master the strategies of creative thinking, making their thinking fluent and flexible, and developing their sensitivity to new knowledge.

Reform teaching methods it is necessary to actively implement heuristic and discussion-based teaching, stimulate students' independent thinking and innovation, and effectively improve the quality of teaching. It is necessary for students to feel and understand the process of knowledge generation and development, and to cultivate students' scientific spirit and creative thinking habits. In the teaching of the experimental group, we vigorously promote the three-stage teaching method, that is, for more practical courses or chapters, students and teachers, especially students, first ask questions themselves; then students go to the laboratory to do experiments themselves Or look for information to find the answer; in the end, the teacher took the students to the laboratory together to do experiments and draw correct conclusions. At the same time, methods such as classroom debate, CAI lectures, student lectures and topical discussions have greatly improved students' curiosity and cultivated their exploration spirit.

The essence of divergent thinking is unique it is a form of creativity. Cultivating students 'divergent thinking skills can make students' thinking active and

enhance their ability to adapt to things. When facing problems and discussing problems, they can respond quickly and come up with many ways. Many ideas and opinion veils, especially good ideas. Art students need inspiration and creativity when designing works to make their works unique. This requires students to have a strong creative ability, which can be from many aspects, and divergent thinking is an important content to cultivate students' creativity. So that students can think from multiple aspects and multiple angles when solving problems, so as to obtain multiple new solutions. The particularity of the art discipline determines that students should have logical thinking skills and keen intuitive thinking. Students need new ideas and new ideas in artistic creation, and some ideas may be generated by intuition, which is suddenly inspired. Intuitive thinking is the most important form of innovative thinking. In the teaching process of teachers, we must pay attention to the cultivation of students 'innovative thinking ability, and strengthen students' innovative consciousness. Pay attention to guiding students to learn to extend from one new idea to another. When acquiring new ideas, they should be recorded in time so that they can be used as materials in the future. Intuitive thinking is very important for students majoring in art and design. Teachers should pay attention to guiding students' thinking, inspiring students to dare to imagine, develop their creativity, and not be bound by certain details.

Strengthen practical teaching links. Through practice and training, not only can students firmly grasp what they have learned, but also exercise their ability to use knowledge to analyze and solve problems, and cultivate their innovative thinking and ability. To strengthen practical teaching, special attention should be paid to strengthening experimental teaching, focusing on the cultivation of college students'

creativity and experimental ability. Our college has built a number of open laboratories, and is actively preparing for the establishment of two-level innovative education experimental bases to provide students with opportunities and places for practice.

Support students to participate in science and technology activities. Participating in scientific research while college students are an effective way to improve the creative ability of college students. Can introduce college students to participate in teachers' scientific research projects, or students can develop their own topics, the school provides funding support, and select teachers for guidance. Regular inspection and appraisal of students 'scientific and technological activities should be conducted to cultivate students' innovative perseverance and responsibility. When the conditions are mature, students are encouraged to set up invention and creation associations to bring together students with the same interests and hobbies to attract more students to take the initiative to participate in scientific and technological innovation activities and creative ability training. The committee is fully responsible for students' scientific and technological projects, project identification and evaluation. And set up high-tech scholarships for science and technology innovation competition, greatly mobilizing students' enthusiasm for scientific and technological activities (Zhang, Guo & Zhu, 2016).

Reform examination methods the current test method focuses on knowing the test and neglecting the ability assessment, and simply using the score as the evaluation standard of the student's level, which severely stifles the creative ability of the student (Yan, 2014). It is necessary to implement an examination method that places equal emphasis on knowledge and ability, combines theory with practice, and focuses on

testing students' ability to flexibly use what they have learned and their practical skills. The members of the research team generally adopted a combination of written answer papers and scientific papers, product design, social survey reports, etc. in their courses, which achieved both the knowledge, ability and comprehensive quality, which was well received by students.

Problem background with scientific progress and social development, national creativity has become an important factor in measuring a country's international competitiveness. China is facing leaping development and challenges, and opportunities are greater than challenges, and the demand for innovative talents is far greater than that of other countries. This determines that China's education in the new period must target the cultivation of innovative talents. Creativity training includes creative cognitive behavior and creative affective behavior, that is, creative non-intellectual factors that creative talents should have—a creative tendency, which includes curiosity imagination, challenge, and adventure in personality. Creativity tendency is a direction that has been involved in creative research in recent years, especially the research of college students is very little, and creativity tendency as an important part of creativity has an extremely important role in the cultivation of creativity (Sheng, 2007). This article aims to analyze the characteristics of creativity tendency of students of different genders, grades, and disciplines through the investigation and research of college students in Ningbo, and on this basis, find corresponding measures and methods suitable for development to improve the creativity of college students. Creativity tendency refers to a relatively stable and durable organizational system composed of individual creativity and creativity motivation. Creativity inclination is the guarantee of the motivation and direction of

creative activities, and it is the personality inclination shown in creativity activities (Sheng, 2007).

According to their scores on the test of creative thinking, college students have relatively poor imagination. Imagination is an organic link between previous concepts, emotions, past experiences, representations and relevant situation clues. It can connect seemingly irrelevant things together and produce a large number of novel and strange ideas in the mind. first of all, rich knowledge and experience are the basis for the development of imagination. If lacking the necessary scientific knowledge and experience, its associative power will be poor, empty, pale, or even become a wandering fancy, unable to give play to the active role of associative power in creative activities. At the same time, if the lack of independent thinking attitude and ability, content with the existing knowledge, do not try to make progress, lose the spirit of pioneering and enterprising, will also hinder the development of imagination. Tchaikovsky once said: "inspiration is a guest he does not like to visit lazy people." Therefore, study hard knowledge, practice diligently, accumulate experience unceasingly, it is the basic premise that enhances the associative power, produces the inspiration. Secondly, interest and curiosity arouse people's associative power in the process of creative activities. Einstein once said: "I have no special talent, I only strong curiosity." Therefore, we should cultivate college students' strong curiosity and thirst for knowledge, and advocate the skeptical spirit of science.

In university education, we must focus on strengthening the cultivation of creative personality of social science students. First of all, it is necessary to cultivate students 'independent and independent psychological character, which is the basis for cultivating innovators' critical and questioning spirit. Educators should also give

students independent activity space and independent personality space to cultivate students 'ability to learn to choose and learn to decide. They should advocate self-education, self-management, self-service, and inspire students' self-consciousness. Second, to cultivate students' new psychological qualities, Nietzsche once told young students: "A person must give up the bad habits that always want to reach agreement with most people. Everything that is common to all things is of minimal value." Therefore, young students should attack the shackles of traditional ideas and thinking with a fearless spirit of criticism and a spirit of doubt, be brave in reform, create new ways, and set new standards.

American psychologist mar bury constructed the theory of creativity structure in the research of creative social psychology. This theory holds that the creativity of college students mainly consists of professional creativity, general creativity and creative motivation. Based on the survey and statistics of the public understanding of the concept of creativity, psychologist stern berg proposed the three-structure model of creativity, which is an organic combination of cognitive style (the way and method to achieve the goal according to the nature of the problem and the situation), intelligence (situation intelligence, component intelligence and empirical intelligence) and personality.

Higher education is a key stage in the cultivation of innovative talents. Research has pointed out that creativity training including creative cognitive behavior and creativity effective behavior, the latter is also called creativity tendency, refers to a person in the activities actively creativity tendency of personality traits, it including the individual on the personality of curiosity, imagination, challenge and adventure four aspects (Liu, Chang, Wang & Chao). The tendency of creativity plays an

important regulating role in the psychological process of individuals and provides psychological conditions for the development of individual creativity. It is an indispensable psychological quality of innovative talents to play a role in creativity through initiation, promotion, adjustment and monitoring (Fredrickson2001).

In summary, there are many factors that influence college students' creativity. The creativity of college students with different majors is influenced by internal and external factors. College students have creative potential. As long as appropriate test scale is adopted, the overall achievement of creativity of college students of different majors can be effectively measured, and the level of creativity of college students of different majors can be distinguished. On the contrary, the creativity of college students can be greatly improved.

CHAPTER 3

METHODOLOGY

In order to find out the answers to the research questions, this study used the interview format to analyze the answers of students from Baise University. Interview method refers to the basic psychological research method to understand the psychology and behavior of interviewees through face-to-face interviews with interviewees and interviewees. The descriptive research method is the most representative method, and it is also how easy it is for researchers to obtain participants' opinions (Polit & Beck, 2004). It does not make accurate predictions, nor does it determines causation, but only describes the situation or phenomenon under study. Observational method, case study method and investigation method are the main types of descriptive research methods. In this study, the survey method was the first choice.

3.1 Conceptual Framework

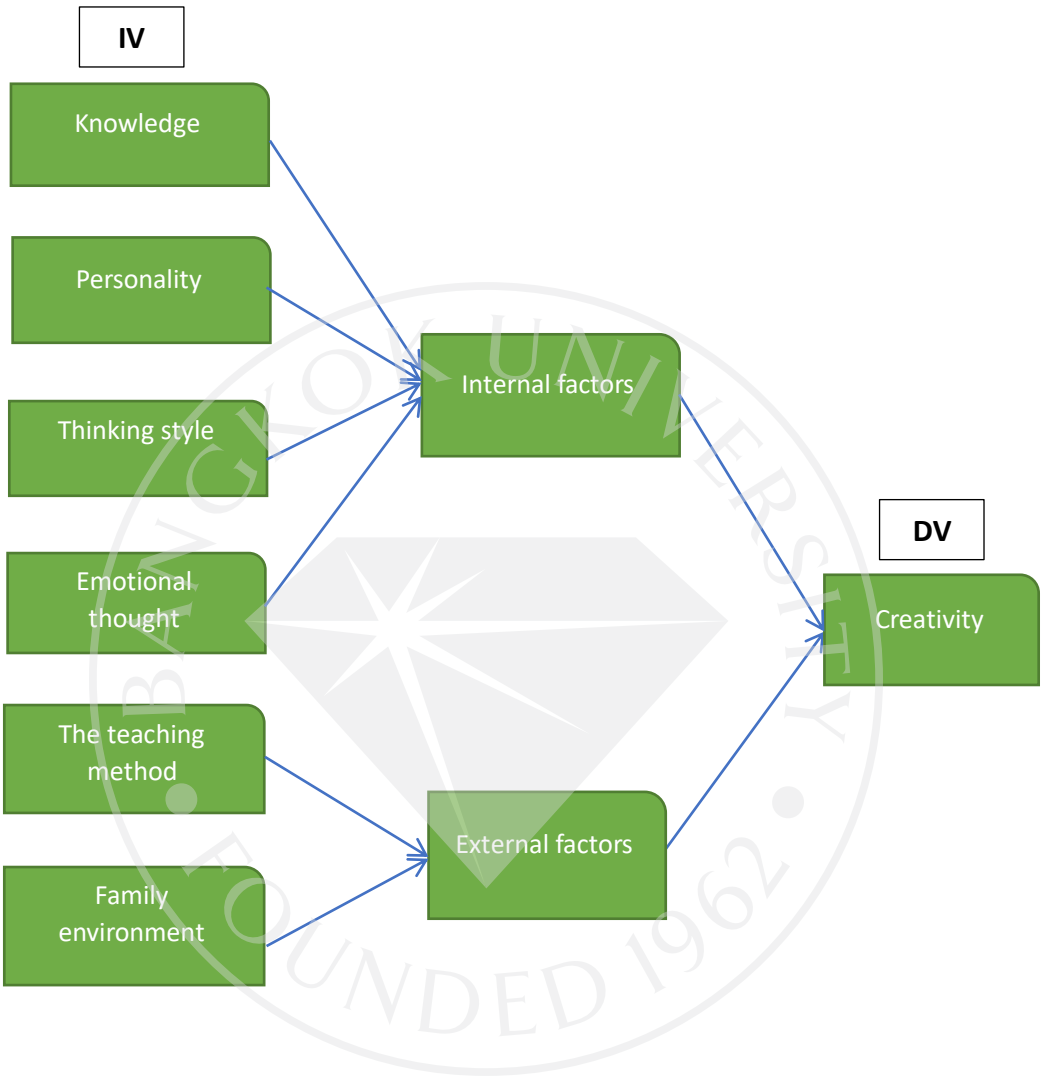

Figure 3.1: Conceptual Framework for Creative Factors

3.2 Sampling

The sample is from Baise University. I will meet them at Baise University or online. The main source of the data is the research questionnaire. In order to fully understand the comparison of the creativity tendency of students of different majors, the respondents were 3 undergraduates of Baise University. They major in arts and

other subjects. The questionnaire testers are 50 art majors and non-art major undergraduates.

3.3 Research Method

3.3.1 Tool

This study uses the Princeton Creative Ability Questionnaire, which was designed by psychologist Eugene Lauder based on several years of research on the personality and quality of thinking, creative men and women scientists, engineers and business managers. Come. It is used to evaluate the subject's degree of curiosity, imagination, challenging and adventurous behavior. It has good reliability and validity in China. The questionnaire consists of 50 multiple-choice questions. In this survey, 20 of the questions are selected for testing. The subject chooses the concept tendency and calculates the total score. Among them, A = fully conforms, B = indeterminate, and B = completely inconsistent.

3.3.2 Program

In April 2020, the method of collective test was adopted to test the subjects, and a questionnaire survey was issued uniformly. The data obtained were analyzed and statistically analyzed using SPSS version 14.0 (Guo, 1999) and the independent sample T-test analysis was used to draw relevant conclusions.

CHAPTER 4

DATA ANALYSIS

4.1 Interview Result Analysis

Through statistical analysis of the scores (average scores) of college students of different majors in the Creativity Tendency Test in the United States, we can find out the current basic situation of college students 'creativity. Lauder see pointed out that those with a total score of 33 or more have great creative potential, those with a score of 14-32 are groups with good creative potential, and those with a score of 18 or less are generally inclined. At present, the creativity tendency of non-art majors of Baise University is not performing well and is at a general level. From all aspects, none of the average test scores of college students in this survey reached the excellent standard, and there was a certain gap.

Although the overall performance of college students in terms of creativity tends to be unsatisfactory, it is not difficult to find in the survey statistics that there is no shortage of highly creative individuals in this group, and some are even close to reaching full marks. Of course, we must also admit that there are also some individuals who show relatively unsatisfactory creativity, that is, there is a relatively large difference in creativity among the group of college students. This phenomenon needs to attract the attention of educators in order to achieve teaching according to their aptitude.

4.2 Cronbach Reliability Analysis

Table 4.1: Reliability Analysis

Cronbach Reliability Analysis			
Name	Corrected items total correlation (CITC)	Deleted alpha coefficient	Cronbach α
Analysis 1	0.52	0.546	0.622
Analysis 2	0.208	0.613	
Analysis 3	0.391	0.575	
Analysis 4	0.146	0.628	
Analysis 5	0.402	0.574	
Analysis 6	0.311	0.593	
Analysis 7	0.309	0.594	
Analysis 8	0.218	0.611	
Analysis 9	0.246	0.607	
Analysis 10	0.283	0.599	
Analysis 11	0.067	0.64	
Analysis 12	0.215	0.495	
Standardization Cronbach α: 0.621			

In order to test the reliability of the test scale, reliability analysis was carried out on 11 questions. The figure above shows that the standard coefficient of the whole

test table reaches 0.641 and the internal consistency coefficient of all factors is within the acceptable range. The reliability coefficient value of the study data is higher than 0.6, which comprehensively indicates that the reliability quality of the data is acceptable.

4.3 Interview Result Analysis (Qualitative)

Three students from different majors got different answers. The students majoring in art thought that the most influential factors for creativity were people's personality, thinking, and what they saw and heard. Creativity should be based on one's own internal passion, continuous exploration, discovery and summary. Students who are not majoring in art think that the most influential factor of creativity is internal knowledge. Their majors pay more attention to training their rigor and logicality. Only experimental design schemes are involved in experimental classes, so the cultivation scope of creativity is limited.

4.4 Questionnaire Result Analysis (Quantitative)

A questionnaire survey was conducted among 50 undergraduate students majoring in art and non-art in Baise University by means of random sampling, and 61 questionnaires were collected, among which 50 were valid. The creativity scores of undergraduates of different majors are as follows.

4.4.1 Students' scores on the creativity level test

Table 4.2: Students' Scores on the Creativity Level Test

Students' scores on the creativity level test			
Degree of creativity	score	people	proportion
Very creative	56–80	3	6 %
General creativity	13–55	35	70 %
Less creativity	0–12	12	24 %

As can be seen from the figure above, the students who took the test scored average in creativity, and only 3 of them were above average, which was 6% of the total number of students who took the test. 35 students reached the average level, accounting for 70 percent, while the remaining 24 percent had a low level of creativity.

4.4.2 The Correlation between Different Majors and Creativity

Table 4.3: Correlation

Correlation			
		profession	score
profession	Pearson correlation	1	-.434**
	Sig. (Double tail)		0.002

(Continued)

Table 4.2 (Continued): Correlation

Correlation			
		profession	score
	N	50	50
Score	Pearson correlation	-.434**	1
	Sig. (Double tail)	0.002	
	N	50	50

According to the correlation analysis with SPSS version 14.0 software, there is a significant correlation between different majors and creative thinking ability in the figure above, and there is also a significant difference in professional creativity tendency. The gender difference in creativity is not significant, but from the professional point of view, the creativity of art majors is significantly higher than that of non-art majors.

4.4.3 Practical Creativity Test Scores of College Students with Different Majors.

Table 4.4: Statistical

Statistical					
	profession	N	average	Standard deviation	Standard error average
score	Art	25	27.2	17.098	3.42
score	Non-art	25	14.92	6.776	1.355

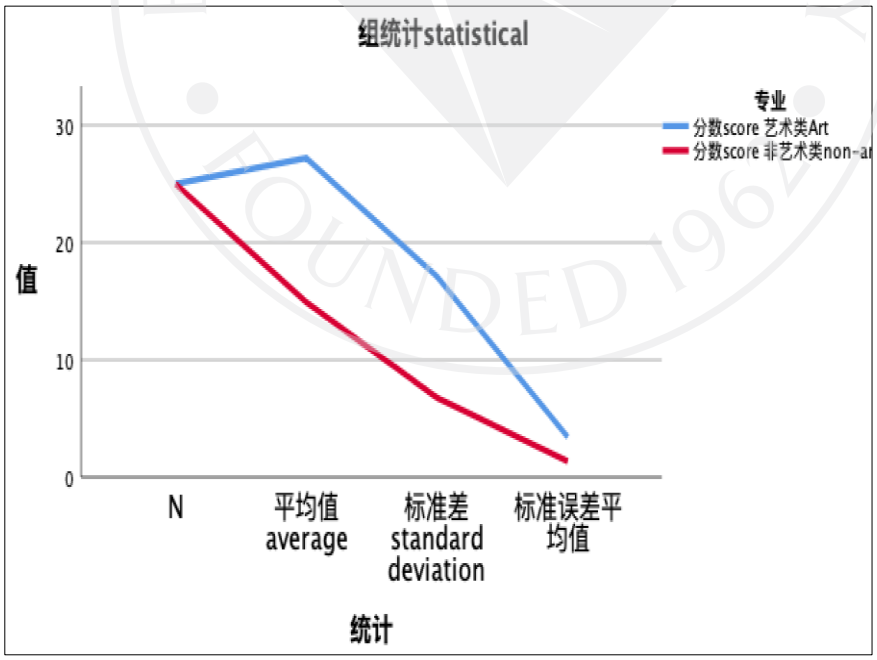

Figure 4.1: Art Majors and Non-Art Majors can be Group into Statistics

As can be seen from the group statistics of practical creativity test scores of undergraduates of different majors in the figure above, the average value of art majors is significantly higher than that of non-art majors.

4.4.4 Comparison of Curiosity in Practical Creativity Test of College Students with Different Majors

Table 4.5: Contrast of Curiosity

Contrast of curiosity				
curiosity	Art (*n*=30)	Non-Art (*n*=20)	*t*	*p*
	1.93±0.25	1.60±0.50	2.742	0.011*
*p<0.05 ** p<0.01				

As can be seen from the comparison of curiosity characteristics in the practical creativity test of college students of different majors in the figure above, all the samples of different majors showed significant differences in curiosity characteristics ($p<0.05$), indicating that the samples of different majors had differences in gender. The significance of curiosity in the majors was significant at the level of 0.05 ($t=2.742$, $p=0.011$). According to the specific comparison, the average value of art (1.93) was significantly higher than that of non-art (1.60). Therefore, college students of different majors all showed significant differences in curiosity characteristics.

4.4.5 The Comparison of Risk-taking in the Creativity Test of College Students with Different Majors

Table 4.6: Risk Taking Test

Risk taking test						
Analyze	Profession	Sample size	average	Standard deviation	*t*	*p*
adventurous	Art	30	1.27	0.52	1.42	0.162
	Non-art	20	1.1	0.31		
	combined	50	1.2	0.45		
*p<0.05** p<0.001						

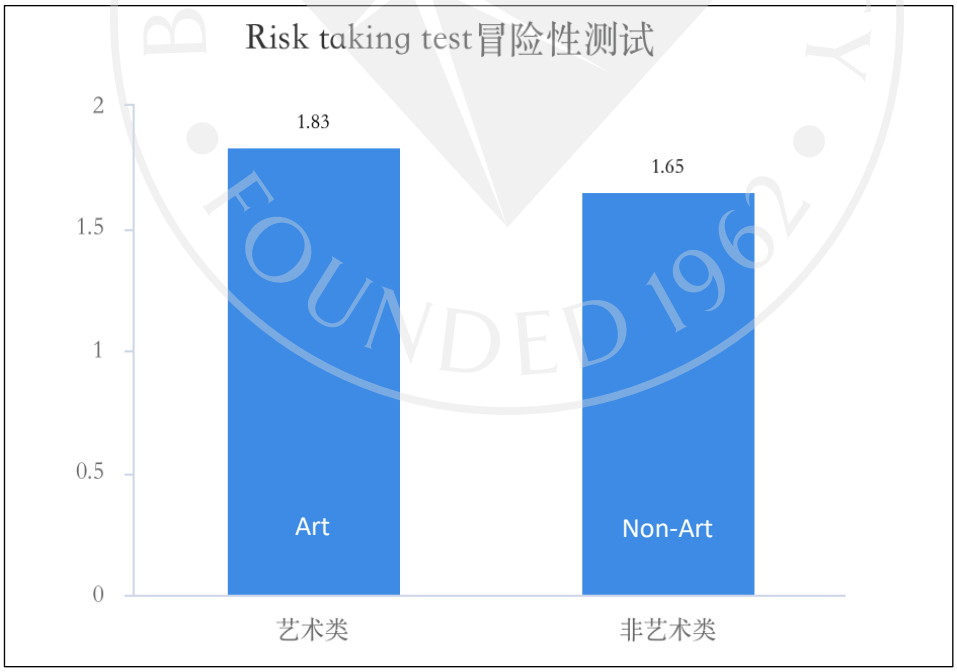

Figure 4.2: Risk Taking Test

As can be seen from the test results above, this may have influenced some students' choice of adventure questions to some extent. Some of the content of such questions reflects the "unconformity" of individuals, such as "I prefer to work with a group rather than engage in a personal struggle". Students may choose to support the above view in order to show good interpersonal relationship in terms of personality, which exactly reflects the lack of certain adventurous spirit of individuals. As a result, the test results all show consistency and no difference in order to meet the test purpose of hypothesis.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Discussion

5.1.1 Analysis of the Overall State of the Creativity Test

Analysis of the overall state of the creativity test. Baise University undergraduates in creativity test scale score, imagination, curiosity and adventure, challenging the score in the four dimensions accounted for the percentage of the full score of 73339%, 69.70%, 73.78%, 72.02%, 75.23%, and the median score than standard, but no one get more than 80% of the scores, which means that the Baise University undergraduates creativity tendency overall status only at a medium level. According to the statistical scores, the undergraduates of Baise University performed best in curiosity, but worst in risk-taking, with moderate imagination and challenge.

5.1.2 Analysis of disciplinary differences in the creativity test

Analysis of disciplinary differences in the creativity test. The scores of non-art majors were lower than those of art majors in the total score of creativity tendency, adventure and curiosity, while the scores of imagination and challenge majors were not much different. This paper argues that such results may be related to the fact that any university adopts the same teaching method without adopting different methods according to the characteristics of the subject. And the content of all professional examination is relatively pay attention to memory recitation, lack of inquiry questions. In this way, the thinking mode and personality characteristics of all the students of the major are integrated, which cannot reflect the professional characteristics.

5.2 Conclusion

According to the above statistical analysis and discussion on the whole sample of Baise University, the following conclusions can be drawn. Compared with the overall level of creativity of college students, the development level of creativity tendency of different majors is not too high, and there are great individual differences. There are significant differences in the development level of college students' creativity tendency among different majors and personalities. (1) There is a significant difference in the curiosity module between the creativity of art majors and non-art majors, but there is no significant difference in the adventurous module. (2) There is no significant gender difference in college students' creativity tendency in different majors, and the scores of male and female students do not change much. (3) There is no significant difference in the level of creativity among college students of different majors.

It can be seen that students majoring in art are more curious about creativity than other majors, which can be concluded from the internal and external factors of creativity.

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APPENDICES

Appendix A

Interview Outline

The interview questions are part of Jojo's are BU bachelor's students enrolled in art related curriculums more creative than students enrolled in other majors?

Name: Gender: Age:

Date (DD/MM/YYYY):

Question1: What factors do you think foster creativity?

Question2: What do you think are the advantages of arts majors in cultivating students' creativity?

Question3: Do you like the way your major cultivates students' creativity? Why is that?

Appendix B

Respondents' Raw Recorded Data

Respondent 1 answers:

Question1: What factors do you think foster creativity?

The factor of creativity comes first from the professional knowledge base and skills, secondly, to cultivate one's own thinking creativity and practical experience, and finally, one's internal enthusiasm must be continuous, continuous exploration, discovery and summary.

Question 2: What do you think are the advantages of arts majors in cultivating students' creativity?

Art students have cultivated their aesthetic comprehension and comprehension abilities because of the focus of the subject. Moreover, art teaching methods are different from other majors. They pay more attention to visual senses, and students have better imagination and creativity than other subjects.

Question 3: Do you like the way your major cultivates students' creativity? Why is that?

I don’t like it. I am a medical student. Our major is more focused on cultivating our rigor and logic. Only in the experimental class will the experimental design scheme be involved, so the scope of creativity training is limited.

Appendix C

The Creativity Level Test Questionnaire

Princeton created to study, psychologists Eugene lauder plug, the general manager of our company, according to the years of thinking, creative men and women scientists, engineers, and enterprise manager's personality and quality of research, design with the simple questions below, subjects as long as 10 minutes, then know that whether their creative talents. Of course, if you need to carefully consider, the appropriate extension of the trial time will not affect the test results.When experimenting, just use a letter at the end of each sentence to indicate whether you agree or disagree:

(1) Agree to use A, disagree to use C, unsure or not knowing to use B;

(2) The answers must be accurate, faithful, and not speculative.

Test questions:

1	1. I do not do blind things, that is, I always have the point, with the right steps to solve every specific problem.	A	B	C
2	In my opinion, it is undoubtedly a waste of time to ask questions without getting answers.	A	B	C
3	No matter what things, to my interest, always more difficult than others.	A	B	C
4	In my opinion, a logical, step-by-step approach is the best way to solve the problem.	A	B	C
5	Sometimes my comments in the group seem to bore some people.	A	B	C
6	I spend a lot of time thinking about how others see me.	A	B	C
7	Doing what you think is right is more important than trying to win others' approval.	A	B	C
8	I don't respect people who seem unsure of what they are doing.	A	B	C
9	I need more excitement and interest than others.	A	B	C
10	I know how to keep my composure in the face of a test.	A	B	C
11	I can hold out for a long time to solve difficult problems.	A	B	C
12	Sometimes I'm too enthusiastic about things.	A	B	C

13	I often come up with good ideas when I have nothing else to do.	A	B	C
14	When it comes to solving problems, I often use my intuition to judge what is "right" or "wrong".	A	B	C
15	In solving problems, I analyze them more quickly than I synthesize the data collected.	A	B	C
16	Sometimes I break out of my routine to do things I hadn't thought of doing before.	A	B	C
17	Fantasy has inspired many of my important projects.	A	B	C
18	I like people who are objective and rational.	A	B	C
19	If It were up to me to choose between two careers outside my own, I would rather be a practitioner than an explorer.	A	B	C
20	I have a high aesthetic sense.	A	B	C
21	All my life, I've been chasing fame and status.	A	B	C
22	Inspiration has nothing to do with success.	A	B	C
23	What pleases me most in an argument is that a man with whom I once disagreed becomes my friend.	A	B	C
24	I am more interested in coming up with new proposals than in trying to persuade others to accept them.	A	B	C
25	I tend to avoid jobs that make me feel inferior.	A	B	C
26	In evaluating information, I think the source is more important than the content.	A	B	C
27	I am not satisfied with things that are uncertain and unpredictable.	A	B	C
28	I like people who put their minds to work.	A	B	C

29	One's self-esteem is more important than admiration.	A	B	C
30	Writers who use odd and unusual words are simply showing off.	A	B	C
31	Even in the face of adversity, frustration and opposition, I have been able to maintain my original state of mind and enthusiasm for my work.	A	B	C
32	I'm more interested in what this could be than what this is.	A	B	C
33	From the following adjectives that describe a person's personality, choose the 10 words that you think tell you the most about yourself:			
	Vigorous, persuasive, realistic and open-minded			
	Observant, cautious, hand - bound, resourceful			
	Self-important, opinionated, dedicated, or original			
	Eager, efficient, ready to help, strong			
	Sassy of restrained enthusiasm			
	Confident, indomitable, insightful, clever			
	Curious organized hard-hearted clear-headed			
	A predictable formal informality of mild temper			
	Capable of understanding, vigorous, and disciplined			
	The economical sense of smell is acute and fearless and strict			
	Fastidious, humble, complex and insouciant			
	Supple, innovative, and practical			
	Sociable, kind and lonely, eager for knowledge			
	Discontented and emotional			
	After the test, please count the scores according to the answers published!			
	The answer sheet			

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