CREATIVENESS AND CAREER CHOICES: A CASE STUDY OF GRADUATING STUDENTS AT BAISE UNIVERSITY

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ABSTRACT

Creativity is the fundamental driving force of social and economic development. Nowadays, enterprises have higher and higher requirements for talent and creativity. Colleges and universities also pay more and more attention to the cultivation of college students' creativity. Based on collecting literature on college students' creativity and innovative enterprises, this study discusses the relationship between college students' creativity and career choice by means of a quantitative analysis. Based on the research results, the paper discusses problem areas explaining the results, and gives suggestions on how to improve the creativeness-career choice-fit of undergraduate students in China.

Keywords: Creativity, Innovative Enterprises, Creativity Test, Undergraduate Graduates, Career Choice

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Beginning in the 1980s, especially after entering the new century, China was once proud of "China is the world's factory." As a significant production country, China produces or assembles a considerable number of branded or brand-name products in the world. Due to the low labor cost and the convenience of aggregation of production factors, industrial forms such as processing with supplied materials, processing with given samples, assembly with supplied parts and compensation trade, processing exports, OEM production, and domestic production and sales of foreign-funded products have become the main boosters for China's economic take-off. "Made in China" in the background of the world's factory is a crucial stage for China, even a stage that China must go through. But what needs to be clearly understood is that the so-called "world factory" is a gorgeous expression of low-end manufacturing. Its essence is that China is in the middle and low end of the world industrial chain division of labor. Over the years, the Chinese central government has reviewed the situation and taken various measures, causing significant changes in China's manufacturing (Li, Qin, & Jiang, 2017).

Now, both the world pattern and the technological background have undergone tremendous changes.

First, the process of re-industrialization in western developed countries and the reality of China as the world's second economy have determined that China is no longer the so-called "world factory" with low labor costs and cheap production factors and resources. In the summer of 2015, the report "The Economic Shift of Manufacturing Industry" by the consulting firm (BCG) pointed out that if the global manufacturing in the United States is 100, the manufacturing cost in China is as high as 96%. In other words, if the price of manufacturing in the United States is $1, it will

cost $0.96 in China. Bangladesh, Vietnam, Indonesia, and Thailand, with lower production costs, have undertaken businesses such as Nike and Adidas that were initially produced in China. Japan's Panasonic, Daikin, Sharp, TDK, and other world-class brands are accelerating the process of returning their manufacturing bases to Japan. Foxconn and other companies that absorb the most significant labor force from the mainland, on the one hand, speed up the pace of withdrawal from China; On the other hand, even if it does not evacuate, the rate of machine generation has been accelerated.

Secondly, in the context of economic globalization, big data, artificial intelligence, mobile Internet, cloud computing, and information technologies such as the Internet of Things, block chain, and 5G are changing with each passing day. Work not only improves the quality of life and work efficiency but also promotes social and industrial transformation. With the acceleration of a new round of industrial revolution led by information technology in the world, all fields of China's industry are also undergoing profound changes. With the emergence of the mobile Internet, China has entered a new era. In the process of Internet development, there are several essential technologies, including "cloud computing," "big data," "Internet of Things," and "artificial intelligence," which all appeared during this period (Singla, Singh, Dubey, & Kumar, 2021). It vividly expresses that "cloud computing," "Internet of things," "big data," and "intelligence" have become a public technology. They are affecting and even controlling the survival and development of traditional professions at an unprecedented scale and speed.

In the 21st century, economic globalization and sustainable development of economy and society have become the central theme of The Times, and more and more rely on the sustainable development of theoretical innovation, knowledge innovation, and high-tech innovation. The new economy is one supported by knowledge innovation and high-tech innovation. The arrival of the recent economic era not only poses a severe challenge to the innovation ability of contemporary talents

but also gives birth to a precious opportunity to cultivate the innovation ability of contemporary talents (Wan, Zhang, & Pan, 2021) According to the World Intellectual Property Organization's Global Innovation Index 2021 report, China ranks 12th among 132 economies, rising steadily for nine consecutive years. China has become an innovative country and is transforming from a major importer of intellectual property to a significant producer of intellectual property. It needs to strengthen the support of knowledge, talent, and education.

Culturing college students' scientific and technological innovation ability is of far-reaching social significance for enhancing national independent innovation ability. With excellent young skills, active academic thinking, and a complete range of disciplines, colleges and universities have become the main bases for knowledge transmission, innovation, and application. By participating in and realizing technological innovation, college students acknowledge their dream of becoming creators of social wealth on campus (Yu, 2020).

Under the condition of the knowledge economy, to make the core competitiveness become the long-term and lasting competitive advantage of enterprises, enterprises should actively guide employees to reform thinking mode, value concept, and behavior mode. Enterprises should let the staff improve the level of technological innovation and product innovation ability. It can make the enterprise master the initiative in the market competition and keep the vitality of the enterprise's core competitiveness forever.

1.2 Research Objectives

Based on the above problem statement, the author proposes the following research objectives:

1.2.1 Explore the relationship between college students' creativity and career choice intention.

1.3 Research Questions

Based on the above research objectives, the research questions proposed by the author are as follows:

1.3.1 Are more creative students interested in choosing a career in a more creative industry?

1.3.2 Are more creative students interested in choosing a career in a business function requiring more creative thinking?

1.4 Research Significance

This study uses quantitative research methods to explore whether there is a significant relationship between highly creative students and highly creative industries. Analyze the problems found through the survey results and suggest improvement suggestions.

1.5 Research Scope

This paper studies the relationship between creativity and career choice. The respondents were senior students at Baise University. This paper uses the Princeton Creativity Test, the authoritative scale of creativity test, to test the creativity level of senior students of Baise University.

1.6 Research Content

This paper is mainly divided into five chapters, and the content design is as follows:

Chapter one, introduction. This chapter first introduces the research background and the importance of the research topic. Then the author puts forward the purpose, question, significance, and scope of the study.

Chapter two, relevant theoretical basis. The author combs domestic and foreign literature on creativity, college students' creativity, innovative enterprises,

career choice, and so on.

Chapter three, methods. Based on reviewing the literature of the first two chapters, the author designs the framework of this paper. The Princeton Creativity Test is the definitive measure of creativity. The author adopts the method of questionnaire to conduct quantitative research.

Chapter four, data analysis. With creativity as the dependent variable and career choice and personal background as the independent variables, the author adopted SPSS statistical analysis software to conduct reliability and validity tests, descriptive analysis, ANOVA analysis, and Pearson Correlation step by step.

Chapter five, summary and prospect. This chapter mainly summarizes the research work of this paper. At the same time, aiming at the shortcomings of this study, a future research direction is proposed.

CHAPTER 2

LITERATURE REVIEW

2.1 Research on Creativity

2.1.1 Definition of Creativity

In that time in the 60s, creativity was considered one of the essential competencies. The world's famous quality management expert W. Edwards Deming once said that the most valuable currency in any business is its employees' initiative and creativity. Albert Einstein once said the problems that exist in the world could not be solved by the level of thinking that created them. It means that the person needs to think differently if he wants to find solutions to problems that he made or a complex problem that somehow he cannot understand easily. It is another definition. G. Hamel said that Companies inherited an essential set of virtues from the industrial era: diligence, efficiency, replication, and control. But these virtues are becoming less critical in an age where the new required virtues are: creativity, imagination, diversity, speed, openness, and flexibility. In the context of the creative economy. It means that everyone is looking at things differently. The source of wealth is different. Everyone needs to be able to be much more reactive, more flexible, and able to take better advantage of ideas and creativity. A 2006 report from the New Commission on the Skills of the American Workforce said in its executive summary, "The best employers the world over will be looking for the most competent, most creative, and most innovative people on the face of the earth and will be willing to pay them top dollar for their services." The report includes the arts as an essential skill for the future workforce. Creativity is often defined as producing novel and valuable ideas, whereas innovation is defined as successfully implementing those ideas (Amabile, Conti, Coon, Lazenby, & Herron, 1996). While this is undoubtedly true, creativity in this research will be described as "the connecting and rearranging of knowledge in the minds of

people, who allow themselves to think flexibly – to generate new, often surprising ideas that others consider useful" (Plsek, 1997). Creativity is the capacity (potential or actual) to perceive new relationships and new possibilities, see things from a different frame of reference, or realize new ways of understanding/having the insight or portraying something).

2.1.2 Relevant theories of creativity

For most of the 20th century, creativity was seen as domain-general. For example, the most widely used creativity test -- Torrance Creative Thinking Test (Torrance, 1974), assumes that divergent thinking ability is domain-general. Guiford's (1967) multidimensional model of divergent thinking is also constructed under general assumptions. Although with the deepening of research, some researchers began to focus on measuring divergent thinking in specific fields (Lin, Hu, Adey, & Shen, 2003), these attempts are still relatively rare. Influenced by Gardner's (1983) multiple-intelligence Theory, the domain-specificity view, as a significant theoretical standpoint, has attracted more and more attention from researchers since the 1980s. Some researchers (Gardner, 1988) put forward that creativity should be treated as intelligence, and attention should be paid to the particularity of the field of creativity. Baer and Kaufman (2006), the main proposers of APT, began to study the domain of creativity in the early 1990s. Baer (1993) believes that high-level creative thinking is performed in a specific field but not at the same high level in another area. Two training studies by Baer (1994) also showed that the creative skills training on specific tasks could only increase the subjects' creative performance on charges directly related to the activity.

Plucker (1998) criticized the field particularity study as a selective interpretation of theories, with a method effect and circular argument. However, with the deepening of research, researchers began to realize that creativity has both generality and particularity, and a fusion view emerged Kaufman and Baer (2004). Conducted many empirical studies and put forward the creativity playground theory

based on integrating these empirical studies. The Creative Playground Theory (APT) compares creativity to Disneyland and proposes a four-level hierarchical structure. They are initial Requirements, General Thematic Areas, Domains, and micro-domains. The APT theory provides a scientific basis for cultivating creativity. First, we should focus on growing and developing the prerequisite conditions for creativity, such as essential cognitive ability, the innate drive for innovation, the environment to encourage creative ideas, etc. Therefore, we should pay attention to the development of individual intelligence, stimulate their motivation, and create a favorable environment, which are the tasks that primary education should complete in cultivating innovative talents. Secondly, cultivating creative talents should focus on discovering and developing skills at the general theme level. In APT theory, creativity includes seven general thematic aspects: speech art, visual art, enterprise, interpersonal, mathematics/science, performance, and problem-solving. Because of the differences between innate endowments and acquired accumulation in these seven aspects, students should be taught by their aptitude and strengthen the cultivation of their advantages. Corresponding measures should be taken to cultivate creativity at different thematic levels. Finally, specific creative skills need to be developed at the domain and micro-domain (or task) level.

In the era of sharing, the relationship between individuals and organizations is symbiosis rather than obedience. In activating The Individual, Chen Chunhua points out that creating individual value will become the core under this new paradigm. Personal innovation is mainly reflected through the creation of unique value. Therefore, particular innovation is becoming more and more critical. Creativity refers to novel and practical ideas or ideas related to products, services, processes, etc. (Shalley & Gilson, 2004), which is generally regarded as the foundation and prerequisite for the realization of innovation. The process of creativity is one in which an individual extends to a group through collaboration and collective thinking. If individuals lose their creativity, it will be difficult for teams to generate creativity,

which will lead to the loss of the original motive force for innovation and make it difficult for enterprises to survive and develop in the market (Shalley, Zhou, & Owdham, 2004). Previous studies have divided the factors affecting job creativity into individual characteristics and situational factors (Shalley, Gilson, & Blum, 2000). Among them, unique features include five prominent personalities, learning orientation, self-efficacy, internal motivation, and emotional state (Gong, Huang, & Farh, 2009). Situational factors include job characteristics, interpersonal situation (leaders, colleagues, etc.), human resource management practices (salary evaluation, training), organizational culture and organizational justice, social network attributes, etc. (Liu, Liao, & Loi, 2012). Yu & Dong (2018) explored the effects of learning orientation and high-quality connection on individual creativity. The results showed that high-quality links significantly impacted employees' work meaning and creativity. Job meaning played an important mediating role between high-quality associations and job creation. Prosocial motivation moderated the relationship between high-quality connectedness and job meaning.

Amabile (1983) integrated many previous research results and put forward the Componential Theory of Creativity. Creativity, the influence factors of the theory, is divided into two kinds; one kind is the individual's factors, which consists of three components, respectively is: in the field related skills, professional knowledge, technical ability, related fields, and other innate ability) related to creativity (flexible cognitive style and personality traits such as openness to experience, etc.), internal motivation; The other is external factors, mainly the influence of social environments, such as team, leader, external trigger and reward, organizational structure, organizational atmosphere and culture, social network and so on. Such factors indirectly affect creativity mainly through factors affecting individuals themselves. This view emphasizes the synthesis of creative behavior and personality, but various creative behaviors are also based on creative thinking. Individuals have different understandings of things, and different interpretations produce creative thinking,

followed by creative behavior. In other words, creative thinking can be extended from the overall concept of creativity.

Ca (2017) believes that in the era of big data, learning methods are mainly manifested as cooperative learning, acquisitive learning, and mobile learning, which improves opportunities for the formation and development of creative personality, creative thinking, and creative ability and is conducive to the cultivation of innovative talents.

Liu (2009 as cited in Wu & Albanese, 2013) believes Creative thinking should follow three steps: clever observation, creative thinking processing, and creative practice, emphasizing the continuity of observation and creative practice ability. In this view, the description of a creative statement is summarized as motivation, which often comes from the individual's desire for exploration and knowledge.

The time at college students' independent control and the necessary working conditions for engaging in creative labor is the primary external conditions that affect their creativity. In contrast, creative ideas, motivation, and potential are the factors that restrict the creativity of college students. This view holds that the concept of creation is the individual's understanding of the nature and significance of creative labor, mainly including the outlook on life, values, and world outlook. Creative motivation is the internal motivation for individuals to engage in creative practice activities, which includes primarily the sense of responsibility, mission, and urgency for social, scientific, and academic development, as well as the spirit of cooperation, adventure, and dedication. Creative thinking is the process of discovering and solving new problems. In this thinking activity, the main characteristics are to think about what others do not feel, to see what others do not know, and to do what others do not dare to do. Agility, direction, depth, and breadth of thinking are essential qualities in discovering and exploring problems. Direction, uniqueness, criticality, logic, and imagination are crucial in formulating and testing hypotheses (Ding & Zhang, 2014).

Based on scholars' viewpoints at home and abroad, it can be considered that creativity is an individual's unique, comprehensive ability, which is the complete embodiment of complex factors such as knowledge, intelligence, power, and excellent personality quality. The structure of college students' creativity is defined as five dimensions: learning knowledge and skills, creative thinking, creative behavior ability, creative motivation, and personality.

2.1.3 Research on creativity testing tools

The testing tools for innovative thinking and creativity are mainly divided into four categories: divergent thinking test, Epiphany test, empathy assessment, and creative achievement test.

Divergent thinking test

The main form is some open-ended questions, and subjects are asked to expand their thinking and write as many answers as possible; representatives are the intelligence structure test, Torrance Creativity test, and so on.

Insight tests

There are also some open-ended questions, but the difference is that the insight test has no standard answer. Such tests include the Distance Association Test (Mednick, 1962), Duncker's (1945) candle problem, the nine-point question, the "brain teaser" insight problem (De Young, Flanders, & Peterson, 2008), archetypal enlightenment Epiphany (Shen, Liu, Zang, & Chen, 2011).

Empathy assessment. Empathy assessment is a subjective method to evaluate creativity. These include Amabile's (1982) empathetic expert evaluation method and Cropley and Kaufman's (2012) Creative Solution Diagnosis Scale.

Creativity Achievement Test. Creative achievement is measured mainly by existing innovative products, the number of verifiable achievements or honors, the evaluations received, and self-reported creative achievement lists, which are currently the most popular.

The measurement of innovative thinking is mainly divided into three situations:

The first is to translate and localize the mature scales abroad. For example, the Chinese Complex Remote Association Test (CRAT) was revised and edited by Wu, Chen, and Chen (2022) based on Mart Indale's Remote Association Test (RAT);

Second, the innovative thinking test scales are modified and localized based on the localization of foreign scales. For example, Dong, Lin, Li, Dou, & Zhou (2015) compiled the Creative Thinking Scale for Middle School Students according to the thinking characteristics of Chinese middle school students by adding the aggregative thinking test content lacking in The Gilford scale according to some topics of Gilford's Divergent Ability Test of Intelligence Structure (SOI).

Third, independent research and development of the test scale. For example, The Best Performance Measurement: Creative Thinking, adopts the self-evaluation of typical behavior to test creative thinking and summarizes and forms a scale of creative thinking covering ten measurement indicators through theoretical sorting and scale arrangement.

2.2 Relevant Research on Innovative Enterprises

2.2.1 Concept and characteristics of innovative enterprises

Innovation-oriented enterprises are enterprises that survive by innovation and achieve sustainable development. Through innovation, enterprises can effectively allocate resources, form a good governance structure, and develop high-performance operation practices. Innovation-oriented enterprises are superior to efficiency-oriented, quality-oriented, and flexible enterprises and are essential in promoting national economic growth and social development (Kumpe & Bolwijn, 1994).

In the era of information globalization, with the change in production structure and technology, the disappearance of trade protectionism, new markets, and new competitors, fast-growing enterprises face significant opportunities and

challenges. Only innovative companies are better able to meet these challenges. Innovation means creativity and the ability of employees in innovative enterprises to be thoughtful, passionate, prepared, and able to put those ideas into practice.

Innovative enterprises lead the development of future enterprises with their unique growth way. Apple, Alphabet, Amazon, Microsoft, Samsung, Huawei, Alibaba, IBM, Sony, Facebook, and so on are typical representatives of innovative enterprises (Ang, 2020). Many of the world's most innovative enterprises are full of creative ideas, from visionary companies to legendary figures, which undoubtedly proves the transformative power of innovative enterprises in the new era.

An innovative enterprise is a kind of creative organization. It refers to an enterprise that has strong innovation vitality in system, management, knowledge, technology, and culture has advantages in critical technologies and intellectual property rights in its industry, and can respond sensitively to changes in the market environment.

The main characteristics of innovative enterprises are: the institutionalization of R&D within the enterprise; Research and development has become one of the core functions of enterprises; Set research and development, production, and sales trinity; Forming a sound mechanism of interaction among research and development, production and sales; Can through the continuous innovation, obtain the constant income. Ongoing innovation is its essential feature. British Christopher Freeman (1921-) listed ten characteristics of innovation-oriented enterprises: (1) the internal research and development capacity of the enterprise is quite strong; (2) Engage in basic research or similar research; (3) Use patents to protect themselves and bargain with competitors; (4) The scale of the enterprise is large enough to fund R&D (research and development) for a long time; (5) The development cycle is shorter than competitors; (6) Willing to take risks; (7) Identify a potential market early and imaginatively; (8) Pay attention to the potential market, and strive to cultivate and help users; (9) Entrepreneurship with efficient coordination of research and

development, production and sales; (10) Maintain close contact with customers and the scientific community. To build a technological innovation system with enterprises as the main body, the market as the guidance, and the combination of industry, university, and research, it is crucial to cultivate a large number of innovative enterprises.

2.2.2 Comparative study between innovative enterprises and non-innovative enterprises

Khan and Manopichetwattna (1989) studied the types and characteristics of innovative and non-innovative small enterprises. The study analyzed 50 Manufacturing companies in Texas and divided them into two groups of innovative companies and three groups of non-innovative companies. Two of these groups of innovative firms include new firms or those managed by highly qualified new entrants. The three groups of non-innovative firms include firms that rely on past success for survival; Lack of entrepreneurship; Enterprises operating in a stable environment; Comparatively speaking, the third type of enterprise has poor ability, low effort level and managers tend to rely on luck to control the external development mode.

Aghion, Bond, Klemm, & Marinescu (2004) investigated 900 publicly traded enterprises (mainly large enterprises and mature enterprises) in the UK. They discussed the differences in financing choices between high innovation enterprises and low innovation enterprises (differentiated by the degree of R&D expenditure). Highly innovative companies have more intangible assets such as knowledge, reputation, and special equipment. The risk of bankruptcy is higher with the same level of debt. Therefore, high-innovation firms may rely less on debt financing to reduce bankruptcy costs. It is found that R&D intensive firms (high innovative firms) tend to issue new stocks, and this possibility increases with the increase of R&D intensity. The total amount of bank debt and guaranteed debt decreases with the rise of enterprise R&D intensity.

The research of Kannebley, Porto, and Pazello (2005) shows that innovative enterprises are distinguished from non-innovative enterprises by four indicators: enterprise size, capital source, export orientation, and industrial difference. Innovative enterprises are mainly concentrated in large enterprises, enterprises with a high proportion of foreign investment, enterprises with continuous export and are usually capital-intensive and technology-intensive enterprises. Whether an enterprise launches a new process in the market are foreign capital or diverse capital sources, industrial differences, and export orientation. The decisive factors in judging new products in the market are export orientation and the origin of foreign capital.

2.2.3 Comparative study of different types of innovative enterprises

Innovative small enterprises and innovative large enterprises.

The Economic Activity Research Center of the Swiss Federal Institute of Technology investigated the innovation activities of 914 Swiss manufacturing enterprises in terms of the impact of enterprise size on innovation activities, and the research results showed that: Small businesses operate in well-protected market niches, use external knowledge to make small product and process improvements continuously, and protect themselves from imitation by introducing cutting-edge technology promptly; In the international environment, large enterprises develop new products and introduce new processes mainly by using their innovative knowledge for non-price competition. It can be found that due to the lack of resources and poor ability to resist the crisis, innovative small enterprises mainly rely on the introduction and absorption of advanced technology to achieve their development. At the same time, independent innovation is abundant in large enterprises, (non) R&D innovative enterprises, product innovative enterprises, and innovative process enterprises innovation survey on South Korean manufacturing enterprises and found that R&D innovative enterprises had similar tendencies to innovative product enterprises, while non-R&D innovative enterprises had identical characteristics with innovative process enterprises. Product innovation based on R&D and process innovation based on

design often happen simultaneously. The results show that the form of creation has nothing to do with the size and years of the firm but has to do with the strategic orientation and industrial characteristics. Increased R&D and product innovation do not necessarily lead directly to rapid success in the short term.

2.3 Research on Career Choice Intention

2.3.1 The concept of career choice intention

There are three different but confusing concepts, namely "career choice," "Career orientation," and "career intention," according to domestic and foreign research related to career choice intention.

The concept of "career choice." Ginsberg, Ginsburg, Axelrad, and& Herma (1951) mentioned in the theory of the development process of career choice that the development process must realize the adjustment of interests, abilities, values, and opportunities. Career choice means before entering the job market for college graduates in the future work of decision-making attitude or behavior, also known as career development tendency, that is, a man after a long time to find and try, and self-development, study, family, and work in the accumulation of rich experience after exploration decision-making attitude preference for work. Career choice is a series of processes in which individuals, under the influence of many factors, consider their desired job elements, enterprise types, industries, and work locations, make confident choices, and finally put them into action, career choice is ideal for college students' future careers, college students' career choice as their choice of future work units based on their career ideas and expectations and their interests and development.

Concept of "career choice orientation" Gerber, Wittekind, Grote, and Staffelbach (2009) believes that occupational orientation reflects an individual's preference for specific career-related opportunities, environments, and occupational types. Alavi, Moteabbed, & Arasti (2012) believes that occupational orientation is the relationship between a person's career ambition, preference, and self-concept.

The concept of "career intention that "intention" is the most critical and direct predictor of behavior, so the intention to choose a career represents a person's tendency to pursue a particular career rather than the actual career choice.

In conclusion, "intention" is not a unified definition. Still, according to the classification of the concept and understanding, this study suggests more should emphasize "career choice" is the result of behavioral intention, "career orientation" is more of an emphasis on the connotation of the concept of self, "career intention" to the most suitable for college students to make the actual current career choice before, That is, college students according to their career preferences, and attitude to choose a career.

2.3.2 Personal background and career choice intention

Herrbach & Mignonac (2012), a foreign scholar, found that gender discrimination significantly impacted subjective occupation through research on women's target career success. To be more precise, job seekers pursuing management, technology, and lifestyle had a more perceived severe impact on gender discrimination, gender's influence on career choice has been reduced due to social changes and school efforts, and it still exists. Wu, Low, Tan, Lopez, and Liaw (2015) found through a survey of nursing students that gender had a more significant impact on nursing students, and female students accounted for a more substantial proportion than male students in nursing. It argues that the widespread perception of social discrimination against male nurses discourages them from choosing nursing careers and the gender of college students affects occupation, but occupational differences are strongly correlated with significant differences.

Shi (2005) and other scholars decomposed occupations in China by all factors and found that 79.5% of domains were explained by gender discrimination. Moreover, under the control of the family environment, women concentrated on affairs and service positions, while men were more managerial and technical positions. Shi (2005) found in a survey report on the employment tendency of female college students in

Shanghai that although the employment gap between male and female students became smaller and smaller, gender still impacted employment. Male students are more likely to work in industries such as manufacturing and transportation. In contrast, female students are more likely to work in stable and traditional sectors such as the service industry, education, and government agencies. Sun (2011) found in his research that male and female college students have different employment intentions. Male college students are not willing to lower their expectations and seek employment in remote places. They are more open-minded and have a sense of innovation and risk.

On the other hand, female college students are more conservative when choosing jobs and lack innovation and competition consciousness, hoping to find stable employment. The factors influencing the career choice of China's doctoral students after graduation and found that gender significantly impacts the employment situation. Men are more inclined to work in academia and have more employment opportunities and a larger labor market than women.

2.3.3 Family economic status and career choice intention

Foreign scholars Linda et al. (1985) tested the relationship between family background and career choice among 2,730 non-minority female students from 74 four-year undergraduate colleges and universities. They found that such environmental pressure harmed career choices.

Differences in family wealth and economic status will also change the motivation and direction of individuals' career choices. When financial support fails to meet individual needs, they will choose a career that can meet this condition. Therefore, such factors will affect personal career choices. In her research on the influencing factors, Zhang (2009) found that the family income of rural residents has a significant impact on rural intergenerational occupational mobility. Yang (2015) found in his study on the orientation of high school students after graduation that their employment situation was relatively optimistic, and there were differences in their

career choice according to different family environments.

2.3.4 Household registration and career choice intention

Abdulai and Delgado (1999) verified the influence of individual, family, and geographical characteristics on the non-agricultural employment of farmers in northern Ghana. The students' place of origin also impacted their employment decisions. Compared with students from provincial capital cities, rural areas, and small towns, students from medium-sized cities were more willing to work in colleges and universities. At the same time, family income level harmed their decision to work in colleges and universities. The rural college students' career choices found that 78% of the rural college students as a preferred working location, the city 22% of the students are willing to do urban and pastoral work. This shows that most people don't want to go to work in remote areas because they grew up in the countryside, family life is not easy, want to go to a job, and more cities continue to grow conducted an empirical analysis of the teacher career choice of average preschool university students and found that students from different origins have different motivations to engage in teaching.

The studies of many scholars above show a corresponding relationship between personal background and individual career choice intention, which mainly influences particular career choices.

CHAPTER 3

METHODOLOGY

3.1 Research Methods

Quantitative analysis is adopted in this paper, and the specific steps are as follows:

1) Literature research

By referring to and sorting out domestic and foreign scholars' research on creativity, innovative enterprises, career choice intentions, and other relevant research trends and research status of cutting-edge issues, concepts, and theories in related fields, as the theoretical basis for building research models and putting forward hypotheses.

2) Questionnaire survey.

To explore the relationship between college students' creativity and career choice, the Princeton Creativity Test scale was selected, the authoritative scale was translated and perfected, and a questionnaire survey was carried out among senior students of Baise University.

3) Statistical analysis.

To verify whether there is a significant correlation between personal background, career choice intention, and creativity of senior students, SPSS statistical analysis software was used to gradually implement the reliability and validity test、descriptive analysis, ANOVA analysis, Pearson Correlation.

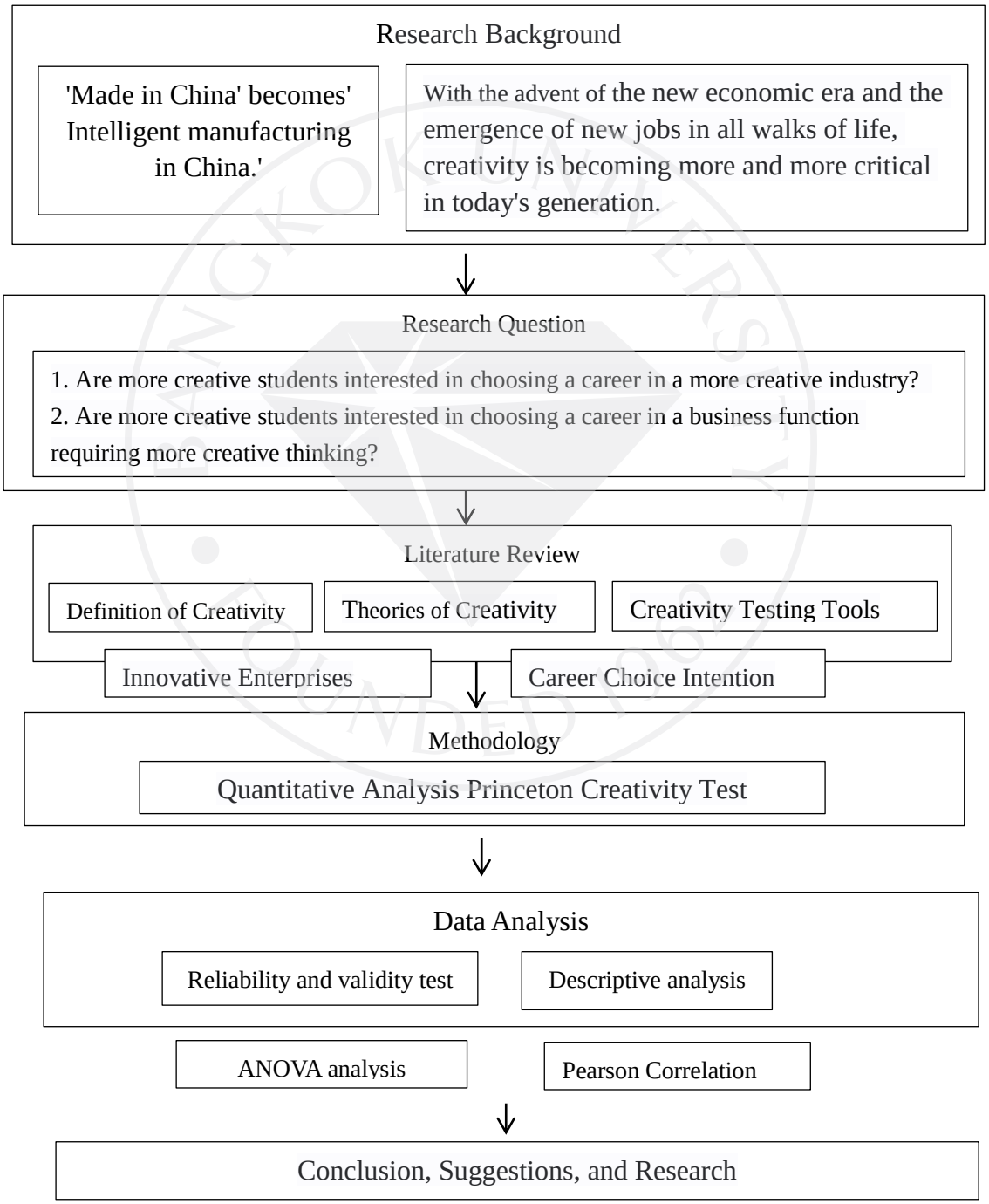
4) Discussion of results.

The conclusions are discussed systematically and deeply, and the corresponding enlightenment is put forward.

3.2 Research Framework

The structure of the paper is shown in the figure

Figure 3.1: Research Framework



3.3 Operational Definition and Measurement of Variables

3.3.1 Creativity

This paper chooses the Princeton creativity test to measure the creativity of college students. The test helps testers determine if they have the personality traits, attributes, values, motivations, and interests that characterize the invention. It is based on several years of study of features possessed by men and women in various fields and occupations who think and act creatively. There are 50 questions in this test, 49 of which are based on each statement; select the appropriate response: A. agree, B. undecided or don't know, C. disagree, and the last one is to provide a list of terms that describe people Let the tester choose ten words that best characterize them. The respondents' creativity scores were divided into six levels: exceptionally creative, very creative, above average, average, below average, or Non-creative.

3.3.2 Career Choice intention

This paper examines career choice intentions in industries and business functions/departments. The author invited four international creativity experts to classify these industries and business functions. These four experts have combined more than a hundred years of work experience and more than half a century of experience in facilitating creativity workshops and obtained the evaluation data table of the relative creative level of the selected industries and business functions. The assessments were done on a 5-point Likert scale. It is divided into five groups (from 1 to 5): highly analytical, more analytical, analytical & creative, more creative, and highly creative. An overview of the assessed industries and business functions (as well as the resulting mean scores of the expert assessments) can be found in Appendix B.

Table 3.1: Overview of Demographical and Professional Backgrounds of Surveyed Creativity Experts

	Details of Creativity Expert:					
Name of Creativity Expert:	A	B	C	D		
Gender	Male	Male	Male	Male		
Nationality	German	French	Thai-German	Thai	Total	Mean
Overall years of work experience:	37	25	27	20	109	27.25
Overall years of experience as a creativity facilitator:	18	10	12	15	55	13.75

3.3.3 Individual background

The research object of this paper is senior students. The author chooses six variables, gender, household registration, monthly consumption, student cadres, whether they have received creativity education, and satisfaction with creativity education, as individual background influencing factors in the relationship between college students' creativity and career.

3.4 Questionnaire and Survey

3.4.1 The questionnaire design

To carry out quantitative analysis, the author surveyed by issuing questionnaires. The questionnaire in this paper is mainly divided into three parts: creativity level test, post-graduation planning, career choice, and personal background.

To improve the reliability of the questionnaire, the author examined each question. In the examination of the translated questionnaire, it was found that students might have difficulty understanding the questions. Let students in the answer process, reduce improper understanding and lead to distortion of the answer. The author invited five students to pre-answer the questionnaire, collected their problems and suggestions on the knowledge of the questionnaire, and then modified it.

The questionnaire includes 62 questions in total. This paper is distributed in the form of an electronic version, which is mainly collected through the distribution platform of the questionnaire.

3.4.2 The investigation process

The survey was distributed on the Questionnaire Star website. The survey was collected from June 8, 2022, to July 8, 2022. Since it is graduation season, many graduates are not on campus, and most students are on internships. Therefore, it took a long time to collect the questionnaires this time. After one month, a total of 238 questionnaires were collected. The author screened the collected questionnaires, the blank questionnaires were directly screened out, and the questionnaires that met one of the following conditions were screened out: First, select others in the industries question. Second, select the other departments in the business functions/departments question. The third is those who do not answer honestly. Finally, 226 valid questionnaires were obtained.

CHAPTER 4

DATA ANALYSIS

4.1 Reliability and Validity Test

The reliability of the questionnaire can reflect the reliability and consistency of the questionnaire results, and Cronbach used α Cronbach's alpha coefficient, Cronbach α The coefficient is directly proportional to the degree of correlation between the entries. Generally speaking, Cronbach α A coefficient > 0.8 indicates very good internal consistency, and < 0.6 indicates poor internal consistency. The combined reliability of this scale is 0.780, which indicates that the reliability is good and can be used for research and analysis.

The validity of the questionnaire can reflect the accuracy and effectiveness of the questionnaire. In this study, KMO and Bartlett sphericity tests were carried out on the scale by factor analysis. Generally speaking, KMO value > 0.8 means that the questionnaire has good structural validity. After calculation, the kmo value of this questionnaire is 0.863, the Bartlett sphericity test value is 12402.583, DF = 10, and the significance probability value is < 0.001, indicating that the validity of this scale is good.

4.2 Descriptive Analysis of the Demographic Background of Respondents

According to Table 4.1, among 226 senior students in Baise University who received the questionnaire survey, It can be found that among the interviewed population, There were 213 "21-23 Years old" people, accounting for 94.25% of the total respondents. It can be found that among the interviewed population, there are 75 "Male" people, Accounting for 33.2% of the total interviewed population, and "Female" 151 people, Accounting for 66.8% of the total number questioned. It can be found that 146 people are student cadres; Student cadre refers to a student who holds some positions in the student community, is responsible for some responsibilities, and

assists the school in the management of the work, which is a student identity. The eligibility criteria are generally excellent and capable students. Accounting for 64.6% of the total number surveyed. There are 171 people from the country, accounting for 75.7% of the total number analyzed. There are 195 people whose monthly consumption level is below 1499, Accounting for 86.28% of the total number of respondents.

Table 4.1: Demographics of Respondents

Demographic Variable	Items	The number of respondents	Percentage (%)
Age	21-23 Years old	213	94.25
	24 years old and above	13	5.75
	Total	226	100
Gender	Male	75	33.2
	Female	151	66.8
	Total	226	100
Student cadre	Yes	146	64.6
	No	80	35.4
	Total	226	100
Domicile place	Towns	55	24.3
	Country	171	75.7
	Total	226	100

(Continued)

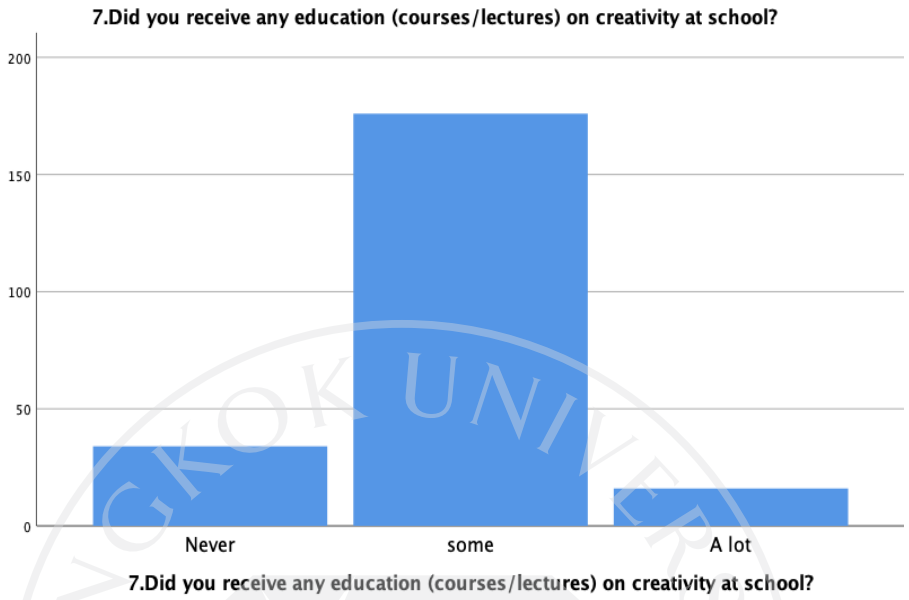
Table 4.1 (Continued): Demographics of Respondents

Demographic Variable	Items	The number of respondents	Percentage (%)
Average monthly expenditure	less than 1000	58	25.7
	1000-1499	137	60.6
	1500-1999	26	11.5
	2000-2499	4	1.8
	2999 and above	1	0.4
	Total	226	100

4.3 Data on Respondents' Creativity Education

A descriptive analysis was carried out on whether you received any education (courses/lectures) on creativity during their undergraduate studies. Roughly three out of four students received “some” creativity education, while 15% of the total respondents didn’t receive any formal instruction in creativity. Only 7.1% of students indicated receiving “a lot” of creativity courses and lectures.

Figure 4.1: Distribution of Education (Courses/Lectures) on Creativity



Regarding the question of "If you've been taught to be creative, You give me a score of the creativity education provided by your university," a descriptive analysis was conducted. The results are shown in figure 4.2 below. It can be seen from the table that the respondents among them, 12 people chose "1", accounting for 5.6% of the total respondents. 13 people chose "2", accounting for 6.1% of the total respondents and 113 people chose "3", accounting for 53.1% of the total respondents.69 people chose "4", accounting for 32.4% of the total respondents. And 6 people chose "5", accounting for 2.8% of the total respondents.

Figure 4.2: The distribution of satisfaction with creativity education (1/2)

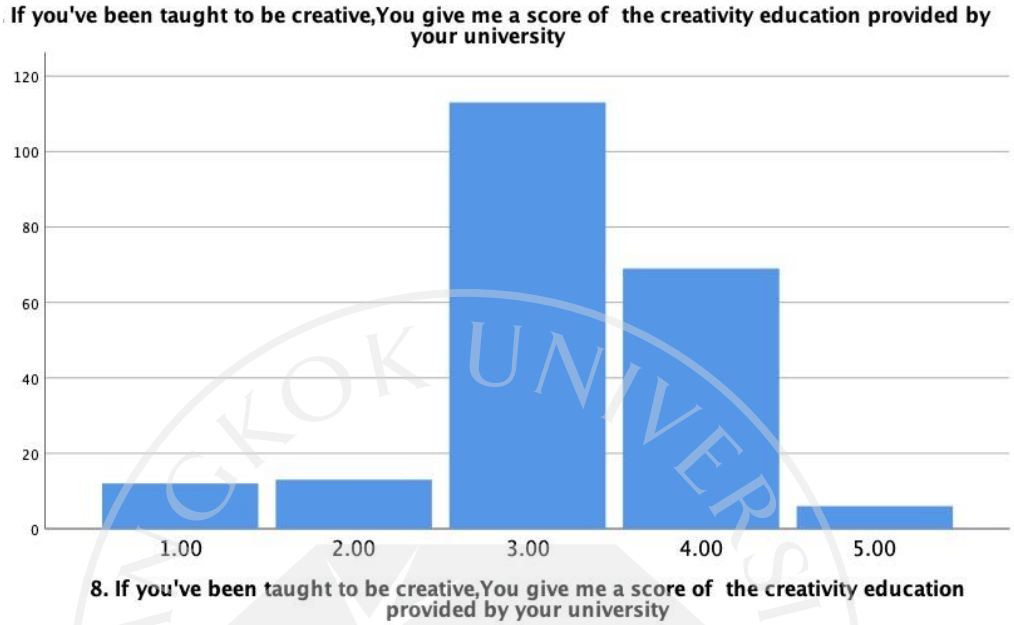


Table 4.2: The Distribution of Satisfaction with Creativity Education

1	2	3	4	5
Highly dissatisfied	More dissatisfied	satisfied	More satisfied	Highly satisfied

From table 4.3 of the Distribution of satisfaction with creativity education, the average score of respondents' satisfaction with creativity education was 3.207, the standard deviation was 0.827, the maximum was 5, and the minimum was 1.

Table 4.3: The Distribution of Satisfaction with Creativity Education (2/2)

If you've been taught to be creative, You give me a score for the creativity	
N	213
Mean	3.207
Std. Deviation	0.827
Minimum	1
Maximum	5

4.4 Data on the Results of Creativity Scores

Table 4.4 of the Distribution of Creativity score. The average respondent's creativity score was 54.969, the minimum was 30, and the maximum was 85.

Table 4.4: Distribution of creativity score (1/2)

Creativity score	
N	226
Mean	54.969
Std.Enor	0.674
Std.Deviation	10.127
variance	102.563
Minimum	30
Maximum	85

Table 4.4 of Distribution of Creativity score we can see the "creativity score" in this respect. No respondents' creativity score is in "Blow14 (Non-creative)", "15-29(Below Average)". The creativity score of 122 respondents was "30-55 (Average)". The creativity score of 103 respondents was Above Average (56-84).

The creativity score of one interviewee was 85-109 (Very Average). No respondents' creativity score was "Exceptionally creative" or above 110. It can be seen that the number of people who scored "30-55 (Average) "is the largest, 54% of the total respondents.

Table 4.5: Distribution of Creativity Score (2/2)

Creativity score		
	0N	Frequency (%)
Non-creative (Below 14)	00	0
Below average (15-29)	00	0
Average (30-55)	1122	54.0
Above Average (56-84)	1103	45.6
Creative (85-109)	11	0.4
Exceptionally creative	00	0
Total	2226	100.0

4.5 Data on Career Choice

From the table of the distribution of future options after graduation,

We can see, "what are your current plans for your future choices after graduation?" In this regard, 126 respondents chose "find a job," accounting for 55.8% of the total respondents.28 respondents chose "apply for a civil servant," accounting for 12.4% of the total respondents.37 respondents chose "go to graduate school," accounting for 16.4% of the total respondents and 35 respondents chose "not sure," accounting for 15.5% of the total respondents, It can be seen that the number of people who choose "find a job" is the largest, more than 50% of the total respondents.

Table 4.6: The Distribution of Future Choices after Graduation

What are your current plans for your future choices after graduation?		
	N	Frequency (%)
Find A Job	126	55.8
Apply for A civil servant	28	12.4
Go to graduate school	37	16.4
Not sure	35	15.5
Total	226	100

Regarding the question "If you could choose among the following fields, which would you choose as your industry& organizational career orientation?", 27.9% of the total respondents selected "Education (Primary & Secondary, Training)." 27 respondents selected "Healthcare", accounting for 11.9% of the total respondents. 18 respondents selected "Conglomerates," accounting for 8% of the total respondents, and 17 respondents selected "Software Companies," Accounting for 7.5% of the total respondents. 14 respondents selected "Government/Party Institutions (Public Sector)," accounting for 6.2% of the total respondents, and 13 respondents selected "Entertainment (T.V., Music, Arts)," accounting for 5.8% of the total respondents. "Universities" and "Utilities" were chosen by the same ten respondents. The number of people in other fields was less than 10, indicating that education was the most extensive choice.

Table 4.7: The Distribution of Industry & Organizational Career Orientation

If you could choose among the following fields, which would you choose as your industry& organizational career orientation?		
	N	Frequency (%)
Education (Primary & Secondary Training)	63	27.9
Healthcare	27	11.9
Conglomerates	18	8
Software Companies	17	7.5
Government / Party Institutions (Public Sector)	14	6.2
Entertainment (Tv, Music, Arts)	13	5.8
Universities	10	4.4
Utilities	10	4.4
Accounting Firms	8	3.5
Advertising	7	3.1
Banking	6	2.7
Architecture	5	2.2
Smes	5	2.2
Design Agencies	4	1.8
Airlines	3	1.3
Gastronomy	3	1.3
Research Institutes	3	1.3
Hotel Industry	2	0.9
Non-Profit Org	2	0.9
Logistics	1	0.4

(Continued)

Table 4.7 (Continued): The distribution of industry& organizational career orientation

If you could choose among the following fields, which would you choose as your industry& organizational career orientation?		
	N	Frequency (%)
Manufacturing	1	0.4
Other Creative Industries (Including Independent Creators)	1	0.4
Property Development	1	0.4
Steel	1	0.4
Trust & Securities Companies	1	0.4
Total	226	100

Regarding the question "If you could choose among the following fields, which would you choose as your business functions /department career orientation?", 25 people chose "Controlling" among the respondents, accounting for 11.1% of the total respondents, It's the most popular of all the departments.19 respondents chose "In-House Consulting", accounting for 8.4% of the total respondents, 16 respondents chose "Accounting", accounting for 7.1% of the total respondents, 15 people chose "Content Creation", accounting for 6.6% of the total respondents,15 respondents chose "Traineeship", accounting for 6.6% of the total respondents. In contrast, 15 departments chose fewer than 10 people.

Table 4.8: Distribution of Selected Business Functions/Department Career Orientation

If you could choose among the following fields, which would you choose as your business functions /department career orientation?		
	N	Frequency (%)
Controlling	25	11.1
In-House Consulting	19	8.4
Accounting	16	7.1
Content Creation	15	6.6
Traineeship	15	6.6
Finance	14	6.2
Time-Sharing	12	5.3
Back-Office (Organization)	11	4.9
Sales	11	4.9
NPD (New Product Development)	10	4.4
Production / Manufacturing	10	4.4
Design (Product, Graphic)	8	3.5
Engineering	7	3.1
Business Development	5	2.2
Economics	5	2.2
Human Resources	5	2.2
Quality Assurance	5	2.2
Research	5	2.2
Floaters	4	1.8
It (Information Technology)	4	1.8
Operations	4	1.8

(Continued)

Table 4.8 (Continued): Distribution of Selected Business Functions/Department Career Orientation

If you could choose among the following fields, which would you choose as your business functions /department career orientation?		
	N	Frequency (%)
Communication	3	1.3
Customer Relationship Management	3	1.3
Project Teams	3	1.3
Compliance	2	0.9
Legal	2	0.9
Public Relations	2	0.9
Software / App Programming	1	0.4
Total	226	100

4.6 ANOVA Analysis

Take "Creativity score" as the independent variable and "Creativeness of Industry Choice" as the dependent variable to conduct a one-way ANOVA analysis. The analysis results are shown in the following table. It can be seen from the table that the result is not significant (P=0.724).

Table 4.9: One-way ANOVA Analysis: Creativeness of Industry Choice

	Sum of squares	df	Mean square	F	P
Intergroup	49.972	47	1.063	0.86	0.724
In group	220.092	178	1.236		
Total	270.065	225			

Take "Creativity score" as the independent variable and " Creativeness of Business Function Choice" as the dependent variable to conduct a one-way ANOVA analysis. The analysis results are shown in the following table. It can be seen from the table that the result is not significant (P=0.751).

Table 4.10: One-way ANOVA analysis: Creativeness of Business Function Choice

	Sum of squares	df	Mean square	F	P
Intergroup	51.264	47	1.091	0.843	0.751
In group	230.424	178	1.295		
Total	281.688	225			

4.7 Pearson Correlation

The Pearson Correlation analysis result is shown in the following table, from the table can be drawn: "Creativity score" has a negative impact on "Creativeness of Industry Choice", but the trend is not statistically significant (Pearson Correlation=-0.037, P=0.582).

Table 4.11: Pearson Correlation (1/2)

Correlations			
		Creativity score	Creativeness of Industry Choice
Creativity score	Person Correlation	1	-0.037
	Sig. (2-tailed)		0.582
	N	226	226

(Continued)

Table 4.11 (Continued): Pearson Correlation (1/2)

Correlations			
		Creativity score	Creativeness of Industry Choice
Creativeness of Industry Choice	Person Correlation	-0.037	1
	Sig. (2-tailed)	0.582	
	N	226	226

Pearson Correlation analysis result is shown in the following table, from the table can be drawn: "Creativity score" has a positive impact trend on "Creativeness of Business Function Choice", but the trend is not statistically significant (Person Correlation =0.068, P=0.308).

Table 4.12: Pearson Correlation (2/2)

Correlations			
		Creativity score	Creativeness of Business Function Choice
Creativity score	Person Correlation	1	0.068
	Sig. (2-tailed)		0.308
	N	226	226
Creativeness of Business Function Choice	Person Correlation	0.068	1
	Sig. (2-tailed)	0.308	
	N	226	226

CHAPTER 5

CONCLUSION AND DISCUSSION

5.1 Cause Analysis of Data Results

5.1.1 Possible reasons for non-significant results between creativity level and career choice in more creative industry and a business function requiring higher levels of creativity.

5.1.1.1 Students are all in the middle concerning their creativity score, probably as a result of the Chinese education system.

1) It is worth affirming that the achievements of China's education system are enormous. After primary and secondary education, Chinese students are highly competitive. High school students across the country have been admitted to college through the College entrance examination, which makes their average performance after graduating from high school and even after graduating from college very high.

2) China's education model is relatively simple. Students should neither be too far ahead nor too far behind. So Chinese education "has a high mean and a small variance." That's just not the case in American schools. The average American education is not very high, but the variance is very large (Shi, 2005).

3) Under the Chinese education system, teachers like to follow the teaching plan. The teacher teaches the knowledge point again and again to the student, asks the student to review and recite continuously, and causes it to become lifelong memory not to forget. Students' basic knowledge is generally relatively solid, but it also restricts their thoughts and thinking and loses the opportunity to cultivate innovative consciousness. American schooling, on the other hand, is a process of observation, discovery, reflection, identification, experience, and comprehension. In this process, students gradually master the skills and knowledge of finding problems, asking questions, thinking about problems, looking for information, and drawing

conclusions. Although the content they learn may not be deep enough, as long as students understand the knowledge points, not only lifelong unforgettable, and often can be extrapolated.

5.1.1.2 Undergraduate students are comparatively young and lack any or more prolonged work experience and hence might naively make career choices based on traditional thinking (of what is a good, safe career environment). This is supported by the fact that most students consider pursuing a career in education.

5.1.1.3 Undergraduate students were also under lockdown over a long time stretch during the COVID-19 pandemic. College students have few opportunities to go out of school, and they have few opportunities to participate in social practice. They spend most of their time studying in school.

5.1.1.4 In Baise and its provincial location on the periphery, they also lack a diverse industry ecosystem representing industries linked to a modern knowledge & creativity economy.

5.1.1.5 Most students also come from rural areas. Most of their parents are farmers, and most of them want their children to have a stable and decent jobs, such as a teacher.

5.2 Conclusions

5.2.1 In a society that guarantees equal educational opportunities and is influenced by Oriental culture. How to encourage innovation is a social problem that cannot be solved by one or two people or one department. It requires the thinking of society and the evolution of the whole culture. The cultivation of top-notch innovative talents is to solve these problems:

1) How to break through the barrier between primary education and higher education;

2) How to reform the recruitment and selection mechanism and identify top creative talents;

3) How to break the existing restrictions on the establishment of disciplines and encourage cross-disciplinary collaborations;

4) How to truly encourage the coexistence of diversity, which is a source of innovation;

5) How to endow universities with more autonomy, how to support departments with more independence, how to let professors get more independence, and promote the innovation of training mode from the bottom (Shi, 2005).

5.2.2 Offer more (sophisticated) creativity courses or courses teaching creativity as part of their curriculum, Teachers should fully improve students' innovative thinking, and pay attention to the training of students' observation and imagination, especially the training of students' creativity and the ability to find new problems.

5.2.3 Add career consulting service on careers in creative industries. Invite corporate guest speakers from more creative industries or business functions to Baise.

5.2.4 Colleges and universities should provide a practical platform for students to give full play to their creativity.

Colleges and universities should cooperate with enterprises, invite some enterprises to carry out creative and innovation competitions and stimulate students' innovation ability by allowing students to participate in practical activities.

5.3 Research Limitations and Suggestions

Due to the results and restrictions of this study, there are several opportunities for further research.

1) Only quantitative analysis is conducted in this paper, and qualitative research can be added in future studies to explore the factors influencing college students' creativity and career choice.

2) The research object of this paper has limitations. In this paper, only 226 effective samples were collected from the senior students of Baise University. The

research objects involved single fields, concentrated distribution of creativity level, and limited scope of career choice, so the results were not apparent, and there were some problems with few samples. Therefore, subsequent studies can expand the sample range, diversify the research objects, and explore more possibilities of the relationship between college students' creativity and career choice.

3) Further explore the factors affecting college students' creativity.

4) The survey area is relatively backward, and many emerging industries and sectors mentioned in the questionnaire have not yet appeared in this area. As a result, some interviewees may not understand, thus affecting the data results. The author suggests that future research can expand the investigation objects to economically developed regions, such as Beijing, Shanghai, and Guangdong in China.

BIBLIOGRAPHY

Abdulai, A., Delgado, C. L. (1999). Determinants of nonfarm earnings of farm-based husbands and wives in Northern Ghana. *American Journal of Agriculture Economics, 81*(1), 117-130.

Aghion, P., Bond, S., Klemm, A., & Marinescu, I. (2004). Technology and financial structure: are innovative firms different?. *Journal of the European Economic Association, 2*(2-3), 277-288.

Alavi, S. B., Moteabbed, Sh., & Arasti, M. R. (2012). A qualitative investigation of career orientations of a sample of Iranian software engineers. *Scientia Iranica, 19*(3), 662-673.

Amabile, T. M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology, 43*(5), 997–1013.

Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology, 45*(2), 357–376.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of management journal, 39*(5), 1154-1184.

Ang, K. (2020). *Ranked: The 50 most innovative companies*. Retrieved from https://www.visualcapitalist.com/top-50-most-innovative-companies-2020/.

Baer, J. (1993). *Creativity and divergent thinking: A task-specific approach*. New York: Lawrence Erlbaum Associates.

Baer, J. (1994). Effects of college residence on perceived norms for alcohol consumption: An examination of the first year in college. Psychology of Addictive Behaviors, 8(1), 43–50.

Baer, J., & Kaufman, J. C. (2006). Creativity research in English-speaking countries. In J. C. Kaufman, & R. J. Sternberg (Eds.), *The international handbook of creativity* (pp. 10–38). New York, NY: Cambridge University.

DeYoung, C. G., Flanders, J. L., & Peterson, J. B. (2008). Cognitive abilities involved in insight problem solving: An individual differences model. *Creativity Research Journal, 20*(3), 278-290.

Ca, J. (2017). The reform of learning style and the cultivation of creative talents in the era of big data. *Education Guide: First Half,* (10), 19-23.

Cropley, D. H., & Kaufman, J. C. (2012). Measuring functional creativity: Non‐expert raters and the creative solution diagnosis scale. *The Journal of Creative Behavior, 46*(2), 119-137.

Ding, X., & Zhang, Q. (2014). Influencing factors and cultivation measures of college students' creativity. *Nanyang Normal University: Journal of Humanities and Social Sciences, 34*(1), 119-121.

Dong, L., Lin, C., Li, T., Dou, D., & Zhou, L. (2015). The relationship between cultural identity and self-esteem among Chinese Uyghur College students: The mediating role of acculturation. *Attitudes, 117*(1), 302-318.

Duncker, K. (1945). On problem-solving. *Psychological Monographs, 58*, 1-113.

Gardner, H. (1983). *Frames of mind: A theory of multiple intelligences*. New York: Basic Books.

Gardner, H. (1988). Creativity: An interdisciplinary perspective. *Creativity Research Journal, 1*, 8–26.

Gerber, M., Wittekind, A., Grote, G., & Staffelbach, B. (2009). Exploring types of career orientation: A latent class analysis approach. *Journal of Vocational Behavior, 75*(3), 303-318

Ginsberg, E., Ginsburg, S. W., Axelrad, S., & Herma, J. L. (1951). *Occupational choice: An approach to a general theory*. Columbia: Columbia University.

Gong, Y., Huang, J.-C., & Farh, J.-L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal, 52*, 765-778.

Guilford, J. P. (1967). Creativity: Yesterday, today, and tomorrow. *The Journal of Creative Behavior, 1*(1), 3–14.

Herrbach, O., & Mignonac, K. (2012). *Perceived gender discrimination and women's subjective career success: The moderating role of career anchors*. Retrieved from https://halshs.archives-ouvertes.fr/halshs-00695915.

Kaufman, J. C., & Baer, J. (2004). Sure, I'm creative--but not in mathematics!: Self-reported creativity in diverse domains. *Empirical Studies of the Arts, 22*(2), 143–155.

Kannebley, S., Porto, G. S., & Pazello, E. T. (2005). Characteristics of Brazilian innovative firms: An empirical analysis based on PINTEC—industrial research on technological innovation. *Research Policy, 34*, 872-893.

Khan, A. M., & Manopichetwattana, V. (1989). Innovative and non-innovative small firms: Types and characteristics. *Management Science,35*(5), 597-606.

Kumpe, T., & Bolwijn, P. (1994). Toward the innovative firm - challenge for R&D management. *Research Technology Management, 37*(1), 38-44.

Li, J., Qin, R., & Jiang, H. (2022). Measurement of innovation efficiency in China’s electronics and communication equipment manufacturing industry-based on dynamic network SBM Model. *Sustainability, 14*, 1227.

Lin, C., Hu, W., Adey, P., & Shen, J. (2003). The influence of case on scientific creativity. *Research in Science Education, 33*(2), 143-162

Liu, D., Liao, H., & Loi, R. (2012). The dark side of leadership: A three-level investigation of the cascading effect of abusive supervision on employee creativity. *Academy of Management Journal, 55*(5),1187-1212.

Mednick, S. (1962). The associative basis of the creative process. *Psychological Review, 69*(3), 220–232.

Plsek, P. E. (1997). *Creativity, innovation and quality*. Milwaukee, WI: ASQC Quality.

Plucker, J. A. (1998). Beware of simple conclusions: The case for content generality of creativity. *Creativity Research Journal, 11*(2), 179–182.

Shalley, C., E., & Gilson, L. L. (2004). A little creativity goes a long way: An examination of teams engagement in creative processes. *Journal of Management, 30*(4), 453-470.

Shalley, C., E., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirementsand the work environment: Effects on satisfaction and intent to turnover. *Academy of Management Journal, 43*(2), 215-224.

Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here?. *Journal of Management, 30*, 933-958.

Shen, W. -B., Liu, C., Zhang, X. -J., & Chen, Y. -L. (2011). The time course and hemispheric effect of "insight" in three-character chinese riddles task: An ERP study. *Acta Psychologica Sinica, 43*(03), 229-240.

Singla, D., Singh, S. K., Dubey, H., & Kumar, T. (2021). Evolving requirements of smart healthcare in cloud computing and MIoT. Retrieved from http://ceur-ws.org/Vol-3080/15.pdf.

Shi, W. (2005). A survey on employment orientation of female college students in Shanghai. *Educational Development Research*, (3), 6-10.

Sun, Y. (2011). *College students' employment intention: Problems and reasons*. Unpublished doctoral dissertation, Dalian, Northeast University of Finance and Economics, Liaoning, China.

Torrance, E. P. (1974). *The Torrance tests of creative thinking: Norms-technical manual*. Princeton, NJ: Personal.

Wan, J., Zhang, F., & Pan, J. (2021). Promoting organized basic research: strategic layout and strategic capacity in science and technology. *Bulletin of Chinese Academy of Sciences, 36*(12), Article 3

Wu, C-L, Chen, P-Z., & Chen, H-C. (2022). *Measuring conceptual associations via the development of the Chinese visual remote associates test*. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2022.799928/full.

Wu, J. J., & Albanese, D. (2013). Imagination and creativity: wellsprings and streams of education – the Taiwan experience. *Educational Psychology, 33*(5), 1-21.

Wu, L. T., Low, M. M., Tan, K. K., Lopez, V., & Liaw, S. Y. (2015). Why not nursing? A systematic review of factors influencing career choice among healthcare students. *International Nursing Review, 62*(4), 547–562.

Yang, H. (2015). *Research on the employment status and influencing factors of graduates majoring in Social work*. Unpublished master's Thesis, Central China Normal University, China.

Yu, X., & Dong, T. (2018). The effect of high-quality connections on employee work creativity: The roles of the meaning of work and pro social motive. *Journal of Southwest Petroleum University (Social Science Edition), 20*(6), 36-44.

Yu, Y. (2020). Research on the science and technology innovation education of colleges and universities based on "internet plus". *Advances in Social Science, Education and Humanities Research, 493,* 478-485.

Zhang, R. (2009). Intergenerational occupational mobility of rural residents. *Lanzhou Academic Journal*, (3), 107-110.

APPENDICES

Appendix A

Questionnaire

A questionnaire survey on the relationship between College students' creativity and career Choice intention

Dear students,

Hello! This questionnaire is about the relationship between the creativity of Baise university students and their intention of career choices. Your answers are critical to the quality of this independent research. We will fill in the questionnaire anonymously. We will keep your personal information strictly confidential and guarantee that the answers will only be used for my independent research. There is no right or wrong answer to each question. Please fill it out truthfully. Thank you for your support and cooperation. I wish you progress in your study and all the best!

1. Princeton Creativity Test

(If you are interested in your level of creativity, you can find out by clicking on this link:

https://www.kellogg.northwestern.edu/faculty/uzzi/ftp/page176.html)

1) I always work with a great deal of certainty that I am following the correct procedure for solving a particular problem.

A. Agree

B. Undecided or Don't Know

C. Disagree

2) It would be a waste of time for me to ask questions if I had no hope of obtaining answers.

A. Agree

B. Undecided or Don't Know

C. Disagree

3) I concentrate harder on whatever interests me than most people.

A. Agree

B. Undecided or Don't Know

C. Disagree

4) I feel that a logical step-by-step method is best for solving problems.

A. Agree

B. Undecided or Don't Know

C. Disagree

5) In groups I occasionally voice opinions that seem to turn people off.

A. Agree

B. Undecided or Don't Know

C. Disagree

6) I spend a great deal of time thinking about what others think of me.

A. Agree

B. Undecided or Don't Know

C. Disagree

7) It is more important for me to do what I believe to be right than to try to win the approval of others.

A. Agree

B. Undecided or Don't Know

C. Disagree

8) People who seem uncertain about things lose my respect.

A. Agree

B. Undecided or Don't Know

C. Disagree

9) More than other people, I need to have things interesting and exciting.

A. Agree

B. Undecided or Don't Know

C. Disagree

10) I know how to keep my inner impulses in check.

A. Agree

B. Undecided or Don't Know

C. Disagree

11) I am able to stick with difficult problems over extended periods of time.

A. Agree

B. Undecided or Don't Know

C. Disagree

12) On occasion I get overly enthusiastic.

A. Agree

B. Undecided or Don't Know

C. Disagree

13) I often get my best ideas when doing nothing in particular.

A. Agree

B. Undecided or Don't Know

C. Disagree

14) I rely on intuitive hunches and feelings of "rightness" or "wrongness" when moving toward the solution of a problem.

A. Agree

B. Undecided or Don't Know

C. Disagree

15) When problem solving, I work faster when analyzing the problem and slower when synthesizing the information I have gathered.

A. Agree

B. Undecided or Don't Know

C. Disagree

16) I sometimes get a kick out of breaking the rules and doing things I am not supposed to.

A. Agree

B. Undecided or Don't Know

C. Disagree

17) I like hobbies that involve collecting things.

A. Agree

B. Undecided or Don't Know

C. Disagree

18) Daydreaming has provided the impetus for many of my more important projects.

A. Agree

B. Undecided or Don't Know

C. Disagree

19) I like people who are objective and rational.

A. Agree

B. Undecided or Don't Know

C. Disagree

20) If I had to choose from two occupations other than the one I now have, I would rather be a physician than an explorer.

A. Agree

B. Undecided or Don't Know

C. Disagree

21) I can get along more easily with people if they belong to about the same social and business class as myself.

A. Agree

B. Undecided or Don't Know

C. Disagree

22) I have a high degree of aesthetic sensitivity.

A. Agree

B. Undecided or Don't Know

C. Disagree

23) I am driven to achieve high status and power in life.

A. Agree

B. Undecided or Don't Know

C. Disagree

24) I like people who are sure of their conclusions.

A. Agree

B. Undecided or Don't Know

C. Disagree

25) Inspiration has nothing to do with the successful solution of problems.

A. Agree

B. Undecided or Don't Know

C. Disagree

26) When I am in an argument, my greatest pleasure would be for the person who disagrees with me to become a friend, even at the price of sacrificing my point of view.

A. Agree

B. Undecided or Don't Know

C. Disagree

27) I am much more interested in coming up with new ideas than in trying to sell them to others.

A. Agree

B. Undecided or Don't Know

C. Disagree

28) I would enjoy spending an entire day alone, just "chewing the mental cud."

A. Agree

B. Undecided or Don't Know

C. Disagree

29) I tend to avoid situations in which I might feel inferior.

A. Agree

B. Undecided or Don't Know

C. Disagree

30) In evaluating information, the source is more important to me than the content.

A. Agree

B. Undecided or Don't Know

C. Disagree

31) I resent things being uncertain and unpredictable.

A. Agree

B. Undecided or Don't Know

C. Disagree

32) I like people who follow the rule, "business before pleasure."

A. Agree

B. Undecided or Don't Know

C. Disagree

33) Self-respect is much more important than the respect of others.

A. Agree

B. Undecided or Don't Know

C. Disagree

34) I feel that people who strive for perfection are unwise.

A. Agree

B. Undecided or Don't Know

C. Disagree

35) I prefer to work with others in a team effort rather than solo.

A. Agree

B. Undecided or Don't Know

C. Disagree

36) I like work in which I must influence others.

A. Agree

B. Undecided or Don't Know

C. Disagree

37) Many problems that I encounter in life cannot be resolved in terms of right or wrong solutions.

A. Agree

B. Undecided or Don't Know

C. Disagree

38) It is important for me to have a place for everything and everything in its place.

A. Agree

B. Undecided or Don't Know

C. Disagree

39) Writers who use strange and unusual words merely want to show off.

A. Agree

B. Undecided or Don't Know

C. Disagree

40) Many people are upset because they take things too seriously.

A. Agree

B. Undecided or Don't Know

C. Disagree

41) In spite of misfortunes, setbacks, and objections, I have been able to maintain my original spirit and enthusiasm for my work.

A. Agree

B. Undecided or Don't Know

C. Disagree

42) The dreamer is impractical.

A. Agree

B. Undecided or Don't Know

C. Disagree

43) I was more impressed by what I didn't know than what I knew.

A. Agree

B. Undecided or Don't Know

C. Disagree

44) I'm more interested in what this could be than what this is.

A. Agree

B. Undecided or Don't Know

C. Disagree

45) I often get upset when I say something I don't mean to hurt someone.

A. Agree

B. Undecided or Don't Know

C. Disagree

46) I am willing to spend a lot of time working on new ideas, even if there is no reward.

A. Agree

B. Undecided or Don't Know

C. Disagree

47) I think it's fair to say that ideas don't amount to much.

A. Agree

B. Undecided or Don't Know

C. Disagree

48) I don't like to ask questions that seem ignorant.

A. Agree

B. Undecided or Don't Know

C. Disagree

49) Once the task in the shoulder, even if setbacks, I will resolutely complete.

A. Agree

B. Undecided or Don't Know

C. Disagree

50) Below is a list of terms that describe people. Choose ten words that best characterize you.

(1) Energetic

(2) Alert

(3) Persuasive

(4) Curious

(5) Observant

(6) Organized

(7) Fashionable

(8) Unemotional

(9) Self-confident

(10) Clear-thinking

(11) Persevering

(12) Understanding

(13) Original

(14) Dynamic

(15) Cautious

(16) Self-demanding

(17) Habit-bound

(18) Polished

(19) Resourceful

(20) Courageous

(21) Egotistical

(22) Efficient

(23) Independent

(24) Helpful

(25) Stern

(26) Perceptive

(27) Predictable

(28) Quick

(29) Formal

(30) Good-natured

(31) Informal

(32) Thorough

(33) Dedicated

(34) Impulsive

(35) Forward-looking

(36) Determined

(37) Factual

(38) Realistic

(39) Open-minded

(40) Modest

(41) Tactful

(42) Involved

(43) Inhibited

(44) Absent-minded

(45) Enthusiastic

(46) Flexible

(47) Innovative

(48) Sociable

(49) Poised

(50) Well-liked

(51) Acquisitive

(52) Restless

(53) Practical

(54) Retiring

2. Plan and career choice after graduation

1) What are your current plans for your future choices after graduation?

A Find A job B Apply for A civil servant C Go to graduate school D Study abroad E Not sure

If you could choose among the following fields, which would you choose as your industry& organizational career orientation?

(1) Accounting Firms

(2) Advertising

(3) Airlines

(4) Architecture

(5) Banking

(6) Conglomerates

(7) Consulting

(8) Design Agencies

(9) Education (Primary & Secondary, Training)

(10)Entertainment (Tv, Music, Arts)

(11)Event Industry

(12)Family Businesses

(13)Franchising

(14)Gastronomy

(15)Government / Party Institutions (Public Sector)

(16)Healthcare

(17)Hotel Industry

(18)Innovation Agencies

(19)Insurance

(20)Law Firms

(21)Logistics

(22)Manufacturing

(23)Non-Profit Org

(24)Oil & Gas

(25)Other Creative Industries (Including Independent Creators)

(26)Property Development

(27)Public Relations

(28)Real Estate

(29)Research Institutes

(30)Smes

(31)Software Companies

(32)(Tech) Start-Up Ventures

(33)Steel

(34)Temporary Work Industry

(35)Think Tanks

(36)Trust & Securities Companies

(37)Universities

(38)Utilities

(39)Other (Please Specify) _____

2) If You Could Choose Among The Following Fields, Which Would You Choose As Your Business Functions /Department Career Orientation?

(1) Accounting

(2) Back-Office (Organization)

(3) Business Development

(4) Communication

(5) Compliance

(6) Content Creation

(7) Controlling

(8) Customer Relationship Management

(9) Customer Service

(10) Design (Product, Graphic)

(11) Economics

(12) Engineering

(13) Finance

(14) Floaters

(15) Human Resources

(16) Human Resources

(17) In-House Consulting

(18) It (Information Technology)

(19) Legal

(20) Marketing

(21) Npd (New Product Development)

(22) Operations

(23) Production / Manufacturing

(24) Project Teams

(25) Public Relations

(26) Quality Assurance

(27) Research

(28) Sales

(29) Software / App Programming

(30) Strategic Planning

(31) Time-Sharing

(32) Traineeship

(33) Other (Please Specify) _____

3. Personal information

1) Your major is _____ (please write the full name of your major)

2) class standing is

A. Freshmen B. Sophomore

C. Junior D. Senior

3) Your age is between

A. 15-17 Years old B. 18-20 Years old

C. 21-23 Years old D. 24 Years old and above

4) Your gender is

A. Male B. Female

5) Did you receive any education (courses/lectures) on creativity at school?

A. Never B. Some

C. A lot

6) If you've been taught to be creative, you give me a score of the creativity education provided by your university

A. 1 B. 2

C. 3 D. 4

E. 5

7) In school, Are you a student cadre (Student cadre refers to a student who holds some positions in the student community, is responsible for some responsibilities, and assists the school in the management of the work, which is a student identity. The election criteria are generally excellent and capable students.)?

A. Yes B. No

8) What is your domicile place?

A. Towns B. Country

9) What was your average monthly expenditure on campus?

A. less than 1000 B. 1000-1499

C. 1500-1999 D. 2000-2499

E .2500-2999 F. 2999 and above

Appendix B

Type of Industries

Table Appendix B.1 the Type of Industries

#	**Industries**
1	Accounting Firms
2	Advertising
3	Airlines
4	Architecture
5	Banking
6	Conglomerates
7	Consulting
8	Design Agencies
9	Education
10	Entertainment (Tv, Music, Arts)
11	Event Industry
12	Family Businesses
13	Franchising
14	Gastronomy
15	Government / Party Institutions (Public Sector)
16	Healthcare
17	Hotel Industry
18	Innovation Agencies
19	Insurance
20	Law Firms

#	Industries
21	Logistics
22	Manufacturing
23	Non-Profit Org
24	Oil & Gas
25	Other Creative Industries (Including Independent Creators)
26	Property Development
27	Public Relations
28	Real Estate
29	Research Institutes
30	Smes
31	Software Companies
32	*(Technology)* Start-Up Ventures
33	Steel
34	Temporary Work Industry
35	Think Tanks
36	Trust & Securities Companies
37	Universities
38	Utilities

Table Appendix B.2 The Type of BUSINESS FUNCTIONS/ DEPARTMENTS

#	Business Functions / Departments
1	Accounting
2	Back-Office (Organization)
3	Business Development
4	Communication
5	Compliance
6	Content Creation
7	Controlling
8	Customer Relationship Management
9	Customer Service
10	Design (Product) / (Graphic)
11	Economics
12	Engineering
13	Finance
14	Floaters
15	Human Resources
16	In-House Consulting
17	Industrial Design
18	It (Information Technology)
19	Legal
20	Marketing
21	Npd (New Product Development)
22	Operations
23	Production / Manufacturing
24	Production Process Design

#	Business Functions / Departments
25	Project Teams
26	Public Relations
27	Quality Assurance
28	Research
29	Sales
30	Software / App Programming
31	Strategic Planning
32	Time-Sharing
33	Traineeship

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