# RESEARCH ON THE THEORETICAL MODEL OF COLLEGE STUDENTS' CAREER ADAPTABILITY FROM THE PERSPECTIVE OF CONSTRUCTIVISM THEORY

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## Abstract

Career adaptability is the ability of an individual to adapt to changes in career roles and maintain a balance with them. College is a critical stage for individual growth. It will face major changes in career roles and career tasks. In order to help Chinese college students better cope with career problems, this study, from the perspective of constructivism theory, uses the localization requirements of college students' career adaptability. As a logical starting point, this paper explores the structure of localization of career adaptability of college students through interviews and empirical surveys, in order to construct a theoretical model of localization of career adaptability of college students and provide some useful inspiration for the cultivation of career adaptability of college students in china.

**Keywords**：career adaptability, college students, model,

## Introduction

The arrival of the "artificial intelligence era" has comprehensively changed all aspects of social life. Humanity is ushering in unprecedented new changes, which puts forward higher requirements for individual adaptability. The concept of career adaptability came into being. American career psychologist Savickas pointed out that the so-called career adaptability refers to the degree of readiness of the individual's career role to respond to career changes, emphasizing the individual's adaptability to the environment, as well as the individual's career confusion. The value of coping ability contains the positive interaction between people and the environment, which is in line with the characteristics of today's era and has an impact on individual career growth, work and life. According to the existing literature, the current overall level of career adaptability of college students is not high and the level of adaptation is low. Improving the career adaptability of college students can promote their smooth transition of career roles and complete the role transition from students to professionals, which is an important step for college students to obtain An important ability for a successful job search. Strengthening the cultivation of college students' career adaptability, in order to improve the career adaptability of college students through early intervention in the education and training process of college students, is an urgent problem that needs to be solved at the moment.

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## Literature Review

**1. Core concepts**

1.1 career construction theory

Career construction theory is based on constructivism. It believes that career development is a natural product of individual psychological development and is driven by adaptation to the external environment. It emphasizes the individual's subjective initiative and self-determination in career development and believes that individuals construct themselves through self-construction. Give meaning to self and career development. The development goal of career construction theory is to establish a positive attitude towards life and career development, improve self-efficacy, and finally develop students' career adaptability through actions based on the present. Self-construction is the core concept of career construction theory. Individuals give meaning to themselves and career development through self-construction to adapt to changes and challenges in the external environment. Career identity is another core concept in career construction theory. It is the basis for an individual's understanding and planning of his or her career. It is also an individual's understanding and recognition of his or her identity and role in career development. In career construction theory, the formation of career identity is a process of continuous self-exploration and self-shaping by individuals.

1.2 career adaptability

Career adaptability is the ability of an individual to respond to changes in career roles and maintain a balance with them. It is the key ability for individuals to integrate various career roles at different stages, that is, "the career roles that an individual participates in for predictable career tasks and the challenges faced by career changes or Preparedness and ability to cope with unpredictable career problems." Career adaptability emphasizes that individuals proactively prepare for and prevent career changes; it is not only an ability that can be cultivated and helpful for individual career development, but also an ability that is both relatively stable and dynamically adjustable throughout the career, allowing Individual careers generate happiness and enhance satisfaction.

**2. Literature review**

The proposal of the definition of "career adaptability" has attracted the attention of the academic community. Related research has been carried out from theory to practice. How to implement the theory in practical application is the most concentrated area of academic research. The key to solving the problem of moving the concept of career adaptability from theory to practice lies in how to conduct effective assessment. The academic community has conducted in-depth research on the theoretical construction of career adaptability from different objects, different perspectives, influencing factors and other aspects. It has also been revised many times and achieved certain research results.

Regarding the research on the theoretical model of career adaptability, the academic community has made certain achievements in the research on career adaptability. Many Western scholars have made certain achievements in theoretical research and practical exploration (Guindon, 2002). In 1997, Savickas proposed three elements of career adaptability based on the support of relevant theories or research: attitudes of preparation and planning, self-awareness and environmental exploration, and scientific decision-making. In 2002, Savickas once again revised the theoretical model of career adaptability, adding the dimension of career confidence based on the three-dimensional structure. With the in-depth research on the theoretical construction of career adaptability, Savickas reconstructed the theoretical model of career adaptability in 2005, making the theoretical model more complete. Based on existing views and combined with the characteristics of Chinese college students, scholar Zhao Xiaoyun conducted research by setting up an open-ended questionnaire around theoretical models, development characteristics, influencing factors, and social cognitive processing characteristics of college students, and concluded that the career adaptability of Chinese college students is The theoretical model proposes a six-dimensional structural model,

pointing out that college students' career adaptability is composed of six influencing factors, which are a multi-dimensional structural system composed of career concern, career control, career curiosity, career confidence, career adjustment and career interpersonal relationships. At present, in the career academic community, there are constantly emerging tests on the relationship between the basic structure of the model - adaptive motivation, career adaptability, adaptive behavior and adaptive outcomes. The more representative ones include the work of scholars Perera & Mcilveen and Merino-Tejedora, Hontangasb, & Boada-Grauc. Research. Research on career adaptability is relatively concentrated. From a review of relevant empirical literature, it can be seen that scholars have mainly conducted research from three aspects: individual factors, situational factors that affect career adaptability, and the resulting adaptive behaviors and results.

Although the current academic circles have achieved some results in research on college students' career adaptability, which provided preliminary data accumulation and certain theoretical and practical guidance for this study, relatively speaking, in the face of new requirements and new challenges, the current research results are still It is relatively scattered and weak, and it is difficult to meet the dual expectations of theory and practice. There is still room for further in-depth research.

## Research Methods

This study adopts a combination of qualitative and quantitative research methods. The first stage is qualitative research, which is conducted through interviews. 40 college students that come from different provinces, different colleges, different grades, different genders, and different student backgrounds were selected to be the The interview subjects.Through individual interviews, data collection, analysis and coding, coding statistics and other processes, the characteristic words of college students' career adaptability were extracted and a theoretical model was initially constructed. The second stage is quantitative research, which is conducted using questionnaire surveys. Based on the theoretical model, the "College Student Career Adaptability" scale is compiled. A questionnaire is designed based on the scale to conduct empirical research. SPSS27.0 statistical software is used to analyze the career adaptability of college students. Empirical analysis and reliability and validity verification of the localization structure of adaptability. The survey targets are college students from Guangdong, Sichuan, Shandong, Zhejiang, Jiangsu, Guangxi, Inner Mongolia and other regions in china. The types of institutions include 985, 211, and local undergraduate colleges. Survey using questionnaire star. 3336 valid questionnaires were collected, including 2031 freshmen, 502 sophomores, 410 juniors, and 393 seniors; 1207 boys and 2129 girls. Among them, after excluding those whose response time was too short (t<60), 3198 valid questionnaires remained, and the questionnaire effectiveness rate was 95.18%.

## Research result

**1.Reliability analysis of the localization model of college students' career adaptability**

From the results , we can see that the overall Cronbach's α coefficient of the questionnaire scale is 0.947, and the standardized Cronbach's α coefficient is 0.951, both greater than 0.7; the Cronbach's α coefficients of the three dimensions of career preparation stage, career action stage and career feedback stage are in order: : 0.85, 0.931, 0.695, all greater than 0.65; in summary, it can be seen that the overall questionnaire and each dimension meet the requirements of the scale's reliability coefficient. The data studied have high credibility and good reliability, and can be used for subsequent analysis.

**2. Validity analysis of the localization structure of college students' career adaptability**

**(1) Exploratory factor analysis of the localization structure of college students' career adaptability**

First, an exploratory factor analysis was conducted on the questionnaire using the 40 collected student version questionnaire scale items as variables: When conducting validity analysis on the formal survey in this study, the significance of the KMO value and Bartlett's sphericity test should be used as the benchmark. , determine whether the above 40 items are suitable for factor analysis. When KMO is greater than 0.7 and the significance level is less than 0.05, it is very suitable for factor analysis. As shown in Table 1 , the KMO value in this study is 0.972, which indicates that there is a correlation between the item variables and meets the requirements of factor analysis; the obtained significance $p<0.05$ passes the significance test, indicating that it is suitable to be used as a factor analyze.

**Table1** KMO and Bartlett test

| KMO Sampling suitability quantity. | | 0.972 |
|---|---|---|
| Bartlett's test of sphericity | Approximate chi-square | 67385.795 |
| | degrees of freedom | 780 |
| | Significance | 0.000 |

The common factor variance obtained in the table below means that each variable can be expressed by a common factor, and the amount of original information that the common factor can express is the "extraction" in the common factor variance table, and the "extraction" of The larger the value, the greater the amount of information that the variable can express by common factors. Generally, if it is greater than 0.5, it can be said that it can be expressed. Better yet, greater than 0.7 is enough to indicate that the variable can be reasonably expressed by common factors. In this example, it can be seen that the values of the "extracted" common factor variance are distributed between [0.425, 0.708], which shows that the variables in the scale used can be reasonably expressed.

In order to make the factors obtained by dimensionality reduction cover as much of the original data information as possible, factors are extracted based on the standard that the cumulative variance contribution rate is greater than 60%, Perform principal component analysis on the variables and Varimax rotation. From the first exploratory factor analysis test results, we can see the first 7 principal components. The cumulative contribution rate of the components after rotation has reached 60.418%, which means 60.418% of the total variance is explained, indicating that the 7 extracted common factors can represent 60.418% of the information of the original 40 item indicators. The data information loss is less, and a total of 7 factors were found, which can explain the initial data well.

According to the evaluation principle of structural validity, it can be seen from the the first analyse results that there are questions in the questionnaire that failed the validity test (that is, the loading coefficient is less than 0.5 or the factor loading after rotation is greater than 0.5 under dual or multiple factors). Questions that failed the validity test were eliminated in turn. After five exploratory factor analyses, several questions were eliminated, leaving the remaining variables.

According to the factor division results , the cumulative variance contribution rate after rotation of the seven extracted factors is 61.719%, and the minimum variance of the extracted common factor is 0.481, indicating that the information amount of the research item can be effectively extracted; In the final rotated factor loading, each indicator is evenly distributed in different components, that is, the remaining 36 indicators all have good energy efficiency. Finally, through exploratory factor analysis, the factors of all measurement items The loadings are all greater than 0.5, the loadings on the corresponding factors are close to 1, and the

loadings on other factors are close to zero, indicating that the scale has good discriminant validity.

(2) Confirmatory factor analysis of the localization structure of college students' career adaptability

This study continued to conduct confirmatory factor analysis on the remaining 36 scale items. According to the evaluation results of the measurement model, the confirmatory factor analysis divided career curiosity, career control, career concern, career self-confidence, career adjustment, career interpersonal, career The ten dimensions of linkage, career initiative, career confusion, and career satisfaction are used as latent variables. After elimination, the remaining analysis items of each latent variable are all 2 or more. The standardized factor loading results of the obtained variables are as follows:It is generally believed that the factor loading coefficient screens the measured variables within the factor. If the standardized factor loading coefficient of each item on the corresponding latent variable is greater than 0.5, it is considered to meet the standard, indicating that the structural validity is good and the measured variables meet the factor requirements. The results shown: the standardized factor loading coefficient of each item on the corresponding latent variable is basically greater than 0.5 and the significance of the factors is less than 0.001, reaching the statistical test standard.

According to the results in Table 2, the average common factor variance extraction amount (AVE, the calculation formula is AVE = )∑λ2)/n, where n is the number of questions in the factor, λ is the factor loading value) and the combined reliability (CR) The results can be used to test the convergent validity of the variables within the factor; the combined reliability CR results are all distributed above 0.6, indicating that the reliability of each item is acceptable; according to the average common factor variance extraction amount AVE value is greater than or close to 0.50 Standard, most of the AVE values obtained are close to 0.5, and the AVE values of some factors are greater than 0.5. It can be seen that the constructed variables have good convergent validity.

**Table 2** Convergent validity results

| Factor | Average variance extraction AVE value | Combined reliability CR value |
|---|---|---|
| Career curiosity | 0.453 | 0.623 |
| career control | 0.303 | 0.625 |
| Career concerns | 0.377 | 0.629 |
| career confidence | 0.563 | 0.838 |
| career adjustment | 0.556 | 0.862 |
| career relationships | 0.449 | 0.709 |
| career link | 0.51 | 0.675 |
| Career initiative | 0.473 | 0.818 |
| career confusion | 0.302 | 0.633 |
| career satisfaction | 0.488 | 0.792 |

According to the square root of the average variance extracted AVE and the correlation coefficient between latent variables, it can be explained whether the measurement items of different latent variables have obvious discriminant validity. If the square root of the average variance extracted (AVE) of the factor is greater than or A Pearson correlation coefficient value close to other factors indicates that it has excellent discriminant validity; in this study, as shown in Table 3, the correlation coefficients between pairs of each latent variable are distributed between 0.158 and 0.791, and each latent variable AVE The square root of is distributed between 0.55 and 0.75, so the model has good discriminant validity.

Table 3 Discriminant validity results

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 | Factor 6 | Factor 7 | Factor 8 | Factor 9 | Factor 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Factor 1 | 0.673 | | | | | | | | | |
| Factor 2 | 0.201 | 0.55 | | | | | | | | |
| Factor 3 | 0.563 | 0.251 | 0.614 | | | | | | | |
| Factor 4 | 0.538 | 0.195 | 0.631 | 0.75 | | | | | | |
| Factor 5 | 0.577 | 0.202 | 0.62 | 0.746 | 0.746 | | | | | |
| Factor 6 | 0.573 | 0.218 | 0.552 | 0.658 | 0.668 | 0.67 | | | | |
| Factor 7 | 0.542 | 0.233 | 0.605 | 0.667 | 0.72 | 0.596 | 0.714 | | | |
| Factor 8 | 0.647 | 0.248 | 0.698 | 0.755 | 0.708 | 0.654 | 0.675 | 0.688 | | |
| Factor 9 | 0.195 | 0.666 | 0.266 | 0.158 | 0.19 | 0.201 | 0.235 | 0.22 | 0.55 | |
| Factor 10 | 0.525 | 0.25 | 0.584 | 0.791 | 0.767 | 0.652 | 0.671 | 0.725 | 0.205 | 0.699 |

Through open-ended survey research and analysis of the data model, it was concluded that the factor structure of the career adaptability questionnaire of college students compiled in this study is clear, has good reliability and validity, and can be used to evaluate the career adaptability of college students.

## Discuss

Comprehensive research on the concept of career adaptability found that: the construction of the concept of career adaptability is a collective construct, not a latent variable. It is based on assumptions and is composed of multiple single measurement indicators. The combination of multiple dimensions is Appropriate methods for understanding and measuring the multidimensional construct of career adaptability. On the basis of previous research, this study focuses on the connotation of career adaptability, hoping to highlight the conceptual definition of the rich connotation of career adaptability and help readers understand and apply it. It is defined as an individual's ability to proactively respond to career changes, take positive actions, and maintain optimism from the perspective of future development based on a rational understanding of his or her own characteristics. An analysis of the typical characteristics of career adaptability found that career adaptability emphasizes individuals' proactive preparation and prevention of career changes; it is not only an ability that can be cultivated and helpful for individual career development, but also an ability that is both relatively stable and dynamic. The ability to adjust throughout one's career can bring happiness and satisfaction to an individual's career.

From the perspective of the characteristics of career adaptability, it is an ability that is relatively stable but can be dynamically adjusted and runs through the entire career. It can be said to be a process that can promote the continuous healthy development of an individual's career. Increasing the career feedback stage can make The structure of career adaptability is more complete, forming a closed-loop structure that can be continuously circulated, with the beginning as the end, the end as the beginning, and a dynamic adjustment process that begins again and again. It is believed that individuals draw energy and experience from career events, and that a correct and rational view of career difficulties is extremely important for career development. Individuals must not only learn to have the ability to obtain happy life conditions, but also learn to have the ability and quality to experience happy feelings. More importantly, It is to learn to have the ability to rationally predict current career confusion.

Therefore, career satisfaction and career confusion should become the key points of the career adaptability structure. The core essence of adaptability emphasizes the benign interaction between people and the environment, emphasizing a positive behavioral orientation, the exertion of individual subjective initiative, and putting it into action. An empirical investigation of the current situation of career adaptability of Chinese college students also found that the lack of action ability. The weak awareness of subjective initiative is a more prominent problem. The emphasis on the link between initiative and society is of great significance in the connotation construction of the entire career adaptability. Therefore, in the theoretical construction of this study, in the career action stage, in the previous work, On the basis of the theoretical construction, two dimensional factors of career link and career initiative are added, further illustrating the applicability of this study to the localized construction of career adaptability of Chinese college students.

Therefore, this study's localized construction of the career adaptability structure of Chinese college students is based on Savicaks' four-dimensional construction and Chinese scholar Zhao Xiaoyun's six-dimensional construction, adding four dimensions: career link, career initiative, career satisfaction, and career confusion. A structural model covering ten dimensional factors including "career concern, career control, career curiosity, career confidence, career adjustment, career interpersonal relationships, career links, career initiative, career satisfaction, and career confusion" is formed, and is divided into "career three stages: preparation, career action, and career feedback. Each stage includes corresponding dimensions. The career preparation stage includes the four career dimensions of "career concern, career control, career curiosity, and career confidence", reflecting the awakening of individual career planning awareness; the career action stage includes "career adjustment, career interpersonal, The four dimensions of "career link and career initiative" reflect the individual's positive career practice actions; the career feedback stage includes the two stages of "career satisfaction and career confusion", which is a review of individual career events. This study conducted a correlation analysis between each stage, between each dimensional factor, and between each stage and the corresponding dimensional factor. The results showed that the correlation was good, which verified that the model has good correlation and credibility. This further illustrates the scientific nature of this study in constructing a localization model of career adaptability of Chinese college students.

## Summary and suggestion

This paper summarizes from the following three aspects. First of all, this paper is based on the career construction theory. On the basis of theoretical analysis, it uses a combination of qualitative research and quantitative research, and carries out the extraction of characteristic words for college students' career adaptability through interview guidance and text mining. Secondly, the paper initially proposes a preliminary theoretical model of "three career stages and ten career dimensions". The "College Student Career Adaptability Scale" was compiled and the "College Student Career Adaptability Questionnaire" was designed. SPSS27.0 statistical analysis software was used to conduct reliability and validity analysis of the questionnaire data, which verified that the model has good relevance and credibility. In addition, the paper reveals the localized characteristics of Chinese college students' career adaptability, and finds that college students have low scores in the two career dimensions of career confusion and career control, and have prominent problems such as difficulties in career decision-making, career development confusion, and insufficient career mobility. Provide appropriate suggestions for cultivating career adaptability of college students in my country.

This paper intends to put forward research suggestions from the following four aspects. First, the structural dimensions and connotation of college students' career adaptability need to be further verified. Career adaptability is a key ability that restricts individual career development. The exploration of its structure cannot be accurately revealed in one study. Although this study is based on existing theoretical research and uses an open-

ended questionnaire to explore the theoretical structure of career adaptability of Chinese college students, the rationality and stability of this structure need to be verified by more empirical research in the future. Second, there are certain limitations in the research methods. In future research, behavioral analysis, observation and other methods can be used to further cross-validate the career adaptability structure of college students. Third, the career adaptability scale of college students needs further revision. Although the college student career adaptability scale developed in this study has high reliability and validity, during the development process of this scale, the author still feels that this scale still has some flaws, so the scale still needs further research. for further testing, revision and improvement. Thirdly, the number of subjects needs to be further expanded and equalized to enhance the credibility of the research conclusions. Fourth, the development of career adaptability intervention courses for college students needs to be further discussed in the future. The main purpose of conducting research on college students' career adaptability is to hope that the research findings can provide some useful inspiration for improving college students' career adaptability.

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