



Optimization of the Cultivation Path for Employment Competency of Higher Vocational College Students under the Support of Early Career Planning

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SUMMARY: *How to realize the cultivation of students' vocational competence in the changing social environment and the cultivation of students' employment competence that can fully adapt to the future career development are the key concerns of college education. The present study introduces a research model grounded in "Social Cognitive Career Theory", and constructs the structure system of employment competence of higher vocational college students from the dimensions of basic ability, vocational skill, potential ability and self-efficacy, and selects 60 researchers according to the perceived social support, "psychological capital" and "employment competence". Sixty researchers were selected to construct a structural equation model according to the assumed relationship between perceived social support, "psychological capital" and employment competence, and then use SPSS to analyze the data, and then use fuzzy set qualitative comparative analysis to explore the effective development pathway of the higher vocational college students' employment competence. It was found that perceived social support has a significant positive effect on employment competence; self-efficacy has a significant positive effect on employment competence; perceived social support has a significant positive effect on employability. There are two cultivation paths to realize the quality of employment competence of higher vocational students, which are "holistic advancement cultivation path" and "scenario-driven cultivation path".*

KEYWORDS: *Employment competence; Structural equation modeling; Cultivation path; Qualitative comparative analysis method*

1 Introduction

At present, college graduates are facing a complex and severe employment situation, and the challenges facing the job market for college students in the future still exist. 2024, the job placement rate of graduates from higher vocational institutions (the implementation rate of employment destination) have reached 88.6%, of which 58.5% have been employed and are in the workforce, and the share of flexible employment keeps increasing. For alumni of higher vocational colleges and universities, the employment market structural dislocation, market demand and industrial development of low matching degree and other objective environment, as well as graduates lack of clear career planning and job recognition, and graduates themselves to deal with the industry further toward the upper and middle tiers of the progress, the application of a new wave of information technology, the rapid development of the Internet economy, and the lack of ability to employment difficulties caused by the [1-5]. These reasons

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highlight the limitations of higher vocational education that focuses on skill cultivation and is light on career planning support, which leads to insufficient cultivation of students' competence in employment under this model [6, 7].

In a period of time, affected by the employment situation and the decline in the number of market recruitment positions, the satisfaction of higher vocational students with the employment status quo is maintained at about 70%, and the rate of job and professional matching is less than 50%, reflecting the lack of innovative consciousness and thinking of the students themselves, and their poor comprehensive qualities, such as the ability to plan their careers, the ability to adapt to changes, the ability to withstand stress, the ability to adapt to the comprehensive qualities of the students and other qualities, which leads to the lack of competence in employment [8-12]. Advancing high-quality full employment serves as the orientation and mission of employment work in the new era [13]. Enhancing the employment competence of learners in higher vocational colleges and universities is the key to solving the employment problems of these higher vocational students and the essential route to achieving high-quality employment of college students in higher vocational colleges and universities [14, 15].

Higher education exists because of enterprises, and individual students have to serve specific positions. Enterprises use competency model to understand employees and realize the scientific and standardized human resource management [16, 17]. Achieving high-quality employment of higher vocational college students under the competency perspective is founded upon the results of the centralized effect of the influencing factors of various aspects of employment ability, and thus the competency model plays a fundamental role in fostering college students' employment capability. At the same time, college students can assess their employability and improve their comprehensive quality through the competency model, and schools can formulate perfect career planning programs for college students based on the model [18-21]. Therefore, higher vocational institutions, as cultivators of enterprise talent reserves, should also actively study and master the occupational competencies of their students, optimize the corresponding talent cultivation mode based on the early career planning, and combine with the actual demand of social employers to teach according to the needs of the students.

This paper takes social cognitive theory as the framework, constructs a theoretical model, explores the relationship between perceived social support, psychological capital and the employment competence of higher vocational college students, puts forward relevant hypotheses, and constructs a structural equation model. Sample data sets are selected, descriptive statistical analysis as well as correlation analysis are performed on variable data, and hypothesis testing is performed on the model. Then the fsQCA approach is applied to investigate the path of employment competence cultivation of higher vocational college students, to clarify the influence mechanism between the variables, and to finally output the multi-causal composite path of employment competence cultivation of higher vocational college students.

2 Theoretical framework and research hypotheses

2.1 Theoretical Framework of Social Cognitive Career

Social Cognitive Career Theory (SCCT) comprises three core determinants: self-efficacy, which refers to people's beliefs about their ability to act as required to achieve a specified outcome; outcome, where individuals are able to perform specific behaviors through their internal beliefs; and goal choice, which denotes an individual's intention to engage in a specific activity or to achieve a certain outcome, which constitute the main mechanism of an individual's

power to act. In addition to this, SCCT has a strong adaptability, which integrates and unifies the influence variables of previous studies on the three main elements, such as achievement events, alternative satisfaction, emotional state, social encouragement and support system, and presents interconnected models such as career interest and career self-management, and the complete theoretical model is shown in Figure 1.

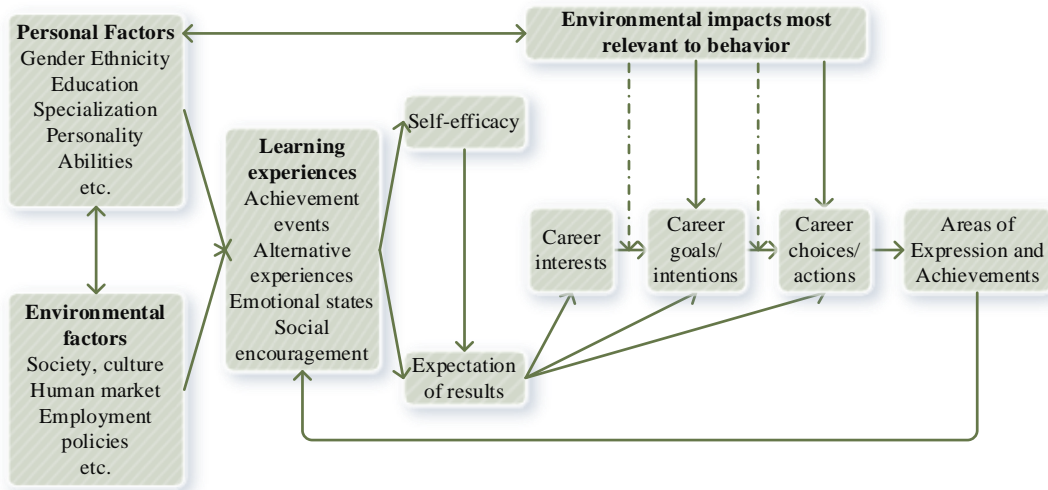


Figure 1: Complete model of social cognitive career theory

2.2 Theoretical modeling framework

Perceived social support, serving as the independent variable, encompasses three dimensions, namely perceived family support, perceived social support and perceived friend support; psychological capital as the mediator variable incorporates four dimensions, namely self-efficacy, resilience, optimism, and hope; and employment competence as the outcome variable mainly contains five dimensions, namely the ability to set goals, the capacity for self-recognition, the capacity for environmental awareness, the ability to formulate a plan, and the ability to feedback and correct. Correction ability. The theoretical model is shown in Figure 2.

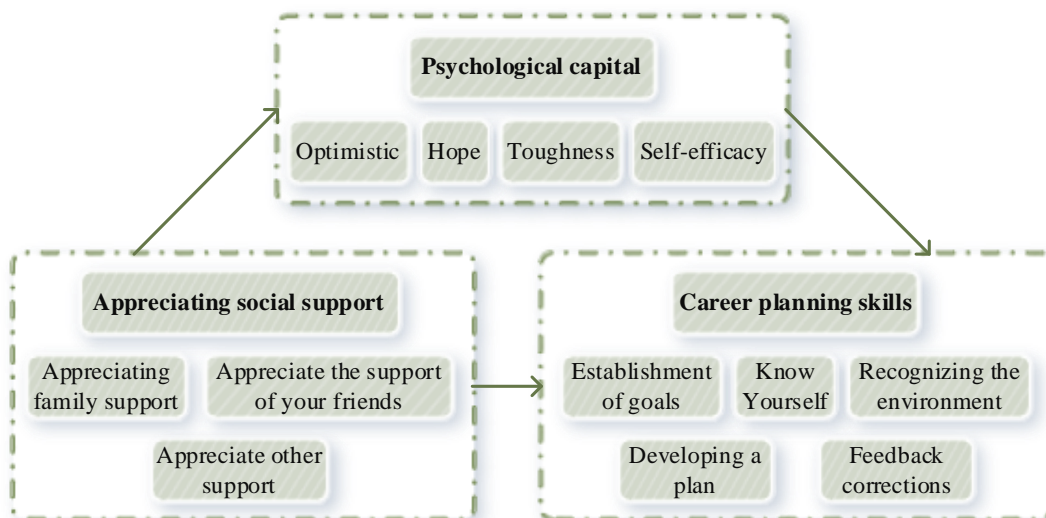


Figure 2: Theoretical Model

2.3 Research hypotheses

2.3.1 Understanding the hypothesis of the relationship between social support and employment competence

Through literature reading, it is found that scholars actively explore the means and methods of providing individual career planning education. However, they mainly focus on discussing the support for students from national policies, enterprises, universities and families, and pay very little attention to students' perception of the support from the outside society. Drawing on the lens of individual psychology, existing research neglects the influence and predictive role of psychological resources of the master's degree group on employment competence, and limited scholarly attention has been directed toward examining the association between perceived social support and employment competence. Therefore, the following hypotheses are put forward:

H1: Appreciative social support of higher education students has a positive effect on employment competence.

2.3.2 Hypothesized Relationship between Psychological Capital and Higher Vocational Employment Competencies

Present assessments of career planning education tend to undervalue the relationship between career counseling and individual mental health, and therefore underscore the necessity of delivering career planning education to undergraduate students from the four dimensions of psychological capital. All of the above indicate that psychological capital is closely related to employment competence, so the basic connotation of psychological capital can be combined with the employability of higher vocational college students. Therefore, the following hypotheses are proposed:

H2: Psychological capital of higher vocational college students has a positive effect on employment competence.

2.3.3 Hypothesized relationship between psychological capital and perceived social support

The interplay between psychological capital and social perceived support is divided into two main categories: first, social perceived support indirectly affects psychological capital through some kind of mediation. For example, social perceived support can have an effect on positive psychological capital through the indirect effect of factors such as self-esteem, psychological consistency and cognitive reassessment; the second is that psychological capital functions as an intermediary between social perceived support and other variables, such as psychological capital assumes a mediating function in the impact of social perceived support on academic achievement, mental health, willingness to stay in the job, entrepreneurial intention and life satisfaction. Therefore, the following hypotheses are proposed:

H3: Perceived social support of higher education students has a positive effect on psychological capital.

2.3.4 The mediating role of psychological capital

Generally speaking, people endowed with abundant psychological capital possess psychological characteristics encompassing optimism, hope, resilience and high self-efficacy, and they are more willing to explore and try challenging unknown fields, and they are also more able to face setbacks and difficulties. This psychological mechanism prompts individuals to give full play to their personal qualities and take the initiative in welcoming the career world,

which helps students to try different strategies of career planning and formulate goals of career planning, so as to realize career development. However, students with weaker psychological capital do not take the initiative and still do not actively explore their own and external information, and their ability of career planning cannot be effectively improved. Therefore, perceived social support may indirectly affect the occupational readiness of higher vocational college students through psychological capital, so the following hypothesis is proposed:

H4: Psychological capital plays a mediating role in the influence of perceived social support on employment competence.

3 Study design

3.1 Design of research tools

3.1.1 Design of the Employment Competency Scale for Higher Education Students

The framework underlying the employment competency structure system draws upon the iceberg model, which outlines a series of competencies that workers should have to be competent at their jobs, mainly including universal job general competencies, professional theoretical knowledge competencies related to the occupation, practical application competencies, social competencies related to workplace interpersonal competencies, as well as work internal motivation, role orientation, and volitional qualities, etc. The system is divided into 2 level 1 indicators: explicit competencies and implicit qualities. In alignment with the developmental orientation of higher vocational college students, the employment competency system for such students is divided into 2 first-level indicators: explicit ability and implicit quality; 4 second-level indicators are shown in Table 1.

Table 1: Employability competency structure system of higher vocational college students

Primary indicator	Secondary indicator	Third-level indicator
Explicit ability	Basic Skills (A1)	Knowledge and information comprehension, execution, adaptability, and learning
	Vocational Skills (A2)	Ability to apply professional knowledge, career planning, problem solving, and teamwork
Implicit qualities	Potential capability (A3)	Resilience, innovation, willpower, consciousness and motivation
	Self-efficacy (A4)	Self-knowledge, self-management, self-regulation, self-drive

3.1.2 Psychological capital scale design

Assessment of psychological capital relies on observational methods, indirect measures, and self-reports, and different measurement dimensions have been proposed for this construct, with the relevant psychological capital dimensions presented in Table 2.

Table 2: Psychological capital scale dimensions

Target Layer	Secondary indicator
Psychological capital dimension	Self-efficacy (B1)
	Resilience (B2)
	Hope (B3)
	Optimistic (B4)

3.1.3 Navigating the social support scale design

The constituent dimensions of perceived social support are shown in Table 3, and the three dimensions are "perceived family support", "perceived friend support" and "perceived other support". Because this scale has been widely used and validated in Chinese studies, it has shown good reliability and validity.

Table 3: Understanding the dimensions of the social support scale

Target Layer	Secondary indicator
Understanding social support	Understanding Family Support (C1)
	Understand friend support (C2)
	Understand other support (C3)

3.2 Research methodology

3.2.1 Structural equation modeling

(1) Modeling fundamentals

The general complete structural equation model [22] is shown in Fig. 3.

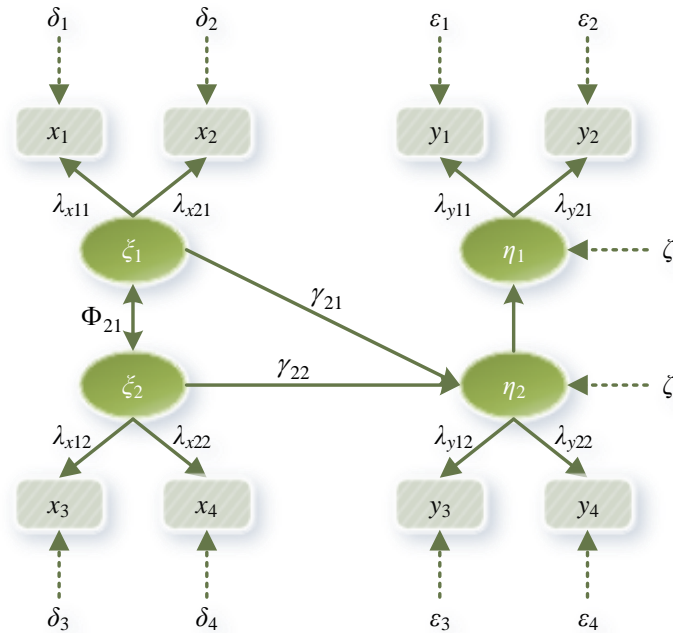


Figure 3: Schematic diagram of the complete SEM model parameters

(2) Measurement Modeling and Structural Modeling

1) Measurement model

Eq. (1) and Eq. (2) are calculated without the measurement model.

$$y = \Lambda_y \eta + \varepsilon \quad (1)$$

$$x = \Lambda_x \xi + \delta \quad (2)$$

2) Structural equations

Equation (3) represents the process of calculating part of the structural equations.

$$\eta = \beta\eta + \gamma\xi + \zeta \quad (3)$$

(3) Basic steps of structural equation modeling

1) Define the variables - Based on the selected indicators (variables), give the concepts of each variable and accurately define each variable.

2) Propose the corresponding hypothesis between the variables - Based on the theoretical analysis of the indicators, the hypothesis is proposed, i.e. the causal relationship between the indicators.

3) Modeling - Based on the hypotheses presented in step 2), the influence paths are connected and modeled.

4) Model estimation and testing - using structural equation model validation software, input the constructed theoretical model for fitting, testing and assessment to determine the final assessment model.

5) Calculation of weights - Combine the loading coefficients of the variables in the finalized assessment model, normalize them, and calculate the weights of each indicator.

3.2.2 Qualitative comparative analysis of fuzzy sets

The qualitative comparative analysis (QCA) approach represents a case-oriented research method. Its core principle lies in examining the relationship between antecedent conditions and combinations of conditions and outcomes from the perspective of sets through the application of architecture theory and Boolean algebra operations, so as to explain the complex causal relationships behind the phenomena [23]. QCA distinguishes itself from conventional case study approaches by systematically examining the causes of the events from the perspective of sets and the mutual combinations that exist among these factors, in an attempt to explain the complexity of the causes and combinations of events that lead to events. This method departs from traditional case analysis in that it systematically studies the causes of events from an aggregated perspective, and the inter-combinations that exist between these factors, and tries to explain the complex combinations of causes that lead to events, thereby achieving a high degree of generalization and explanation.

QCA is mainly used for causality research under nonlinear conditions, and its premise is multiple causes and one effect, i.e., the combination of multiple conditions can produce the same result. QCA can be primarily classified into clear set qualitative comparison method (csQCA), fuzzy set qualitative comparison method (fsQCA), multi-valued set qualitative comparison method (mvQCA), and temporal qualitative comparison method (TQCA). Among them, the fsQCA method is widely used in cases where both the condition and outcome variables can be described by a categorical variable assigned a value of 1 when the condition is present and 0 otherwise.

4 Empirical findings and discussion

4.1 Variable handling and descriptive statistics

4.1.1 Data collection and variables

Selected 60 in the school leavers are not employed for the pre-survey, this part of the data also from the research during the period of October 20, 2024 - November 15, is the second part of

the questionnaire on the school leavers are not employed college graduates in the employment of the factors that influence the investigation, mainly including the comprehension of the three elements of social support, psychological capital, and employment competence. The employment status in this paper studies whether or not college graduates who left school without employment have achieved employment after graduation, and is a dichotomous variable that assigns a value of 0 to not employed and a value of 1 to employed.

4.1.2 Descriptive statistics for variables

Utilizing SPSS software, descriptive statistical analysis was conducted on the sample statistics, maximum, minimum, mean and standard deviation in the basic data of the model variables and the outcomes are presented in Table 4. Upon examining the data in the table, the measured psychological capital, comprehension social support and employment competence are basically above medium, and with regard to the standard deviation, the standard deviation of psychological capital variables are between 0.7-1, while the standard deviation of employment competence and its dimensions are between 0.3-0.7, which is due to the fact that this variable measures the psychological condition of employment, indicating that the level of employment psychology of each of the underemployed graduates is relatively stable, and the differences are small. This is because the variable measures the psychological condition of employment, indicating that the psychological level of employment is relatively stable and the differences are small, while the standard deviation pertaining to the dimensions of perceived social support is between 1.1 and 1.2, suggesting that notable disparities exist in the extent to which underemployed students draw upon social support from various parties.

Table 4: Descriptive statistics for variables

	N	Least value	Crest value	Mean	Standard error
Psychological capital	60	1	6	3.179	0.861
Self efficacy	60	1	5	2.294	0.784
Tenacity	60	1	5	3.247	0.793
Hope	60	1	7	2.916	0.884
Optimistic	60	1	8	3.824	1.029
Understanding social support	60	1	6	4.895	1.113
Family	60	1	6	4.753	1.226
Friend	60	1	6	5.083	1.207
Other	60	1	6	5.174	1.237
Employability	60	1	7	3.331	0.445
Basic Skills	60	1	7	3.455	0.648
Job skill	60	1	7	3.139	0.392
Potential ability	60	1	7	3.377	0.715
Self efficacy	60	1	7	3.542	0.634

4.1.3 Correlation analysis of variables

Correlation analysis is the study of whether there is some kind of dependence between phenomena, described by the correlation coefficient r . Before testing the model, the study employed SPSS22.0 software to conduct Pearson correlation analysis [24] to analyze the interrelationships among the research variables involved in order to further understand the relationship between the influencing factors of employment, with detailed findings presented in Table 5. As evidenced by the table, there is a positive correlation between the three variables of psychological capital, comprehension social support, and employment competence at the p

< 0.01 significance level, and the result also provides some support for the validation of the research hypotheses in this paper.

Table 5: Correlation analysis of study variables

	Psychological capital	Understanding social support	Employability
Psychological capital	1		
Understanding social support	0.384**	1	
Employability	0.142**	0.239**	1
Mean	2.811	3.248	0.33
Standard deviation	0.745	0.874	1.084

Note 1: **Correlation is significant at a confidence level (two-test) of 0.01

4.2 Structural equation modeling

4.2.1 Model testing

Following the development of the model of employment competence and influencing factors of higher vocational college students, the fit of the model needs to be tested. In this study, the fit of the model was analyzed using seven indicators, namely, χ^2/df , GFI, RMSEA, RMR, CFI, NFI, NNFI, as shown in Table 6. The outcomes demonstrate that all the fitting indicators meet the requirements.

Table 6: Model Fit Metrics

	χ^2	df	χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Criterion for judgement	-	-	<3	>0.8	<0.11	<0.06	>0.8	>0.8	>0.8
Measured value	231.013	131	1.79	0.915	0.057	0.036	0.949	0.9	0.936

4.2.2 Results of research hypothesis testing

Building upon the development and validation of the model of employment competence and influencing factors of higher vocational college students, this study tests the proposed research hypotheses, and the outcomes are presented in Table 7. The findings reveal that the effect of perceived social support on employment competence is significant, indicating that greater levels of perceived social support correspond to higher employment competence, supporting H1; psychological capital positively affects the employment competence, indicating that students possessing a high self-efficacy level have high employment competence, accepting H2; perceived social support significantly affects the psychological capital, that is, students who perceive higher levels of social support have a high level of psychological qualities, and H3 is established; the effect of psychological capital on perceived social support has a significant effect on employability competence, indicating that learners with elevated psychological capital are better in perceiving social support and employability competence, H4 is validated. The model test path is shown in Figure 4.

Table 7: Regression coefficients table

X→Y	Standardized path coefficient	Non-standardized path coefficient	SE	Z	P
Understanding social support → Employment competence	0.568	0.531	0.079	6.901	0.000***
Psychological capital → Employability	0.538	0.483	0.081	6.399	0.001***
Understanding social support → Psychological capital	0.187	0.214	0.078	2.286	0.015**
Understanding social support → Psychological capital → Employability	0.449	0.476	0.107	4.613	0.002***

Note: → indicates path influence relationships

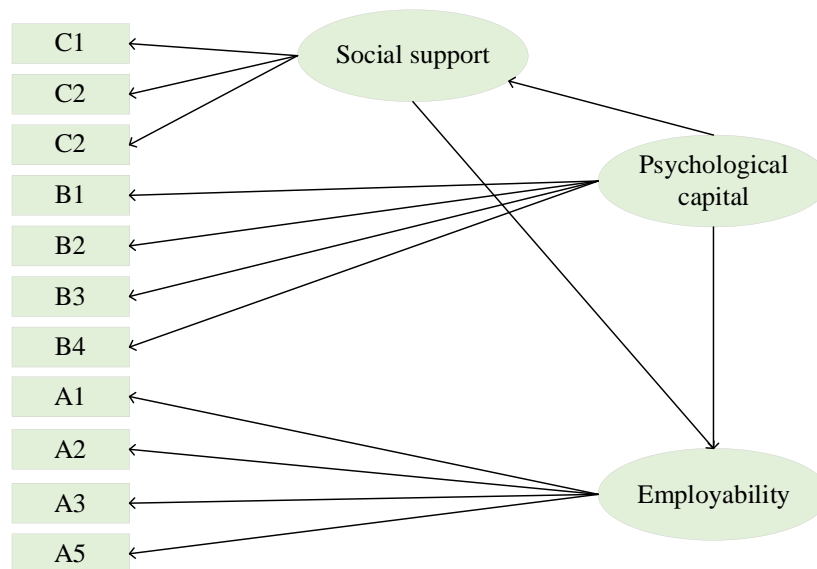


Figure 4: Structural equation model of college students' employability and influencing factors

4.3 Qualitative comparative analysis of fuzzy sets

4.3.1 Data calibration

A prerequisite for research using the QCA method is the calibration of the data to the set of variables, which is the "qualitative" aspect of the QCA method. The delineation of set affiliation in calibration requires three thresholds: full affiliation, intersection, and no affiliation at all. Idealized data calibration needs to refer to criteria beyond the sample, i.e., beyond the relatively limited sample information to determine the thresholds. In this study, 95%, 50%, and 5%, which are commonly used in academia, were used as the critical cut-off values. The anchor values for each variable's calibration are presented in Table 8. After data calibration for the antecedent and outcome variables, the data were imported into fsQCA 3.0 software to begin the formal empirical analysis.

Table 8: Research variable calibration anchor value

Study variable	Variable dimensions	Anchor point		
		Full Affiliation	cross point	Not affiliated at all
Dependent variable	Self efficacy	3.81	3.43	2.65
	Tenacity	3.64	3.38	2.64
	Hope	3.93	3.25	2.63
	Optimistic	4.36	3.32	2.12
	Family	4.06	3.17	2.12
	Friend	3.97	3.21	2.54
	Other	3.92	3.12	2.16
Outcome variable	Basic Skills	3.71	3.27	2.61
	Job skill	3.83	2.94	2.12
	Potential ability	3.78	3.52	2.28
	Self efficacy	3.88	2.75	2.24

4.3.2 Necessity analysis of individual conditions

Within the fuzzy set qualitative comparative analysis framework, the necessity of a given condition is evaluated on the basis of consistency. Conditions whose consistency exceeds 0.9 are regarded as necessary for the condition variable to be the outcome variable. The results of the necessity analysis of the individual conditions of employment competency development are shown in Table 9.

Drawing from the necessity test, it can be obtained that none of the seven condition variables exceeds the consistency value of 0.9, a finding that aligns with real-world circumstances, demonstrating that the caliber of employment competency training of higher vocational students is not determined by any single factor, but rather by the joint interaction of multiple variables. In other words, whether the standard of higher vocational students' employment competence cultivation is improved or not necessitates a holistic consideration of the multiple synergistic and concurrent influences operating under the conditions of educational philosophy, resource endowment, activity context, student body, supervision and evaluation, and educational ecology. Accordingly, the subsequent analysis will further examine the combined effects of these seven condition variables on the results.

Table 9: Analysis of necessary conditions for the quality of employability training

Condition variable	Quality of vocational employment competency development		Low quality of vocational competence training	
	Consistency	Coverage	Consistency	Coverage
Self efficacy	0.64742	0.68241	0.69836	0.51441
Tenacity	0.69504	0.79694	0.60659	0.5321
Hope	0.81262	0.75374	0.62818	0.56209
Optimistic	0.66489	0.90789	0.5742	0.43655
Family	0.83008	0.83444	0.46219	0.50867
Friend	0.85569	0.81895	0.60389	0.42213
Other	0.67464	0.64002	0.62841	0.65754

4.3.3 Sufficiency analysis of the conditional configuration

So as to transparently and intuitively capture the contribution of each conditional variable

within the grouping, this study chooses to present the results of the grouping analysis in the form suggested by Ragin and Fiss. The final results are shown in Table 10, where ● indicates that the condition variable exists in the path, ⊙ signifies that the condition variable does not exist in the path, and "blank" denotes that the existence of the condition variable is irrelevant to the path, and can be dispensed with; ■ or ○ indicates the core condition, and ● or ⊙ indicates the edge condition.

The outcomes indicate that the cultivation pathways accounting for high-quality employment competence are diversified, and there are a total of five combinations of the seven cultivation elements, each of which is capable of realizing the high quality of employment competence cultivation. A total solution consistency of 0.936857 suggests that roughly 94% of the cases of higher education institutions that meet these five conditional groupings show a high level of quality of employment competency development. A total solution coverage of 0.735183 implies that the 5 conditional groupings explain about 74% of the cases of high quality development.

Table 10: Confounder analysis of employability development

Conditional configuration	Group 1	Group 2	Group 3	Group 4	Group 5
Self efficacy		○	●	●	
Tenacity	●	●	●	⊙	⊙
Hope	■	■	●	●	⊙
Optimistic	●	●	⊙	●	⊙
Family	■		■	■	■
Friend	■		⊙	⊙	■
Other	■	○		■	○
Original coverage	0.492853	0.447172	0.258105	0.284532	0.311982
Unique coverage	0.0857321	0.025573	0.00251742	0.0218736	0.110947
Consistency	0.99742	0.95728	0.950836	0.951948	0.978542
Coverage of solutions	0.735183				
Consistency of solutions	0.936857				

4.4 Paths for Cultivating Employment Competence of College Students in Higher Education

(1) Comprehensive promotion type cultivation path

The path validated by Conditional Grouping State 1 is “Employment Competency Cultivation of Higher Vocational College Students = Self-Efficacy (Marginal Condition)* Resilience (Core Condition)*Hope (Marginal Condition)*Family (Core Condition)*Friends (Core Condition)*Other (Core Condition)”, and the original coverage of this path is 0.492853, and the unique coverage is 0.0857321, indicating that the comprehensive advancement pathway explains about 49% of the high-quality cases of occupational core literacy, of which only about 9% can be explained by this pathway. Since this path covers a large number of cultivation elements, it is a path that emphasizes the balanced improvement of all cultivation elements, and accordingly, it is described as a “comprehensive advancement-type enhancement path” for the cultivation of employment competence.

(2) Context-driven cultivation path

The path verified by group pattern 2 is “Employment competence cultivation of higher vocational college students = self-efficacy (core condition) * resilience (marginal condition) * hope (core condition) * optimism (marginal condition) * other (core condition)”, and the

original coverage of this path is 0.447172, and the unique coverage is 0.025573, which means that Pathway 2 explains about 45% of the high quality cases of occupational core literacy, of which about 2.6% can be explained by this pathway only. This pathway is characterized by the school's strong focus on fostering students' self-efficacy and enabling them to obtain psychological satisfaction enhancement in near-real work scenarios rather than purely theoretical teaching. Accordingly, it is described as a context-driven enhancement pathway.

5 Conclusion

Grounded in the framework of social cognitive theory, the study used the collected questionnaire data to test the constructed model of psychological capital of unemployed college graduates who left school, perceived social support on whether or not to realize the development of employability, and the results showed that the hypotheses put forward in this study were all verified, and the results of the study are analyzed and discussed in the following:

(1) The data of employment competence and model of higher vocational college students are $\chi^2=231.013$, $df=131$, $\chi^2/df=1.79$, $GFI=0.915$, $RMSEA=0.057$, $RMR=0.036$, $CFI=0.949$, $NFI=0.9$, $NNFI=0.936$, the fitting indexes are good, and the model test passed. Through the model analysis, it was established that perceived social support exerts a notable positive influence on employment competence; self-efficacy demonstrates a considerable positive impact on employment competence; perceived social support yields a pronounced positive effect on employability; and psychological capital assumes an intermediary function between perceived social support and employment competence.

(2) By employing the fuzzy set qualitative comparative analysis to explore the complex synergistic relationship between the factors of employment competence training of higher vocational college students, as well as the role of different factors on the quality of employment competence development, the empirical investigation revealed that there exist two pathways for achieving high-caliber cultivation of vocational core literacy for higher vocational students, specifically "holistic advancement cultivation path" and "scenario-driven cultivation path". The empirical investigation further corroborated that these two distinct pathways serve as the primary mechanisms through which high-quality cultivation of vocational core literacy of higher vocational students can be accomplished: "comprehensive promotion type cultivation path" and "context-driven cultivation path".

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