

# *Study on Employment Ability of College Students in Psychological Capital Dimension*

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**Abstract:** The employability of college students includes not only the individual ability to get a job, but also the ability to continuously complete work and achieve good career development. At present, the lack of employability of college students is a major obstacle to their smooth employment, and the lack of employability is closely related to the lack of psychological capital. With the methods of literature review and questionnaire survey, this paper analyzes the composition of College Students' psychological capital, psychological status and employment status of college students, and gives reasonable opinions on the improvement of College Students' employability on the basis of a comprehensive understanding of these situations. There is still a big gap between the employability of college graduates and the actual needs of employers (Zhang Jin, 2007; Wang Ting & Zeng Xiangquan, 2009; Wang Ting, 2009; Huang Bingchan, 2015, Cheng Wei, 2017). Combined with the actual characteristics of college students, the positive psychological capital of college students is developed from four dimensions of self-efficacy, optimism, hope and resilience. Psychological capital is a kind of positive psychological state of individuals in their growth and development. If individual psychological capital can be effectively and reasonably developed and utilized, the positive psychological power hidden in individuals and their self-management and recovery ability in the face of adversity can be excavated. The construction of psychological capital intervention system will be of great significance to improve the current employment guidance in colleges and universities.

## 1. Introduction

Since the enrollment expansion of colleges and universities in the late 1990s, China's higher education is changing from "elite education" to "mass education", and the number of college graduates has increased sharply. Followed by an increasingly large employment force. According to relevant statistics in recent three years, the number of graduates in 2019 and 2020 reached 8.34 million and 8.74 million respectively, even the number of graduates in 2021 will reach 9.09 million. As a result, the employment pressure on college students is gradually increasing. Thus, the employment psychological problems are becoming more and more prominent: such as confusion

and anxiety before employment, depression, antisocial personality and other psychological problems caused by frustration during job hunting. More and more employers and managers realize the importance of human psychological resources. The past human, financial and social capital can no longer meet the requirements of the development of the unit, and psychological capital is becoming the fourth capital that cannot be lacked. Therefore, under the general trend of "difficult employment", it is particularly important to explore how to cultivate college students' healthy employment psychology, improve college students' Graduation ability, make them better obtain high-quality employment, and better transport talents for national and regional economic development.

## 2. Literature Review

### 2.1 Psychological Capital

Table 1: Division and measurement evolution of psychological capital structure

Dimension	Researcher and year	Scale name	Measurement dimension
Two dimensions	Goldsmith (1997)	Psychological capital scale	Self esteem, control points
	Ke Jianglin, sun Jianmin, Li Yongrun (2009)	Local psychological capital scale	Transactional psychological capital and personality psychological capital
	Larson (2004)	Psychological capital scale	Self efficacy (self-confidence), optimism, resilience
Three dimensional degree	Luthans( 2006)	Positive mental state scale	Hope, optimism and resilience
	Jenson ( 2006)	Mental capital status scale	Hope state, optimism state, resilience
	Barrick ( 2001)	Psychological capital evaluation scale	Self esteem, self-efficacy, control point, emotional stability
	Judge ( 2001) Cole ( 2006)	Core Self-evaluation Scale	Self esteem, self-efficacy, control point, emotional stability
	Jenson ( 2003)	Psychological capital evaluation scale	Hope state, optimism state, self-efficacy, resilience
Four dimensions	Avey (2006)	Mental capital status scale	Hope, optimism, sense of self-efficacy (self-confidence), resilience
	Luthans ( 2007)	Psychological capital scale	Self efficacy (self-confidence), optimism, resilience, hope
	Jiang Jianwu, Zhao Shuming (2007)	Psychological capital scale	Confidence, hope, optimism and tenacity
Six dimensions	Letcher ( 2004)	Big Five personality (psychological capital) evaluation scale	Emotional stability, extroversion, openness, agreeableness and sense of responsibility
	Page (2004)	Positive psychological evaluation scale	Hope, optimism, self-efficacy (self-confidence), resilience, integrity
	Tian Xizhou (2008)		Self confidence, hope, optimism, tenacity and positive ability
Six dimensions	Lei Mingqi (2006)		Hope, optimism, subjective well-being Emotional intelligence, resilience, citizen organizational behavior

Source: According to the researcher's literature

Luthans (2003) first put forward the concept of individual psychological capital, which refers to a positive psychological state shown by individuals in the process of growth and development. It has the characteristics of investment and income. It is the core psychological element beyond human capital and social capital. Economists goldsmith, darity and veum (1997, 1998) believe that "psychological capital is an individual characteristic, a relatively stable psychological tendency or

characteristic gradually formed in life. It affects individual work ability, reflects self-esteem and self perception, and has a decisive impact on basic motivation and work attitude." Fredrickson and losada (2005) Among the factors affecting individual cognition and action, positive psychological state (such as confidence, hope, optimism and tenacity) is another extremely important factor in addition to intellectual ability, physiological ability and social resources, which has been ignored by previous studies. Hosen (2003) believes that psychological capital is an internal infrastructure, which requires individuals to invest in various ways such as learning, including cognitive ability, self-monitoring, individual tendency and effective emotional communication quality. Luthans and youself (2007) further revised and improved the definition of "psychological capital". Psychological capital is described as an individual's positive psychological development state, including four positive psychological resources: self-efficacy, optimism, hope and resilience.

To sum up, combined with the research on the dimension composition of psychological capital by many scholars at home and abroad, it is summarized as follows: see Table 1.

## 2.2 Employability

Table 2: Several Typical Requirements of Employability at Home and Abroad

Serial number	Researcher	Employability elements
1	Fugate(2004)	Borderless career includes career identification, personal adaptability, social orientation and human capital
2	Hall et al. (2004)	From the perspective of borderless career, it is considered that adaptability and self-awareness are the two "meta abilities" of career success
3	Knight&Yorke (2004)	The simple employment model usem involves four elements: the understanding of subject knowledge, professional and general skills, personal quality and metacognitive ability
4	Gainer(1988)	It mainly includes individual competitiveness and other adaptive skills
5	Van Der Hei Jde(2009)	Specific professional skills, environmental adaptability and team spirit
6	American training and Development Association (1990)	Including basic competence, communication ability and influence ability
7	British Higher Education Quality Council (2002)	Self evaluation ability, communication ability, problem solving ability, teamwork and moral quality
8	Fugate, Amp and Kinicki(2008)	It mainly includes professional behavior, professional motivation and professional flexibility
9	Hillage and pallard (1998)	It mainly includes individual skills, learning attitude, expression ability and development vision
10	Frits Kluytmans(1999)	It is composed of knowledge and skills, human resources knowledge and work willingness
11	Law(1996)	Personal adaptability, individual market interface and career identification
12	Goldsmith (1999)	Personal quality, rich knowledge reserves, scientific working methods, evaluation of their own value within the organization and evaluation of their own value outside the organization
13	Rothwell, Amp and Arnold (2007)	Evaluation of the value of Baiji position within the organization and the value of Baiji position outside the organization
14	Li Enping, Niu chonghuai, Dong Guohui(2008)	Basic ability, professional ability, personal characteristics and social adaptability
15	Yang Xuhua (2012)	Character quality, emotion control ability, work competence, career planning consciousness team
16	Yang Xiaonan, Zheng Wei (2012)	Cooperation consciousness, personalized thinking cognition, adaptability, autonomous learning ability
17	Liu kuiying, Ying Lina, Huang Chunping (2008)	Personal quality ability, teamwork ability, leadership ability, professional knowledge ability, problem-solving ability, innovation ability and emotion control ability

Source: according to the researcher's literature

The concept of "employability" was first put forward by the British economist ebveirdgeu in

1909. With the continuous development of the times, the employment policy and employment environment in different periods are also changing. Hillage and Pollard (1999) said that employability not only means one's own quality and skills, but also means that one can obtain a more lasting employment career than others. Bennett (1999) proposed that employability is not only an independent concept, but a compound concept radiating from multiple angles. It is the possibility for workers to obtain employment in the internal and external environment. Clarke (2008) summarized the concept of modern employability by consulting and studying relevant literature, and summarized it into three aspects: institutional factors, supply factors and demand factors. Rajani (2015) studied and summarized the concept of employability. He proposed that employability is the ability to obtain initial employment, maintain employment, change roles in the same organization and obtain new employment when necessary. He believes that its essence is the ability and capital to choose employment between various jobs. Luthans and Youssef (2007) positive psychological capital consists of four dimensions: efficacy, hope, optimism and resilience.

To sum up, based on the research on employability indicators by relevant scholars and research institutions, this paper summarizes them: see Table 2.

## 2.3 Relevant Research

According to the past academic research on psychological capital, there are many literatures that show that psychological capital is related to individual ability and outcome variables. Scholars Jiang Jianwu and Chen Tingting (2016) believe that improving college students' psychological capital is an effective way to strengthen their employability and integrate with society as soon as possible. Du Yanyan and Gong Tingting (2020) investigated the employment psychological status of application-oriented undergraduates, explored the covariant relationship among psychological capital, employability and employment results, and constructed a structural equation model to prove that psychological capital has a positive predictive effect on employability. The research of Dang Yipei and Liu Dawei (2019) shows that there is a significant positive correlation between College Students' psychological capital and employability, and psychological capital has a strong positive effect on predicting employability.

Wang Weiyao (2018) constructed a mechanism model of the impact of psychological capital on employment results based on the resource theory model. Zheng Wandu, Chen Weiyan and Wei Jinyang (2020) pointed out that great changes have taken place in the current employment market environment from the perspective of psychological capital, which has a certain impact on the employment of college students. Based on the existing research, this paper deeply discusses the causes of College Students' employment difficulties, and puts forward strategies to improve college students' self-efficacy, enhance their employment vision, strengthen emotional management and objectively deal with setbacks, in order to provide guidance for college students' employment from the perspective of psychological capital.

Through the above review, it can be preliminarily concluded that psychological capital is an important individual resource to promote personal growth and has an important impact on the improvement of personal ability. Therefore, the author believes that college students' psychological capital should be one of the core resources affecting college students' employability.

## 3. Method

### 3.1 Research Object and Data Collection

This study takes college students as the parent group and the dependent variable is employability, so the subjects of the questionnaire are fresh senior graduates. The research samples were collected

in two time periods. The first batch was the pre-test questionnaire, 215 questionnaires were distributed, and 189 valid questionnaires were recovered. The second batch is the formal questionnaire survey time (June 2021). The formal questionnaires were distributed to 1028 senior graduates from 5 domestic universities, and 926 valid questionnaires were effectively recovered. The first batch of prediction samples were used to analyze the item analysis, exploratory factor analysis and reliability analysis of this research scale; The second batch is a formal sample to test the research hypothesis.

### 3.2 Research Methods

Through literature research, this paper systematically analyzes and arranges the relevant literature such as psychological capital and employability. Through the questionnaire survey, understand and master the current situation of College Students' employability, explore the employability that college students should have, and conduct research and analysis. Finally, using the quantitative research method, the research results are analyzed and sorted out, and the methods and ways to improve the employability of university students are obtained.

### 3.3 Research Tools

#### 3.3.1 Psychological Capital Scale

This paper adopts the positive psychological capital questionnaire prepared by Zhang Kuo (2010) and other researchers. The questionnaire is divided into four dimensions, a total of 26 items, which is suitable for the measurement of college students. Self efficacy and resilience contain 7 items respectively, and hope and optimism contain 6 items respectively. The scale adopts a 5-point scoring form, from completely inconsistent to fully consistent, with 1-5 points respectively. The higher the total score of the questionnaire, the better the psychological capital level of College Students' participants. After re testing the reliability of the positive psychological capital questionnaire (PPQ), all factors of the questionnaire have very good reliability and validity.

#### 3.3.2 Employability Scale

By sorting out the previous literature and combining the analysis results of interview method, this paper intends to use song Guoxue (2008) college students' employability questionnaire to divide college students' employability into career acquisition ability and career development ability. Among them, there are 9 items in the dimension of career acquisition ability (c1-c9) and 6 items in the dimension of career development ability (c10-c15). Using Likert's five level scale (from 1 to 5, representing the ability level from low to high) to investigate the employment professional quality of college students. The test shows that the scale has excellent reliability and validity.

## 4. Data Analysis and Results

### 4.1 Difference Analysis

Table 3: Gender differences between variables

Variable	Female M	SD	Male M	SD	t	p	d	Difference comparison
Psychological capital	3.8073	.76052	3.5048	1.12875	-4.593	<.001	-0.349	Female>Male
Employability	2.9388	.77863	3.1747	.93941	3.781	<.001	0.287	Male>Female

Table 4: Only-child differences between variables

Variable	Yes		No		t	p	d	Difference comparison
	M	SD	M	SD				
Psychological capital	3.771	.8349	3.713	.8952	0.941	0.347	0.066	-
Employability	2.994	.7967	3.000	.8423	-0.102	0.919	-0.007	-

Table 5: Differences in family residence between variables

Family residence Variable	1City		2County seat		3Rural		F	p	Difference comparison
	M	SD	M	SD	M	SD			
Psychological capital	3.786	.8584	3.781	.7267	3.578	1.0122	4.899	.008	1,2>3
Employability	3.083	.8274	2.957	.7888	2.864	.8449	5.940	.003	1>3

Table 6: Professional differences between variables

Variable	Major	M	SD	F	p	Post-inspection
Psychological capital	Liberal arts	3.729	.8835	1.301	.268	-
	Science	3.867	.7699			
	Engineering	3.700	.8935			
	Art	3.767	.9238			
Employability	Physical	3.637	.9446	1.327	.258	-
	Liberal arts	3.132	.8548			
	Science	2.998	.8857			
	Engineering	3.007	.7910			
	Art	2.801	.9383			
	Physical	2.842	.9766			

Table 7: Differences in family economic status among variables

	Family's financial situation		M	SD	F	p	Difference analysis
Psychological capital	1 Not bad		3.570	.8566	7.680	.000	3,4 > 1,2
	2 General		3.671	.9068			
	3 Good		3.906	.7495			
	4 Excellent		4.421	.5048			
Employability	1 Not bad		3.004	.6797	6.230	.000	3 > 2
	2 General		2.931	.7954			
	3 Good		3.182	.8896			
	4 Excellent		3.398	1.1750			

Table 8: Differences in Father's Education between Variables

Variable	Father's education	M	SD	F	p	Difference analysis
Psychological capital	Primary school	3.352	1.1131	12.328	.000	3,4 > 1
	Junior high school	3.634	.9025			
	Technical secondary school/High school	3.819	.8455			
	College/Undergraduate	3.917	.6725			
Employability	Primary school	2.842	.7793	3.561	.014	4 > 1
	Junior high school	2.992	.7823			
	Technical secondary school/High school	2.954	.8831			
	College/Undergraduate	3.135	.8151			

In order to test the difference between the research variables in the various background variables, this study used independent sample T test and one-way analysis of variance, in which two-level variables, such as gender, were subjected to T-test; multi-level variables, such as family economic status, were subjected to analysis of variance (F). The T test shows that there are significant gender differences in psychological capital and employability. Women's psychological capital scores are higher than men's, and men's employability scores are higher than women's; there is no difference in only-children; there is a significant difference in family residence, with the city being higher. There is no significant difference in majors; the psychological capital and employability of students with better family economic status are significantly higher than those of students with poor family

economic status; the higher the parent's educational background, the higher the student's psychological capital and employability level. See the comparison (table 3—table 10)

Table 9: Differences in Mother's Education between Variables

Variable	Mother's education	M	SD	F	p	Difference analysis
Psychological capital	Primary school	3.519	1.0900	4.270	.005	4 > 1
	Junior high school	3.731	.8722			
	Technical secondary school/High school	3.722	.8750			
	College/Undergraduate	3.875	.7029			
Employability	Primary school	2.855	.8255	2.778	.040	4 > 1
	Junior high school	3.033	.8748			
	Technical secondary school/High school	2.945	.7560			
	College/Undergraduate	3.097	.8316			

Table 10: Descriptive statistics of variables

Variables and dimensions	Number of questions	M	SD
Self-efficacy	7	3.9175	1.04007
Toughness	7	3.8047	1.06885
Hope	6	3.9392	1.09128
Optimism	6	3.2660	1.09164
Psychological capital	26	3.7318	.87629
Career acquisition	9	3.1829	.98159
Career development ability	6	2.8125	.96788
Employability	15	2.9977	.82748

## 4.2 Related Analysis

It can be seen from Table 11 that there is a two-by-two positive correlation between the various dimensions of psychological capital and the various dimensions of employability, that is, the higher the scores of students in self-efficacy, resilience, hope, and optimism, the higher the scores in career development ability and career acquisition ability.

Table 11: The dimensions of psychological capital are related to the dimensions of employability

	Self-efficacy	Toughness	Hope	Optimism	Career acquisition	Career development
Self-efficacy	1					
Toughness	.652**	1				
Hope	.651**	.634**	1			
Optimism	.477**	.479**	.449**	1		
Career acquisition	.327**	.290**	.295**	.245**	1	
Career development ability	.261**	.231**	.216**	.139**	.441**	1

Note: \* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$ .

## 4.3 Regression Analysis

Construct a regression model with psychological capital as an independent variable, employability as a dependent variable, gender, family residence, family economic status, father's education, and mother's education as control variables. Among them, gender and family residence are categorical variables, and coded as dummy variables are included in the regression equation, and women and rural areas are respectively used as reference groups. The results are shown in Table 12. After controlling for background variables, the regression model is significant,  $F=27.520$ ,  $p < 0.001$ , all variables explain 17.3% of the variance of employability. The VIF in the model is less than 10, indicating that there is no collinearity problem. In the model, psychological capital can

significantly positively affect employability,  $\beta=.372$ ,  $p<.001$ .

Table 12: Regression analysis of psychological capital to employability

	Dependent variable: Employability					VIF
	B	se	$\beta$	t	p	
Male	.356	.059	.186	6.004	.000	1.072
City	.119	.062	.072	1.926	.054	1.538
Country town	.073	.072	.037	1.004	.316	1.524
Family's financial situation	.125*	.050	.081*	2.491	.013	1.162
Father's education	.001	.033	.001	.031	.976	1.647
Mother's education	-.006	.033	-.007	-.187	.852	1.672
Psychological capital	.351***	.029	.372***	11.956	.000	1.074
R2	.173					
Adj R2	.167					
F	27.520***					
df	(7, 918)					

Note: \*P <0.05, \*\*P <0.01, \*\*\*P <0.001, “Female”, “Rural” Taken as a reference group

The results of this study show that the four positive mental states of college students' self-efficacy, hope, optimism and resilience are all significantly positively correlated with their employability. And psychological capital as a whole construct has a stronger explanatory power for employment than all dimensions of psychological capital.

## 5. Discussion and Countermeasures

### 5.1 Enhance Self-Efficacy and Enhance Employment Competitiveness

Colleges and universities can start from several aspects when improving college students' sense of self-efficacy. Constantly set goals and tasks for students in learning and student work, and improve students' sense of self-efficacy in continuous success; Encourage students to compete. If there is competition, there will be goals and objects to compare. In this process, they can find their strengths and improve their sense of self productivity; Helping students to attribute success and failure can also improve students' sense of self productivity; Helping students find their strengths and advantages in their study and work is an effective way to enhance students' sense of self productivity. The enhancement of self-efficacy cultivates the confidence and courage of college students to overcome difficulties and overcome difficulties, and contributes to the further enhancement of College Students' employability and employability.

### 5.2 Build hope and Enhance Employment Competitiveness

Hope is that individuals or organizations can set realistic and challenging goals and expectations, and achieve these goals through self-directed determination, energy and perception of internal control. Therefore, the establishment of hope should determine realistic and challenging goals and achieve this goal through their own efforts, which can improve people's hope. From this hope building behavior training, college students' expectation of achieving the goal can be greatly strengthened, which avoids making college students fall into a negative psychological attitude in the process of learning and life, thus laying a good psychological foundation for the improvement of employability.

### 5.3 Cultivate Optimism and Enhance Employment Competitiveness

Cultivating college students' psychological capital can cultivate students' courage in the face of difficulties and optimism in the face of setbacks. While improving students' self-efficacy and



establishing students' hope, students' optimism will also be improved.

## 5.4 Temper Resilience and Enhance Employment Competitiveness

Cultivate college students' psychological capital to deal with employment competition. It also requires us to cultivate students' ability to survive and develop in adversity. Exercise their indomitable will quality and enhance their competitiveness in employment. Only those who are full of self-confidence, hope, optimism and tenacity have the courage to innovate and dare to innovate, can they give full play to their knowledge and skills according to local conditions, and can they move from adversity to prosperity and from prosperity to greater achievements.

## 6. Conclusion

There is a positive correlation between psychological capital and employability. Psychological capital affects college students' employability. By enhancing college students' sense of self-efficacy, establishing hope, cultivating optimism, tempering resilience and improving psychological capital, college students' employability can be improved.

## References

- [1] B Steers R M, Porter L W, Bigley G A, et al. *Motivation and leadership at work [M]*. McGraw-Hill, 1996, 187-195
- [2] Bennett, Dunne and Carre. (1999). *Patterns of Core And Genericskill Provision In Higher Education*, 37(1), 71-93.
- [3] Bond, M. (2020). *Facilitating Student Engagement through the Flipped Learning Approach in K-12: A Systematic Review*. *Computers & Education*, 7,1-36.
- [4] Clarke, M. (2008). *The New Covenant of Employability*. *Employee Relations*, 30(2), 121–141.
- [5] Fredrickson, B., & Losada, M. F. (2005). *Positive affect and the complex dynamics of human flourishing*. *American Psychologist*, 60, 678–686.
- [6] Fredricks, J., Blumenfeld, P., & Paris, A. (2004). *School Engagement: Potential of the Concept, State of the Evidence*. *Review of Educational Research*, 74(1), 59-109.
- [7] Harvey, L. (2001). *Defining and measuring employability*. *Quality in Higher Education*, 7, 97–109.
- [8] Hillage, J., & Pollard, E. (1999). *Employability: Developing A Framework For Policy Analysis*. *Labour Market Trends*, 107, 83–84.
- [9] Holland, S. (2006). *Synthesis: A lifelong learning framework to graduate attributes*. In P. Hager & S. Holland (Eds.), *Graduate attributes, learning and employability*, (26)2:67–307.
- [10] Luthans, F. (2003). *Positive organizational behaviour (POB): Implications for leadership and HR development and motivation*. In R. M. Steers, L. W. Porter & G A.
- [11] Rajani Kumari. (2015). *Fuzzified Expert System For Employability Assessment*, 62(8),99-106.
- [12] Chen Tingting (2016). *Research on the improvement of College Students' employability from the perspective of psychological capital-Taking the undergraduates of a normal university as an example*. *Future and development*, 8, 97-100 + 96.
- [13] Cheng Wei(2017). *Empirical research on the employability of college students and its improvement—Based on the effective sample analysis of 64 universities across the country*. *Higher Education Exploration*, (7): 98-105.
- [14] Du Yanyan and Gong Tingting (2020). *A longitudinal study on the improvement of employability of Applied Undergraduates Based on psychological capital*. *Vocational Education Forum*, (11), 172-176.
- [15] Huang Bingchao. *Research on the elements, characteristics and construction methods of the employability structure of college students*. *Employment of Chinese University Students*, 2015, (8): 8-12.
- [16] Wang Weiyao (2018). *The influence of College Students' Psychological Capital on employment results (Master's thesis, Beijing Foreign Studies University)*.
- [17] Zheng Wandi, Chen Weiyan, Wei Jinyang (2020). *Research on the improvement of College Students' employability from the perspective of psychological capital*. *Xueyuan*, 13,80-81.
- [18] Zhang Jina(2007). *Improve employability: An important choice to alleviate the employment difficulties of college students*. *Higher Education Research*, (12): 37-41.
- [19] Wang Ting, Zeng Xiangquan(2009). *Research on the Causes and Countermeasures of Structural Unemployment of College Graduates*. *Education and Economy*, (1): 1-4.

[20] Wang Ting, Yang Yumei, Zhang Jin (2010). *Research on Employment Situation and Employment Issues of College Graduates—Survey based on corporate employers, school teachers and graduates*. *Heilongjiang Higher Education*, (10): 93-97.