

# An Exploration into the Influence of Higher Vocational Students' Psychological Capital on Their Employability

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**Abstract.** Cultivating higher vocational students' employability is one of the most important goals for higher vocational education. Many researchers address teachers' key roles in cultivation of employability. However, the cultivation of employability relates to students' family environment and psychological capital. Through the collection of demographic data, 6700 higher vocational students were investigated with the Positive Psychological Capital Questionnaire (PPQ) and the College Students' Employability Questionnaire (CSEQ). The results show that psychological capital is significantly correlated with employability ( $P < 0.01$ ); although family environment can not regulate the impact of psychological capital on employability, it works independently as psychological capital does; the self-efficacy, optimism and hope in psychological capital significantly affect the employability of higher vocational students from single-parent families. The improvement of psychological capital is conducive to the cultivation of employability of higher vocational students from single-parent families.

**Keywords:** Employability, Family environment, Psychological capital, Higher vocational students

## 1 Introduction

In recent years, with the number of college graduates rising increasingly, the employment pressure of college students is growing rapidly [1]. The employment problem has become the focus of the government, universities and other relevant departments which need to be resolved. Employment is an important issue relevant to people's livelihood. Thus many scholars have discussed this issue from different perspectives and expected to find out the solutions. From the perspective of supply-side reform, some scholars suggested that colleges and universities should strive to improve the employability of college students, so as to help them obtain satisfactory employment results [2]; some scholars proposed from the perspective of government management and enterprise development that the government should take tax measures to reduce the burden of enterprises, so as to provide a good employment environment for college students [3]; some scholars believed that the government should focus on the reform of the supply-demand structure, actively adjust the professional settings of various colleges and universities, and resolve the contradiction

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between supply and demand in the employment market [4]. In sum, from the macro level, the supply-demand structure of employment market determines the quality of the employment situation; from the micro level, the evaluation of employment situation and the trade-off of employment result vary among different people, which depend on the individuals' internal cognition and value orientations toward employment results.

Because of the existence of inclination of benefit maximization and the orientations of social values, individuals can evaluate the employment results under the guidance of social values and the pursuits of their goals, thus the employment result itself has the social attributes and becomes an important indicator to reflect the qualities of individuals' employments. The employment result is a result of combination of multiple factors and levels. It is not only affected by the external employment market, but also relates to the college students' internal abilities, such as employability and so on. Some researches show that the employment result is affected by the internal factors such as individual's employability, professional images, personality traits and professional choices. Among them, employability is one of the most important factors affecting possible employment results. The qualities of individuals' employment results are directly relative with their employability [5]. Employability is the precondition for individuals to obtain employment opportunities and improve their job satisfactions. It is also an important core of workplace competitiveness. The improvement of college students' employability is helpful to solve employment problems, guarantee employment opportunities and obtain satisfactory employment results.

The way to improve the college students' employability has always been the focus of many scholars. The literatures about employability usually concentrated on the structure, measurement and antecedents of employability. For example, X. Gong and his colleagues (2018) divided the employability of college students into four dimensions: professional ability, quasi-professional image, personality compatibility and employment personality [6]; W. Cheng (2016) proposed a six-dimensional model of employability through interviews and factor analysis [7]; Y. Cui (2017) discovered a significant impact of psychological capital on employability by analyzing 289 medical students' employability [8].

According to previous researches, psychological capital is the general name of all the positive mentality states which is superior to human capital and social capital, it can help people obtain competitive advantages and improve their employability [9,10]. Individuals with higher psychological capital can obtain more psychological resources, their academic performances and interpersonal relationships are better than those who own lower psychology capital [11]. These essential factors are conducive to the improvement of employability.

The psychological capital is closely related to the individual's family growth environment, and the family environment has an important impact on the individual psychological capital. When individuals get more spiritual and material supports from their families, their psychological needs are better met leading to the growth of psychological capital, which is conducive to the development of employability. These kinds of individuals usually show strong resilience and stable psychological qualities in their careers; however, when people are in the single-parent or divorced family environment, their mental health levels are usually low [12], and their psychological capital is poor [13], which may negatively affect the development of employability. Theoretically, the single-parent family environment may be one of the most important variables among various demographic variables affecting employability.

In order to elaborate the impacts of family environment and psychological capital on higher vocational students' employability, this paper takes the operational definition of demographic variable of family environment as whether higher vocational students come from single-parent families or not, and conducts research on the group of higher vocational students. This paper proposes hypothesis 1: family environment and psychological capital

significantly affect higher vocational students' employability. However, there are two modes of the influence of family environment and psychological capital on employability: one is that family environment and psychological capital independently affect employability, there is no interaction between them; the other is that family environment influences employment ability by regulating psychological capital, and there is interaction between them.

The traditional view is that family environment has a great influence on individual employability. Not only does family environment affect employability directly, but also affects employability through other variables, such as psychological capital. However, there is another view that the influence of family environment on individual's ability is gradually weakened with the increase of individual's social experience, and the socialization process weakens the influence of original family on individual's ability development. With the increase of individual social experience, the development of employability will gradually get rid of the restriction of family environment, so there is no regulatory effect of family environment on employability. In order to find out if there is an intermediate mechanism between family environment and employability, this paper establishes control model and regulation model to verify these views.

In addition, due to the negative impact of family environment, higher vocational students from single-parent families tend to have inferiority complex, jealousy and other negative emotions, which are easy to hinder the developments of their employability. Therefore, in order to better help vocational students from single-parent families develop their employability, the paper sets up hypothesis 2 (Hypothesis 2: psychological capital and its dimensions have a significant impact on the employability of higher vocational students from single parent families). From the different dimensions of psychological capital, this paper provides useful suggestions about the cultivation of employment ability for higher vocational students from single parent families.

## **2 Object, tools and measurement process of investigation**

### **2.1 Investigation object**

A total of 6752 students from a medical vocational college were surveyed by cluster sampling method. 6658 pieces of data are valid for the further analysis. In the data, there are 1436 boys (21.6%) and 5222 girls (78.4%); there are 3884 Han students (58.3%), 306 Hani (4.6%), 1280 Yi (19.2%), 196 Hui (2.9%) and 992 other ethnic minorities (14.9%); there are 5681 vocational students (85.3%) from rural areas and 977 students from cities and towns (14.7%); there are 1015 students from singleton families (15.2%) and 5643 students from multiplex families (84.8%). there are 736 students from single-parent families (11.1%) and 5922 students from non-single-parent families (88.9%).

### **2.2 Positive psychological capital questionnaire (PPQ)**

The Positive Psychological Capital Questionnaire was used to measure the psychological capital of higher vocational students. The questionnaire is a measurement tool developed by Zhang Kuo and his colleagues on the basis of Psychological Capital Questionnaire (PCQ) compiled by Luthans et al. (2010) [14]. The questionnaire has 26 items and 4 dimensions, which are self-efficacy, resilience, hope and optimism. Each item was evaluated by Likert scale. The subjects were asked to choose from "completely inconsistent" to "fully consistent" according to the actual situation. Each item was scored from 1 to 7. The overall Cronbach's alpha coefficient of the questionnaire is 0.90, and the Cronbach's alpha coefficient of each dimension is 0.75, 0.75, 0.90 and 0.80 respectively.

### 2.3 College students' employability questionnaire (CSEQ)

The employment ability of higher vocational students was measured by the College Students' Employability Questionnaire (CSEQ) compiled by W. Cheng. The questionnaire consists of 89 items, each item is scored by Likert scale ranged from 1 to 7. The scale is divided into six dimensions, which are general vocational skills, professional core quality, career development potential, professional personality, team quality and leadership quality [15]. Previous studies have shown that the questionnaire has good reliability and validity, the internal consistence reliability of each dimension is between 0.83 and 0.97, and the convergence validity is greater than 0.8 [16]. Based on the measured data, the Cronbach's alpha coefficient of the scale is 0.97.

### 2.4 Measurement process

The unified instruction was carried out in class. The professional staffs were required to carry out measurement in batches, at different times and in different places, ensured the anonymity of the subjects and strictly controlled the common method deviation included in the measurement process [17]. SPSS18.0 software was used to analyze the measured data. The research methods included Pearson correlation, Moderated Multiple Regression and Stepwise Regression.

## 3 Results

### 3.1 The relationship between psychological capital and employability

The data of 6658 vocational students were analyzed by Pearson correlation analysis. The results show that there is a significant correlation between the total score of psychological capital and its dimensions, the correlation coefficient is between 0.495 and 0.866; the total score of psychological capital and its dimensions are significantly correlated with employability, the correlation coefficient is between 0.429 and 0.712, showing a positive correlation with high intensity.

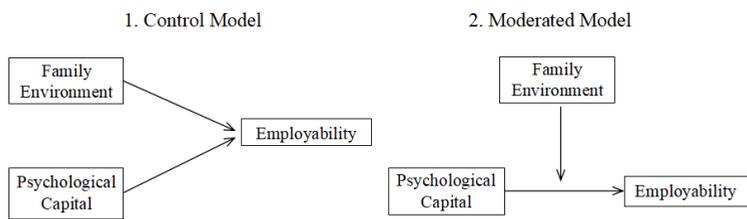
**Table 1.** Pearson correlation matrix of psychological capital and employability.

	1	2	3	4	5
1.Self-efficacy	1				
2.Resilience	0.683**	1			
3.Hope	0.586**	0.503**	1		
4.Optimism	0.561**	0.495**	0.756**	1	
5.Psychological capital	0.866**	0.807**	0.840**	0.827**	1
6.Employability	0.571**	0.429**	0.712**	0.623**	0.695**

### 3.2 The impacts of family environment and psychological capital on employability

It's possible that family environment and psychological capital affect employability in different ways, that is, family environment independently affects employability or affects it by adjusting psychological capital. When family environment and psychological capital

affect employability independently, the control model is established; when family environment affects employability by adjusting psychological capital, the moderated model is established. In order to explore whether the regulatory effect of family environment exists or not, the Moderated Multiple Regression (MMR) equation is established by using the interaction term of family environment and psychological capital [18,19]. Please see the following figure 1.



**Fig. 1.** The Comparison of Control Model and Moderated Model.

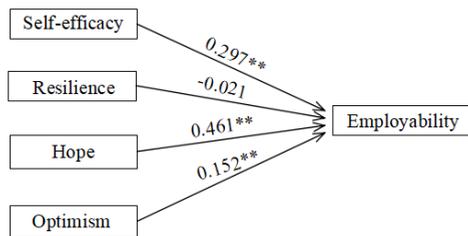
As shown in table 2, the explanatory power of psychological capital to employability is 0.735, while the explanatory power of family environment to employability is 0.018, both reaching significant levels, which support hypothesis 1. However, the interaction between psychological capital and family environment upon employability was not significant,  $\Delta F(1, 16654) = 0.050, p > 0.5$ . It shows that family environment can not regulate the effect of psychological capital upon employability, thus the moderated model is not established; but family environment and psychological capital affect employability independently, the control model is established. The control regression equation was  $y = 3.431x + 4.532z + 56.553$ . Among them, X is psychological capital, Z is family environment.

**Table 2.** Regression analysis on the influence of family environment and psychological capital on employability.

Model	Independent Variables	R <sup>2</sup>	$\Delta F$	$\beta$	Beta	t
1	Psychological capital	0.540	7828.503**	3.432	0.735	88.479**
2	Psychological capital	0.541	4.448*	3.431	0.735	88.493**
	family environment			4.532	0.018	2.109*
3	Psychological capital	0.541	0.050	3.486	0.747	14.052**
	family environment			7.753	0.030	0.532
	Interaction term			-0.029	-0.017	-0.225

### 3.3 The influence of psychological capital on the employability of higher vocational students from single-parent families

Y.J. Wang believes that psychological capital has a significant impact on college students' employability [20]. However, this study does not focus on subjects' family environment. As mention before, family environment is the key variable leading to people's various employability, thus family environment must be considered in further analysis. We select 736 higher vocational students from single-parent families as the research subjects, and test the influence of psychological capital on the employability of vocational college students from single-parent families by Stepwise Regression method.



**Fig. 2.** The Effect of Dimensions of Psychological Capital on Employability.

The results show that psychological capital can still significantly affect the employability of vocational college students from single-parent families. After controlling the effect of each dimension of psychological capital, self-efficacy, hope and optimism can significantly affect employability, their standardized regression coefficients are 0.297, 0.461 and 0.152 respectively, reaching a significant level; however, resilience dimension cannot affect employability, which is different from previous research conclusions [20], which may be caused by different research subjects. Previous studies mainly focus on ordinary college students, but for higher vocational students from single-parent families, their resilience levels are likely to be different from the overall levels of college students. On the whole, the four dimensions of psychological capital explain 60.10% variation of employability, which show that the influence of psychological capital on the employability of vocational college students from single-parent families is significant.

## 4 Conclusions

### 4.1 The control model of family environment and psychological capital affecting vocational college students' employability

The research shows that the employability of higher vocational students from two-parent families is significantly better than that of higher vocational students from single-parent families,  $F(1, 16655) = 4.448, p < 0.05$ . As for higher vocational students, a good family environment is conducive to the improvement of employability, while the broken family relationship and the lack of family care are harmful for the development of employability. However, the influence of family environment on employability is limited, and it is not the only factor which determines the development of employability. Compared with psychological capital, family environment has less influence on employability; at the same time, the regulatory effect of family environment on higher vocational students' employability is not significant, which means that family environment can not enlarge or reduce the effect of psychological capital upon employability.

This is inconsistent with the traditional view. The traditional view is that family environment has an important impact on the development of individual ability. As a result of the lack of family care and parental education, the individual growing up in a single-parent family is sensitive, suspicious, and has poor psychological qualities, which seriously restricts the development of comprehensive ability. However, the research shows that family environment and psychological capital are two separated variables that affect employability independently and there is no interaction between them, that is, the influence of psychological capital on individual employability cannot be enhanced by family environment. Family environment is a relatively stable external variable, and its impact on employability will gradually decline with the passage of time. Individuals can heal themselves in the process of socialization, use the cares and helps of peers to make up for the lack of family cares, and

repair the negative impacts of the original families on themselves. Therefore, with the increase of people's social experience, their employability will eventually get rid of the constraints of family environment and continue to develop. The impact of family environment on individual employability is generally fixed and short-term, while the impact of psychological capital on individual employability is dynamic and long-term. Psychological capital is a controllable internal variable, which corresponds to the individual's positive attitude, optimistic and progressive personality. Therefore, compared with the family environment, psychological capital has greater impact on the development of individual employability.

#### **4.2 Improving the psychological capital of higher vocational students from single-parent family is conducive to the cultivation of employability**

Psychological capital plays an important role in the cultivation of employability of higher vocational students from single-parent families, its pure effect is 0.739. The stronger the individual's psychological capital is, the more active he is to engage in work and study, and constantly improve his comprehensive ability. On the contrary, individuals with weak psychological capital tend to treat work and study with negative attitudes, which are easy to fall into self denial and form a vicious circle [21]. Therefore, giving full play to the positive role of psychological capital is of great significance to personal study, employment and work.

The improvement of psychological capital is beneficial to the cultivation of higher vocational students' employability. Therefore, higher vocational colleges can not only cultivate the students' employability from the perspective of core skills and professional knowledge, but also comprehensively improve the employability of higher vocational students from the perspective of psychological capital. Specifically, it is necessary to carry out the special training of employability from three aspects, such as self-efficacy, hope and optimism. Self-efficacy refers to the individual's belief and effort to complete the challenging tasks. Individuals with high self-efficacy often exhibit full confidence against the tasks and difficulties, and these mental qualities make them concentrate on the tasks without interruptions; hope is that individuals can persevere and adjust to achieve goals; optimism refers to an individual's positive attribution to the present and future [22]. Vocational colleges can focus on the three dimensions, and integrate the cultivation of self-efficacy, willpower training and attribution training into psychological classroom and group activities. By the means of discovering and emphasizing students' own advantages, students' self-efficacy would be cultivated. They can learn to build up their confidences in spite of setbacks by not only accepting their weaknesses, but also learning to see their advantages in the difficult circumstances. This process would benefit their self-confidences and improve their adverse quotients; by the means of helping students set up the reasonable goals that can be achieved through hard work, students would experience the success of self-fulfillment and become more persistent in the challenges. This process would be helpful for students to enlarge their willpower resources; by the means of guiding students to form the favorable habits, students would acquire knowledge effectively and get rid of the constraints of willpower resources which minimize the effect of willpower; by the means of practicing attribution training in psychological class or in extracurricular activities, students would develop their optimisms toward studying and living while they attribute success to competence and attribute failure to effort, their hopefulness about future would be reinforced. In sum, there are many ways to enhance people's psychological capital, through the acquisition of reasonable beliefs, the form of good habits and attribution training in class or in extracurricular activities, higher vocational students' employability would be better fostered.

## 5 Acknowledgement

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