
The Relationship between Psychological Capital and Academic Burnout among Vocational College Students in Jiujiang Vocational University

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Abstract

Education is the foundation of a country, and the development of talents is closely related to socialist modernization. The great rejuvenation of the Chinese nation and the development of socialism with Chinese characteristics urgently require college students to grow and succeed. But in recent years, academic burnout among Chinese vocational college students has become increasingly common. To gain a deeper understanding of the relationship between academic burnout and psychological capital among vocational college students, this study conducted a questionnaire survey of 317 vocational college students using the Psychological Capital Questionnaire and the College Student Academic Burnout Questionnaire. The statistical analysis results show that there are significant differences in psychological capital and academic burnout among college students by gender and major category. The total score of psychological capital is significantly negatively correlated with the total score of academic burnout. The regression analysis results indicate that the total score of psychological capital can explain 48.4% of the variation in the total score of academic burnout. The main conclusion drawn from the study is that psychological capital can negatively predict academic burnout among vocational college students.

Keywords: *Psychological Capital; Academic Burnout; Vocational College Students.*

1 Introduction

The development of talents is closely related to socialist modernization. The great rejuvenation of the Chinese nation and the development of socialism with Chinese characteristics urgently require the healthy growth and successful development of college students. The Fifth Plenary Session of the 19th Central Committee of the CPC proposed to achieve the goal of strengthening the country through education by 2035. In recent years, China has set educational goals for the comprehensive development of students, not only to increase their knowledge and innovative spirit, but also to promote the development of their intellectual factors and cultivate their personalities. In addition, the severe employment situation in recent years has led to increasing pressure on Chinese university students, and academic burnout is relatively common. Jia, Zheng, & Zhao (2022) found that the incidence of academic burnout among college students is 58.8%. Academic burnout has become an important problem that troubles

the learning and life of vocational college students (He, Chen, & Hui, 2022). Academic burnout not only leads to internal and external problems such as depression, aversion to learning, and dropout among students, but also affects their future employment and career development. Therefore, exploring the influencing factors and internal mechanisms of academic burnout among vocational college students has an important practical significance.

As a collection of individual positive psychological elements, psychological capital has been proven to have an impact on various aspects of people's learning, work, and life (Wu, 2023). In the wave of positive psychology movement launched at the end of the last century, Seligman (1998), former president of the American Psychological Society, led many psychologists to conduct a series of scientific research related to human positive qualities in this movement. With the help of this positive psychology movement, people's focus has shifted towards research related to positive orientation. Liu and Huang (2022) found that the higher the psychological capital of college students, the lower the level of academic burnout. Psychological capital can effectively predict the status of academic burnout among college students.

1.1 Background of Study

Li (2020) found in his research that the surveyed college students have a certain degree of academic burnout. The common academic burnout among college students is related to several reasons from family, school, and society. With the continuous expansion of enrollment in universities, but limited employment opportunities in society, this means that the requirements for college students are becoming higher and higher. Freshmen entering university may face changes in their learning and management methods, various exams and activities, as well as obscure and difficult to understand professional courses, and even uninterested courses, which may lack enthusiasm and motivation for learning. The relative freedom in management at the same time can make some students addicted to games and neglect their studies. In the process of employment, increasingly fierce competition can cause some students to lose confidence and develop negative psychology.

Psychological capital is a widely studied individual positive psychological factor in positive psychology research, and its relationship with academic burnout has been studied by many researchers (Rad, et al., 2017; Liang, 2020). Most studies suggest a significant negative correlation between these two factors, with psychological capital being the prominent psychological factor that negatively predicts academic burnout levels. Conversely, academic burnout levels can also negatively predict students' psychological capital levels (Liu, et al., 2021; Chen, 2021). Dong (2011) studied the relationship between psychological capital, academic burnout, and coping strategies among high school students. The results showed a significant negative correlation between psychological capital and academic burnout, and psychological capital can effectively predict the situation of academic burnout. Cheng (2017) studied the relationship between psychological capital, learning motivation, and academic burnout among vocational college students. He pointed out that after using psychological intervention to enhance psychological capital, students' learning motivation was significantly strengthened, and their level of academic burnout was significantly reduced. Xu (2020) studied

the relationship between social support, psychological capital, and academic burnout among high school students. The study showed that there was a significant negative correlation between psychological capital and academic burnout among high school students, and psychological capital played a mediating role between academic burnout and social support.

1.2 Problem Statement

The relationship between psychological capital and academic burnout among vocational college students needs further exploration. As a key factor in the process of individual psychological development, psychological capital can have an impact on students' learning attitudes, learning enthusiasm, and other aspects. Yang (2013) found in his research that there is a significant negative correlation between psychological capital and academic burnout among college students, and there is a significant negative correlation between various dimensions of psychological capital and academic burnout. Most of the current research on academic burnout focuses more on ordinary college students, while there is relatively little research on academic burnout among vocational college students. The existing surveys cannot fully reflect the relationship between psychological capital and academic burnout among vocational college students.

1.3 Operational Definitions

In this part, two operational definitions will be discussed, academic burnout, psychological capital of vocational college students.

1.3.1 Academic Burnout

The concept of academic burnout is mostly developed and perfected by drawing on Maslach's (1982) concept of work burnout. Academic burnout is often considered as a negative and indifferent attitude towards learning that students develop due to academic pressure, with a lower sense of achievement towards learning. The classification of academic burnout in dimensions continues work burnout, consisting of three dimensions: emotional exhaustion, indifference and alienation, and low sense of achievement. However, the "exhaustion" and "indifference" of academic burnout tend to be caused by academic activities rather than interpersonal activities. Yang (2004) believes that academic burnout is a phenomenon of low sense of achievement and low enthusiasm caused by heavy academic burden, academic pressure, or other psychological factors during the learning process. Lian, Yang, and Wu (2005) proposed a new definition of academic burnout based on their research, which refers to the negative emotions such as boredom, frustration, and even avoidance of learning activities that arise from students lacking interest and motivation in learning and having to engage in learning activities.

In this study academic burnout measures from three dimensions: dejection, improper behavior, and reduced personal accomplishment. (1) Dejection: reflect students exhibit emotional characteristics such as fatigue, depression, and lack of interest due to their inability to handle learning problems and demands well. (2) Improper behavior: reflect students exhibit behavioral characteristics such as skipping classes, not attending classes, being late, leaving early, and not submitting homework due to boredom in learning. (3) Reduced personal accomplishment: reflect the feeling of low achievement experienced by students during the learning process, or referring to the low sense of achievement in learning ability caused by insufficient ability to complete learning tasks.

1.3.2 Psychological Capital

Luthans (2008), former president of the American Management Association, cleverly combined the relevant theoretical ideas of positive psychology with the relevant systems in the field of management, creating Positive Organizational Behavior (POB). He defined psychological capital as a positive aspect of an individual's psychological development process. It mainly manifests in four aspects: confidence, optimistic, hope, resilience. Based on Luthans, Tian (2008) proposed that psychological capital is not limited to four dimensions, but also includes dimensions such as positive ability, happiness, and emotional intelligence. Cao (2006) pointed out in his research that the six-dimensional structure of psychological capital includes hope, optimism, subjective well-being, emotional intelligence, resilience, and civic organizational behavior.

In this study the psychological capital measures from four dimensions: self-efficacy, hope, optimism, and resilience. (1) Self-efficacy: reflect the individual's sense of achievement in stimulating motivation, mobilizing cognitive resources, and taking measures to complete a certain task within a certain context. (2) Hope: reflect a positive motivational state formed by individuals who are willing to plan a path to achieve their goals after being motivated by a desire for success, to ensure the achievement of the goals. (3) Optimism: reflect a tendency to an individual's approach to explaining the cause of an event. (4) Resilience: reflecting the individual's ability to quickly recover from conflicts, adversity, and failures.

The problem of academic burnout among vocational college students is becoming increasingly prominent. If these phenomena can't be effectively curbed in a timely manner, they will have a serious impact on their school learning and employment. Therefore, the issue of academic burnout among vocational college students should receive high attention. The competition for development in the 21st century is first manifested in the competition for talent. Among them, the employment problems faced by vocational college students are becoming increasingly prominent, leading to an increase in their academic pressure. As a result, the gradually emerging problem of academic burnout has also begun to receive high attention from all sectors of society. The popularization and popularization of education models in China's vocational colleges after the expansion of enrollment has certainly increased the average education level and education level of the current social population. However, the expansion and diversity of vocational college enrollment scale have also caused problems of uneven knowledge reserves

and learning abilities among vocational college students. Various problems such as academic pressure and employment prospects continue to affect students' learning attitudes.

This study takes college students in vocational colleges as the research object, investigates and analyzes their academic burnout and psychological capital status through questionnaires, and explores the relationship between the two variables to deeply analyze the academic burnout situation of vocational college students. Starting from their psychological capital level, the study deeply analyzes the factors that cause academic burnout. Based on the research results, it provides theoretical basis and suggestions for education authorities and vocational colleges to prevent and intervene in the academic burnout situation of vocational college students, improve teaching quality, maintain students' learning efficiency and physical and mental health, and consolidate theoretical support for promoting the reform and development of vocational colleges.

2 Literature Review

This section will discuss related research of academic burnout, psychological capital among vocational college students. And propose research gap in academic burnout of vocational college students, the conceptual and theoretical framework for this study.

2.1 Literature Review on Academic Burnout

This part focuses on the measurement, researches of academic burnout.

2.1.1 The Measurement of Academic Burnout

Pines, et al., (1981) proposed one-dimensional model mainly explains the burnout situation of different groups in a wide range of fields. Wu, et al., (2010) proposed three-dimensional model mainly explains the academic burnout situation of primary and high school adolescents. Hu (2006) proposed a four-dimensional model mainly explains the academic burnout situation of middle school students. Densten (2001) proposed five-dimensional model is less applied to the college student population. Only Schaufeli, et al., (2002) and Lian, et al., (2005) proposed three-dimensional model mainly explains the level of academic burnout among college students. Schaufeli, et al., (2002) developed the Student Version of the Academic Burnout Scale, which mainly measures emotional exhaustion, lethargy, and low personal achievement. It consists of 15 items, each of which is represented by a 7-point scoring method of 0-6 points. The range of the sum of all item scores is 0-90 points, and the higher the score, the more severe the academic burnout situation of the subject.

The College Student Academic Burnout Scale developed by Lian, et al., (2005) mainly measures three dimensions of dejection, improper behavior, and reduced personal accomplishment. It consists of 20 items, each of which is represented by the Likert 5-point scoring method. The range of the sum of item scores is 20-100 points, and the higher the score,

the higher the degree of academic burnout of the subject. This scale is widely used in the study of academic burnout among Chinese university students and has high validity (Chen, 2023).

2.1.2 The Research on Academic Burnout

There is a significant negative correlation between high self-efficacy and academic burnout and its constituent elements. High self-efficacy helps to remain calm when facing difficult tasks and activities, while low self-efficacy can lead to poor problem-solving abilities. The conclusion drawn by Rahmati (2015) is that high self-efficacy can prevent fatigue. Salami and Ajitoni (2015) investigated academic burnout and classroom environment. They collected classroom environment assessments and student burnout data from accounting students and found that performance-oriented activities in the classroom led to an increase in student burnout levels, while an increase in learning-oriented activities reduced student burnout levels.

Meanwhile, many studies have shown that a lack of social support can also lead to academic burnout. For example, Jacobs and Dodd, (2007) have found through research that social support has a predictive effect on student learning fatigue, and there is a negative correlation between learning fatigue and social support. Other studies have shown that if high school students receive strong support from their families, their own level of academic burnout will significantly decrease (Zhang, 2012). Differences in environmental factors often lead to differences in the level of student learning fatigue, mainly including school management environment, family structure, interpersonal relationships, and teacher teaching management attitude. In addition to the above factors, individual personality factors can also affect learning fatigue, including student emotional state, self-esteem, anxiety, stress patterns, academic self-efficacy. Xu, et al., (2005) found through their research that many factors, such as heavy academic burden, low academic self-efficacy, and improper teaching by teachers, are also the main reasons that affect learning fatigue among middle school students.

2.2 Literature Review on Psychological Capital

This part focuses on the measurement, researches of psychological capital.

2.2.1 The Measurement of Psychological Capital

According to different theoretical foundations, scholars have different methods for measuring psychological capital. The two-dimensional theory mainly includes Goldsmith (1997) proposing the concept of psychological capital, which pointed out that its dimensions are composed of self-esteem and control points; Ke, et al., (2009) used transactional and interpersonal approaches to divide the questionnaire on psychological capital in China, with transactional and Western concepts of psychological capital being similar. The main dimensions of the three-dimensional theory include resilience, optimism, and hope (Luthans, et al., 2004; Jensen, et al., 2006). The four-dimensional theory distinguishes the dimensions of psychological capital into self-esteem, locus of control, self-efficacy, and emotional stability (Judge, et al., 2001; Cole, et al., 2006).

While Luthans, et al., (2005) refined the thinking perspective of psychological capital by proposing that it is composed of resilience, optimism, hope and self-efficacy. This theory has received a lot of support in subsequent research (Luthans, 2008; Zhang, et al., 2010; Fang, 2012). Zhang, et al., (2010) revised the Psychological Capital Questionnaire developed by Luthans, et al., (2005), consisting of 26 questions with good reliability and validity indicators.

2.2.2 The Research on Psychological Capital

The research on psychological capital mainly includes: (1) The relationship between psychological capital and individual attitudes. As Luthans, et al., (2006) conducted a study on factors such as psychological capital and job satisfaction, the results showed that individuals with higher psychological capital showed better abilities and expectations for the future when solving practical problems, and they worked harder to showcase their excellent selves or were more proactive in their work. (2) The relationship with individual and group behavior (Luthans, 2008). Research has shown that there is a correlation between psychological capital and employee satisfaction with the workplace, which can affect the level of employee satisfaction with the workplace. For example, there is a positive correlation between psychological capital and extra role behavior; And there is a negative correlation with low workplace satisfaction; In addition, individuals with high psychological capital have a lower unemployment rate than those with low psychological capital and tend to engage in more job seeking behavior (Avey, et al., 2011). (3) The relationship with individual performance; Hobfoll (2002) pointed out in his theoretical research that individuals with high psychological capital often have more resources and perform better in pursuing goals compared to individuals with low psychological capital; Luthans (2008) found a significant correlation between psychological capital and employee job performance, with high-level individuals having higher self-evaluation than low-level individuals; Avey, et al., (2011) found a significant correlation between psychological capital and employees' creative performance, problem-solving ability, and innovation ability. (4) The relationship with individual subjective well-being; The study by scholar Robert, et al., (2016) shows that psychological capital is significantly correlated with work quality and living standards and has a significant effect on improving the work quality and level of employees. (5) The relationship with learning ability; In Fang, Ding's (2020) study on psychological capital and learning, it was found that psychological capital is significantly correlated with learning engagement, and intrinsic learning motivation has a significant impact on psychological capital and learning engagement.

2.3 Relationship between Psychological Capital and Academic Burnout

Dong (2011) studied the relationship between psychological capital and academic burnout and coping styles among high school students, and the results showed a significant negative correlation between psychological capital and academic burnout, and psychological capital can effectively predict the situation of academic burnout. Luthans (2014) found that psychological capital can influence the effect of directed learning on individual creativity, that is, by clarifying task goals and cultivating self-efficacy, in order to improve individual psychological

capital and reduce academic burnout levels. Cheng (2017) studied the relationship between psychological capital, learning motivation, and academic burnout among vocational college students. He pointed out that after using psychological intervention to enhance psychological capital, students' learning motivation was significantly strengthened, and their level of academic burnout was significantly reduced. Xu (2020) studied the relationship between social support, psychological capital, and academic burnout among high school students. The study showed a significant negative correlation between psychological capital and academic burnout, and psychological capital played a mediating role between academic burnout and social support. Wang (2022) pointed out in his research paper on the relationship between academic burnout and psychological capital among junior high school students that there is a significant negative correlation between psychological capital and academic burnout, and psychological capital can serve as a mediating variable, partially mediating the relationship between school atmosphere and academic burnout.

2.4 Research Gap

Evidence Gap: Based on previous research, most scholars have explored the impact of social support on academic burnout, but research on academic burnout among vocational college students lacks evidence from the perspective of positive psychology. There is still a lack of research on the relationship and manifestations between psychological capital and academic burnout.

Subject Gap: Most of the current research on academic burnout focuses more on ordinary college students, while there is relatively little research on academic burnout among vocational college students. There are certain differences between vocational education and regular undergraduate education, as they have significant differences in terms of student development requirements, learning environment, and learning tasks. There are significant differences in the learning foundation, abilities, interests, and other aspects between vocational college students and ordinary college students.

2.5 Conceptual Framework

The conceptual framework of this study is shown in Figure 1.

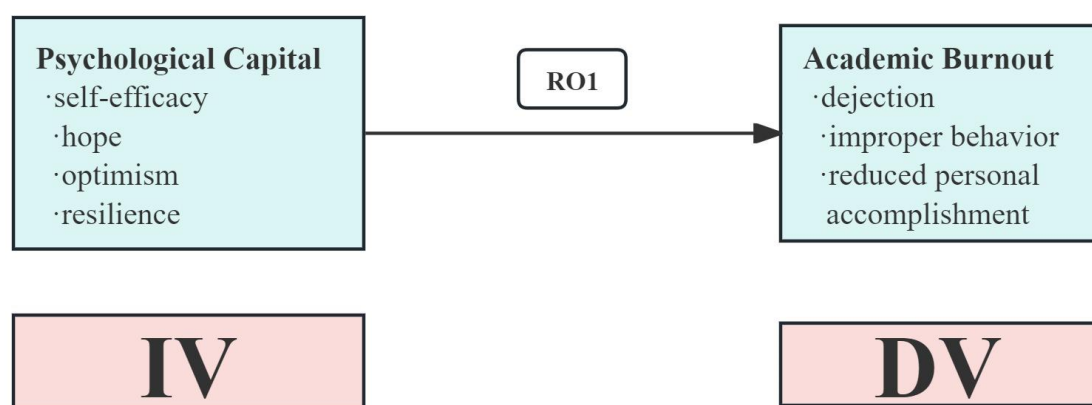


Figure1: Conceptual Framework

The relationship between psychological capital and academic burnout among vocational college students needs further exploration. As a key factor in the process of individual psychological development, psychological capital can have an impact on students' learning attitudes, learning enthusiasm, and other aspects. Yang (2013) found in his research that there is a significant negative correlation between psychological capital and academic burnout among college students, and there is a significant negative correlation between various dimensions of psychological capital and academic burnout. Most of the current research on academic burnout focuses more on ordinary college students, while there is relatively little research on academic burnout among vocational college students. The existing surveys cannot fully reflect the relationship between psychological capital and academic burnout among vocational college students. Based on this, research objective 1 is proposed: To analyze the relationship between psychological capital and academic burnout among vocational college students.

3 Research Methodology

The study employed a quantitative research design using correlational research approach with the use of questionnaires.

3.1 Subject

This study surveyed 317 first-year vocational college students in Jiujiang Vocational University. The demographic information is shown in Table 1.

Table 1: Demographic Information of the Study

<i>Demographic</i>		<i>N</i>	<i>Percent</i>
Gender	Male	141	44.4%
	Female	176	55.6%

Major	Primary School Chinese Education	108	34.0%
	Primary School Mathematics Education	116	36.5%
	Primary School English Education	93	29.5%

3.2 Questionnaires

College Student Academic Burnout Questionnaire: Developed by Lian, Yang, & Wu (2005), consisted of 20 questions. It includes three dimensions: dejection, improper behavior, and reduced personal accomplishment. The items of College Student Academic Burnout Questionnaire, 1, 3, 6, 8, 11, 13, 15, and 18 are reverse scoring questions. Each question is represented using the Likert 5-point scoring system, which ranges from 1 point (completely disagree) to 5 points (completely agree). The sum of all question scores is the subject's academic burnout score, with a range of 20-100 points. The higher the score, the higher the degree of academic burnout. The questionnaire has good reliability and validity in the measurement of academic burnout among Chinese college students, and in this study the internal consistency coefficient Cronbach's α is 0.83.

Psychological Capital Questionnaire: Developed by Luthans, et al., (2005) and revised by Zhang, et al., (2010), which included 26 items. The questionnaire is divided into four dimensions: resilience, optimism, hope and self-efficacy. The questionnaire has good reliability and validity in the measurement of psychological capital among Chinese college students, and in this study the internal consistency coefficient Cronbach's α is 0.87.

3.3 Data Analysis

Distribute questionnaires to college students online, add L-scale test questions from the Eysenck Personality Questionnaire, and eliminate incomplete and careless responses. This study conducted statistical analysis on questionnaire data using SPSS 29.0. Firstly, conduct descriptive statistics on psychological capital, academic burnout, and their various dimensions to understand the current situation of vocational college students. Secondly, conduct t-tests and ANOVA on the two variables and their respective dimensions to understand the differences in demographic variables among the two variables. Thirdly, conduct correlation analysis between psychological capital and academic burnout to understand the correlation between the two variables and their dimensions. Based on the correlation analysis, conduct regression analysis to assess the strength of the relationship between psychological capital and academic burnout.

4 Results and Discussion

4.1 Differences Statistics on Psychological Capital and Academic Burnout

4.1.1 Gender Differences in Psychological Capital and Academic Burnout

Using t-test to analyze gender differences in psychological capital among vocational college students. The results showed that there was no significant difference in optimism ($t=-0.4$, $p>0.05$) and hope ($t=0.4$, $p>0.05$) between genders, while resilience ($t=-17.1$, $p<0.001$), self-efficacy ($t=5.0$, $p<0.001$), and total score of psychological capital ($t=-6.8$, $p<0.001$) showed significant differences between genders. Girls have significantly higher levels of self-efficacy compared to boys, while boys have significantly higher levels of resilience and psychological capital. Gender differences in total score and dimensions of academic burnout have been summarized in Table 2.

Table 2: Gender Differences in Total Score and Dimensions of Psychological Capital

	<i>Male</i>	<i>Female</i>	<i>t</i>	<i>P</i>
	<i>M±SD</i>	<i>M±SD</i>		
RESILIENCE	19.1±1.8	15.5±2.0	-17.1	<0.001
OPTIMISM	20.0±1.4	20.0±1.4	-0.4	0.3
HOPE	20.1±2.0	20.2±2.0	0.4	0.3
SELF-EFFICACY	16.8±1.6	17.7±1.6	5.0	<0.001
TOTAL SCORE	76.0±3.7	73.4±3.3	-6.8	<0.001

Using t-test to analyze gender differences in academic burnout among vocational college students. The results showed that there was no significant difference in improve behavior ($t=0.6$, $p>0.05$) between genders, while rejection ($t=27.8$, $p<0.001$), reduced personal acceptance ($t=-5.0$, $p<0.001$), and total score of academic burnout ($t=13.2$, $p<0.001$) showed significant differences between genders. Girls have significantly higher levels of emotional depression and overall academic burnout compared to boys, while boys have significantly lower levels of achievement. Gender differences in total score and dimensions of academic burnout have been summarized in Table 3.

Table 3: Gender Differences in Total Score and Dimensions of Academic Burnout

	<i>Male</i>	<i>Female</i>	<i>t</i>	<i>P</i>
	<i>M±SD</i>	<i>M±SD</i>		
DEJECTION	23.4±1.2	27.7±1.5	27.8	<0.001
IMPROPER BEHAVIOR	31.1±0.9	31.1±0.9	0.6	0.3
REDUCED PERSONAL ACCOMPLISHMENT	23.2±1.6	22.3±1.6	-5.0	<0.001
TOTAL SCORE	77.7±2.3	81.1±2.3	13.2	<0.001

There are significant gender differences in the overall scores of psychological capital, resilience sub dimensions, and self-efficacy sub dimensions. Specifically, males score significantly higher than females in the overall scores of psychological capital and resilience sub dimensions. There is no significant difference in scores between male and female students in the optimistic and hopeful sub dimensions. This may be due to different social expectations and family upbringing styles for boys and girls. Boys are often taught to be brave, independent, and strong, while girls are expected to be gentle and kind, rather than being portrayed as strong in life. Therefore, boys may have greater psychological resilience and higher levels of psychological capital than girls.

There are significant differences in the total score of academic burnout and the sub dimensions of weak sense of achievement and low mood between males and females. The total score of academic burnout and the sub dimensions of low mood for females are significantly higher than those for males, while there is no significant difference in the dimension of inappropriate behavior. This may be because girls are more prone to emotions, have greater academic competition, are more fragile than boys, have more severe emotional lows, and are more prone to academic burnout.

4.1.2 Major Differences in Psychological Capital and Academic Burnout

Through ANOVA, a difference analysis was conducted on the psychological capital of students in their majors. The results showed that there was no significant difference in optimism ($F=0.2$, $P>0.05$), hope ($F=0.8$, $P>0.05$), total score of psychological capital ($F=2.8$, $P>0.05$) in their majors, while there was a significant difference in resilience ($F=23.9$, $P<0.001$) and self-efficacy ($F=171.6$, $P<0.001$) in their majors. The level of self-efficacy among students majoring in primary school Chinese education and primary school English education are significantly higher than that of students majoring in primary school mathematics education. The level of resilience among students majoring in primary school mathematics education is significantly higher than that of students majoring in primary school Chinese education and primary school English education. Major differences in total score and dimensions of academic burnout have been summarized in Table 4.

Table 4: Major Differences in Total Score and Dimensions of Psychological Capital

	<i>Primary School</i>	<i>Primary School</i>	<i>Primary School</i>	<i>F</i>	<i>P</i>
	<i>Chinese Education</i>	<i>English Education</i>	<i>Mathematics Education</i>		
	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>		
RESILIENCE	16.0±2.6	17.0±2.5	18.2±2.3	23.9	<0.001
OPTIMISM	20.0±1.4	20.0±1.4	20.0±1.5	0.2	0.8
HOPE	20.3±2.1	20.0±2.0	20.0±2.0	0.8	0.4
SELF-EFFICACY	18.3±1.2	18.2±1.3	15.7±1.1	171.6	<0.001
TOTAL SCORE	74.5±3.3	75.2±3.9	74.0±3.7	2.8	0.06

Through ANOVA, a difference analysis was conducted on the academic burnout of students in their majors. The results showed that there was no significant difference in improve behavior ($F=0.1$, $P>0.05$) in their majors, while there was a significant difference in dejection ($F=31.1$, $P<0.001$), reduced personal accomplishment ($F=171.2$, $P<0.001$), and total score of academic burnout ($F=3.9$, $P<0.05$) in their majors. The level of emotional depression among students majoring in primary school Chinese education and primary school English education are significantly higher than that of students majoring in primary school mathematics education. The sense of achievement of students majoring in primary school mathematics education is significantly lower than that of students majoring in primary school Chinese education and primary school English education, and the total score of academic burnout is significantly higher than that of students majoring in primary school English education. Major differences in total score and dimensions of academic burnout have been summarized in Table 5.

Table 5: Major Differences in Total Score and Dimensions of Academic Burnout

	<i>Primary School</i>	<i>Primary School</i>	<i>Primary School</i>	<i>F</i>	<i>P</i>
	<i>Chinese Education</i>	<i>English Education</i>	<i>Mathematics Education</i>		
	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>		
DEJECTION	27.0±2.2	26.0±2.5	24.6±2.3	31.1	<0.001
IMPROPER BEHAVIOR	31.1±0.9	31.1±0.9	31.1±0.9	0.1	0.9
REDUCED PERSONAL ACCOMPLISHMENT	21.7±1.2	21.8±1.3	24.3±1.1	171.2	<0.001
TOTAL SCORE	80.0±2.6	78.9±2.8	80.0±3.0	3.9	0.02

4.2 Correlation Analysis between Psychological Capital and Academic Burnout

From Table 6, it can be seen that there is a significant negative correlation between the scores obtained from the psychological capital dimension and the scores obtained from the academic burnout dimension, and the correlation is moderate. Specifically, there is a significant negative correlation between the scores obtained from psychological capital, resilience, self-efficacy, and academic burnout. There is a significant negative correlation between the scores obtained in the resilience dimension and the scores obtained in the academic burnout and emotional depression dimensions, and a significant positive correlation between the scores obtained in the weak sense of achievement dimension. There is a significant negative correlation between the scores obtained in the self-efficacy dimension and the scores obtained in the academic burnout and weak sense of achievement dimensions, and a significant positive correlation between the scores obtained in the emotional depression dimension.

Table 6: Correlation Analysis between Psychological Capital and Academic Burnout

	RESILIENCE	OPTIMISM	HOPE	SELF-EFFICACY	TOTAL SCORE OF PSYCHOLOGICAL CAPITAL	DEJECTION	IMPROPER BEHAVIOR	REDUCED PERSONAL ACCOMPLISHMENT	TOTAL SCORE OF ACADEMIC BURNPUT
RESILIENCE	1								
OPTIMISM	0.040	1							
HOPE	-0.044	-0.066	1						
SELF-EFFICACY	-0.201**	0.011	0.028	1					
TOTAL SCORE OF PSYCHOLOGICAL CAPITAL	0.602**	0.382**	0.506**	0.334**	1				
DEJECTION	-0.923**	-0.024	0.032	0.249**	-0.527**	1			
IMPROPER BEHAVIOR	-0.011	-0.074	-0.079	-0.045	-0.100	0.017	1		
REDUCED PERSONAL ACCOMPLISHMENT	0.201**	-0.011	-0.028	-0.894**	-0.334**	-0.249**	0.045	1	
TOTAL SCORE OF ACADEMIC BURNPUT	-0.703**	-0.051	-0.012	-0.388**	-0.697**	0.746**	0.348**	0.388**	1

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

There is a significant negative correlation between the total score of psychological capital and the total score of academic burnout, and the correlation reaches a moderate level. Specifically, there is a significant negative correlation between the scores obtained in the resilience dimension and the scores obtained in the academic burnout and emotional depression dimensions, and a significant positive correlation between the scores obtained in the weak sense of achievement dimension. There is a significant negative correlation between the scores obtained in the self-efficacy dimension and the scores obtained in the academic burnout and weak sense of achievement dimensions, and a significant positive correlation between the scores obtained in the emotional depression dimension. The higher the psychological capital value possessed by vocational college students, the fuller their positive spirit, the more confident they are, the more hopeful they are for the future, the more optimistic they are in their interactions, and the less likely they are to experience inappropriate behavior, low mood, low sense of achievement, and academic fatigue.

4.3 Regression Analysis between Psychological Capital and Academic Burnout

According to the correlation analysis, the correlation coefficient between the total score of psychological capital and the total score of academic burnout is -0.697. Linear regression analysis was conducted with the total score of psychological capital as the independent variable and the total score of academic burnout as the dependent variable. The results are shown in Table 7.

Table 7: Regression Analysis between Psychological Capital and Academic Burnout

DV	IV	R^2	$Beta$	t	F
Academic Burnout	Psychological Capital	0.484	-0.697	51.7***	297.8***

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

According to Table 7, the total score of psychological capital R^2 is 0.484, which means that the total score of psychological capital can explain 48.4% of the variation in the total score of academic burnout. Meanwhile, the standardized regression coefficient is -0.697, reaching a significant level ($p < 0.001$), indicating that the total score of psychological capital can negatively predict academic burnout among vocational college students.

On the basis of relevant analysis, regression analysis was conducted, and the results showed that the total score of psychological capital could significantly predict academic burnout. The total score of psychological capital can predict a variation of 48.4% in academic burnout. The higher the psychological capital, the more positive and optimistic vocational college students are, and they are more able to persevere in the face of difficulties, which makes them less likely to experience academic burnout.

5 Conclusions

According to research, the following conclusions have been drawn: (1) There are significant differences in academic burnout among vocational college students by gender and major category. (2) The total score of psychological capital is significantly negatively correlated with the total score of academic burnout, with a moderate degree of correlation. (3) Regression analysis shows that the total score of psychological capital can negatively predict academic burnout among vocational college students.

In response to the phenomenon of low academic mood among vocational college students, it is necessary to strengthen psychological counseling for students in education and teaching. Professional course teachers should fully consider students' learning situation in teaching, strengthen the control of students' learning process, provide timely feedback on students' learning effectiveness, and weaken their level of academic depression through the achievement of phased learning goals. Employment counselors should establish good emotional connections with students, influence them with positive emotions, guide them to establish professional identity, and clarify the relationship between profession, academic performance, and employment. The homeroom teacher should strengthen the connection with students' parents, communicate and warn them of students' low academic mood and behavior, and work together with parents to provide psychological counseling for students. By forming a collaborative mechanism among professional course teachers, employment counselors, homeroom teachers, and parents, we can jointly reduce students' levels of academic burnout.

Although this study consulted a large amount of literature and made efforts, there are still some shortcomings due to limitations in time and personal abilities. This survey was mainly conducted at Jiujiang Vocational University, with limited sample size, large gender ratio difference, incomplete professional coverage, and weak representativeness. Future research can expand the scope of sampling and increase the sample size.

6 References

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