

# The Influence of College Students' Psychological Stress on Learning Burnout

Qin Linxin

School of Management, Wuhan University of Technology, Wuhan, China

jsqin@whut.edu.cn

**Keywords:** College students; Psychological stress; Learning burnout; Influencing factors

**Abstract:** Under the background of college education reform, this research aims to explore the relationship between psychological stress and learning burnout of college students, and provides a direction for colleges to improve students' learning quality. In this study, the college students in Wuhan as the research object, the questionnaires are used to investigate the psychological stress and learning burnout of college students. The results of data analysis show that college students' psychological stress has an important positive impact on learning burnout. Colleges and universities can effectively reduce the level of learning burnout by relieving students' psychological stress, thus improving the quality of students' learning.

## 1. Introduction

In recent years, the mental health problems of college students have received more and more attention from all walks of life. The problems of academic burden and emotional collapse caused by excessive psychological stress are increasing. The psychological stress of college students will not only affect daily life, but also have a negative impact on learning. Excessive psychological pressure will make them lose confidence in learning. With the progress of college education reform, the quality of college students' learning is gradually attracting attention of colleges and universities. Strict student management, strengthening students' behavior and learning process assessment, increasing the burden of college students and improving the quality of undergraduate graduates are becoming an important part of the comprehensive revitalization of undergraduate education in many colleges and universities. Learning burnout reflects the negative learning psychology of college students, which is an important factor affecting the quality of college students' learning. It is also a phenomenon that is common among college students in China.

Understanding the relationship between college students' psychological stress and learning burnout, and effectively analyzing the impact of college students' psychological stress on learning burnout can help students to reduce the level of learning burnout, which is of great significance to improve the quality of college education.

## 2. Literature review

### 2.1 Psychological pressure

Psychological stress is defined in domestic research as a state of psychological stress caused by various life events, chronic stress (family tension, work stress, etc.) and sudden traumatic experience experienced in daily life [1]. With the development of the technology age, the accelerating social rhythm, and the increasing employment competition, college students are facing increasing psychological pressure. Understanding the psychological stress status of college students and their psychological stressors can greatly help college students' ability to learn and live and to cope with problems. Domestic scholars divide the source of psychological stress into two parts. One is "personal self-pressure", including family pressure and other six aspects, and the other is "social environment pressure", mainly including five aspects, such as career choice pressure, academic pressure [2]. The main source of psychological stress among college students is employment pressure and learning stress, in which academic pressure is significantly higher than other pressures

[3,4].

## **2.2 Learning burnout**

The concept of learning burnout comes from burnout, and it has not yet formed a completely unified concept. Foreign scholars mostly have cited Freuberger and Maslach's research on burnout. They believe that learning burnout refers to the phenomenon that students hold a negative attitude towards school curriculum, which is characterized by the loss of enthusiasm for the schoolwork and school activities, and showing a negative state; [5]. According to foreign research combined with the psychological status of domestic college students, some domestic scholars pointed out that learning burnout is students' bored and powerless negative attitudes and behaviors due to lack of interest in learning or academic pressure [6]. Regarding the factors affecting learning burnout, some studies have pointed out that learning pressure can indirectly affect learning burnout through the influence of control points [7]. In addition, professional maladaptation is one of the important reasons for college students' learning burnout [8]. Some studies have shown that There is a negative correlation between positive psychological capital and learning burnout, and positive psychological capital has an important impact on learning burnout [9].

Based on the above research review, it is found that stress is the influencing factor of learning burnout directly or indirectly, but empirical research on direct research on this issue is difficult to find. This study intends to start from the learning burnout of college students, explore the relationship between psychological stress and learning burnout, analyze the impact of psychological stress on learning burnout, and provide theoretical support for improving the quality of college students' learning.

## **3. Research hypotheses**

Based on the above literature review, we conduct a questionnaire survey on the psychological stress and learning burnout of college students. From the "College Students' Stressfulness Questionnaire" [10], "College Students' Psychological Stress Scale" [2] and "College Students' Learning Burnout Questionnaire" [11], the items that do not conform to this study are deleted, and the expressions of some items are revised to form a questionnaire on the impact of college students' psychological stress on learning burnout. The paper analyzes the psychological stress of college students from four dimensions: family expectation pressure, frustration pressure, academic outlook pressure and learning pressure. At the same time, learning burnout is divided into three dimensions: low sense of accomplishment, depression and improper behavior.

In this research, we can assume the following assumptions:

H1: College students' psychological stress has a significant positive impact on learning burnout

## **4. Empirical analysis**

This study follows the principle of random sampling and selects some college students in Wuhan as the research object. We use a questionnaire survey to investigate the psychological stress and learning burnout of selected college students. A total of 160 questionnaires are distributed, and 144 valid questionnaires are returned, with an effective rate of 90%. All the data of the questionnaire are analyzed by SPSSAU18.0 for reliability analysis, validity analysis, correlation analysis and linear regression analysis.

### **4.1 Reliability Analysis of College Students' Psychological Stress and Learning Burnout**

According to the data analysis of the reliability, the reliability coefficient of the research data is 0.953, which is higher than 0.9. The value of the reliability coefficient after the deletion of the item is not significantly improved. The comprehensive description indicates that the data reliability is high and can be used for further analysis.

#### 4.2 Validity Analysis of College Students' Psychological Stress and Learning Burnout

As can be seen from the data in table 1, the data has validity. The absolute value of the factor load factor is greater than 0.4, which shows that there is a corresponding relationship between the two factors (college students' psychological stress and learning burnout) and their respective dimensions.

The above comprehensively illustrates that the research data has a good level of structural validity.

Table 1 Validity analysis results of college students' psychological stress and learning burnout

	Factor load factor		Commonality
	Factor 1	Factor 2	
Low sense of accomplishment	0.912		0.906
Depression	0.831		0.879
Improper behavior	0.787		0.768
Learning pressure		0.421	0.838
Academic outlook pressure		0.511	0.838
Frustration pressure		0.568	0.739
Family expectation pressure		0.919	0.962
Characteristic root value (before rotation)	5.475	0.455	-
Variance interpretation rate % (before rotation)	78.214%	6.494%	-
Cumulative variance interpretation rate % (before rotation)	78.214%	84.708%	-
Characteristic root value (after rotation)	3.914	2.015	-
Variance interpretation rate % (after rotation)	55.917%	28.791%	-
Cumulative variance interpretation rate % (after rotation)	55.917%	84.708%	-
KMO value	0.907		-
Bart sphere value	1021.267		-
Df	21		-
p value	0		-

#### 4.3 Correlation between college students' psychological stress and learning burnout

We use correlation analysis to study the correlation between college students' psychological stress and learning burnout, and use Pearson correlation coefficient to indicate the strength of correlation.

From the data analysis of table 2, we can know:

There is a significant positive correlation between the dimensions of college students' psychological stress and the dimensions of learning burnout. Among them, the three dimensions of learning burnout, including low sense of accomplishment, depression, improper behavior, have relatively high correlation with learning pressure and academic outlook pressure which are the two dimensions of psychological stress.

Table 2 Analysis of the correlation between college students' psychological stress and learning burnout

	Low sense of accomplishment	Depression	Improper behavior
Learning pressure	0.815**	0.843**	0.737**
Academic outlook pressure	0.794**	0.806**	0.772**
Frustration pressure	0.765**	0.736**	0.604**
Family expectation pressure	0.587**	0.700**	0.663**
* p<0.05 ** p<0.01			

#### 4.4 Linear Regression Analysis of College Students' Psychological Stress and Learning Burnout

Table 3 lists the results of linear regression analysis using psychological stress as an independent

variable and learning burnout as a dependent variable. The analysis shows that all psychological stress has a significant positive impact on learning burnout.

Table 3 Results of linear regression analysis of college students' psychological stress and learning burnout

	Non-standardized coefficient		Standardization coefficient	t	p	VI F	R <sup>2</sup>	Adjust R <sup>2</sup>	F
	B	Standard error	Beta						
Constant	0.181	0.14	-	1.293	0.198	-	0.778	0.776	497.573 (0.000**)
Psychological stress	0.927	0.042	0.882	22.306	0.000 **	1			
Dependent variable: Learning burnout D-W value:1.917 * p<0.05 ** p<0.01									

## 5. Conclusion

Through correlation analysis and linear regression analysis, this study found that college students' psychological stress has a very significant predictive effect on learning burnout, which indicates that the higher the psychological stress, the higher the degree of learning burnout. And the psychological stress has an important impact on learning burnout. This is consistent with the research hypothesis of this experiment. The correlation between learning burnout and learning pressure and academic outlook pressure is relatively high, indicating that the main factor affecting learning burnout is the pressure on learning, which is in line with the current situation of college students. Learning is the main activity of college students, as well as facing the current serious employment situation, poor performance, fierce competition, etc., which will make college students feel depressed and have a low sense of accomplishment, causing students to have negative attitudes and behaviors such as loss of interest in learning, powerlessness, and so on. In addition, excessive family expectations pressure and frustration pressure will also increase students' sense of powerlessness in learning.

Under the background of college education reform, colleges and universities can improve the quality of learning by improving the learning burnout of college students. Teachers and counselors should pay more attention to the mental health status of college students. According to the main source of college students' psychological stress, they should conduct corresponding psychological counseling for students, effectively alleviate psychological stress and help to reduce the level of college students' learning burnout. In addition, colleges and universities can also carry out mental health courses to guide college students to self-test and adjust their psychological conditions to reduce the occurrence of learning burnout.

However, this study only conducts a survey of college students in Wuhan. The scope of the survey is limited and could not reflect the situation of college students in the country. Colleges and universities are now paying more and more attention to the quality of students' learning. Learning burnout is one of the factors affecting the quality of learning. If it can effectively reduce the level of learning burnout, it is of great significance to improve the quality of learning. We suggested that in the follow-up study, the scope of the study can be expanded to better understand the impact of psychological stress on learning burnout.

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