

A STUDY ON THE RELATIONSHIP BETWEEN STUDENTS ' LEARNING BURNOUT AND SELF-EFFICACY AT A PRIVATE UNIVERSITY IN SHANDONG PROVINCE, CHINA

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This study aimed to explore the relationship between college students' learning burnout and academic self-efficacy at the School of Business at a private university in Shandong Province, China, and to determine the differences between students' learning burnout and academic self-efficacy under different demographic factors. The study mainly applied the quantitative method to survey the undergraduate students at the School of Business at this private university in Shandong Province, China. We collected a total of 406 questionnaires from the students. The study found that there are significant differences in students' learning self-efficacy with different genders, grades, student sources, and majors in the private university of Shandong province. Female students have higher learning self-efficacy than male students; students from urban areas have higher learning self-efficacy than those from rural areas. There is no significant difference in academic burnout among different genders, but students from urban areas have higher learning burnout than those from rural areas. There is a significant negative correlation between student learning burnout and academic burnout. The study recommended that schools and administrators consider the relationship



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between their learning burnout and academic self-efficacy and focus on teaching and management strategies to reduce students' learning burnout and increase their academic self-efficacy through various means.

Keywords: learning burnout; self-efficacy; students; private university

Introduction

The development of private colleges and universities around the world faces both opportunities and challenges due to globalization. Internationally, private colleges and universities often have better educational resources. By improving the quality of teaching and education, many international students can be attracted to study and exchange at private colleges and universities. Moreover, in the world, private colleges and universities have obvious influence and competitiveness and can play a relatively key role in the development and promotion of higher education (Shin, 2020).

Of course, due to the high tuition fees of private colleges and universities, private colleges and universities with "international" value-added will naturally recruit students of different quality and have an impact on their development. Many private colleges and universities have the aura of famous universities, but in fact, there are also major drawbacks, so students in private colleges and universities also have problems related to employment difficulties and poor learning.

For China, since the beginning of the new century, the popularization of higher education has become a trend. There are 764 private colleges and universities in China, including 390 ordinary undergraduate schools, 22 undergraduate vocational schools, 350 vocational colleges, and 2 adult higher schools. Faced with so many private colleges and universities, the indicators of students' individual learning status have become factors that must be carefully considered. However, at present, there are problems with fairness in higher education. Private universities and public universities have different treatment in management systems, policy environments, student competition, employment policies, and other aspects (Wu, 2018).

No matter whether in private universities or public universities, the college period is extremely important to individual college students. "Learning burnout" affects students' learning situation as an important indicator of whether their individual learning state is positive or not. The expansion of university enrollment has made contemporary college students face great challenges and competition earlier, and the competition for study and employment has become increasingly fierce. Students are also prone to a series of problems such as anxiety, depression, and confusion.

If these issues remain unresolved, the risk of learning burnout increases. The so-called learning burnout is an important indicator reflecting students' positive and negative learning psychology, and the reasons leading to learning exhaustion are various. In addition to the objective factors of boring professional courses and low teacher teaching levels, the subjective factors of self-esteem and academic self-efficacy also play a very important role (Ma et al., 2014).

At the same time, in this study, self-efficacy is an important indicator that aims at an individual's confidence or belief that he can successfully complete a certain task or achieve a certain goal.

Various factors, including environment, social culture, and psychological factors, influence learning based on subjective feelings, thereby shaping students' learning behaviors and habits. Self-efficacy is regarded as an important psychological variable in the field of psychology that has an important impact on individual behavior, emotion, and cognition. For example, when individuals believe they can successfully complete a task, they tend to put in more time and effort and are more likely to overcome difficulties and challenges.

Conversely, if individuals lack a sense of self-efficacy, they may feel anxious and fearful about the task or even give up trying (Wang, 2015). Moreover, self-efficacy is closely related to an individual's mental health. Research shows that individuals with high self-efficacy tend to have higher self-esteem, self-confidence, and happiness, while individuals with low self-efficacy are more likely to suffer from anxiety, depression, and other psychological problems. In other words, self-efficacy can effectively avoid students' negative emotions caused by the learning process (Wang & Miao, 2012). The field of education regards self-efficacy as a powerful educational variable. Studies have shown that students' self-efficacy has an important impact on their academic performance, learning attitude, and learning motivation (Wu et al., 2015).

As there are few studies on the causal relationship between learning burnout and academic self-efficacy of college students in private colleges and universities, especially the demographic variables such as gender, age, student origin, and major have little impact on the differences between the two.

This study plans to explore the relationship between college students' learning burnout and academic self-efficacy with the help of existing research and conclusions, so as to provide a basis for effectively reducing the level of college students' learning burnout, boosting their sense of self-efficacy, optimizing the teaching quality of private colleges and universities, and promoting the healthy development of college students.

Research objectives

- (1) To explore the differences in students' learning self-efficacy in college with different genders, grades, student sources, and majors in the private university of Shandong Province.
- (2) To investigate the differences in student learning burnout among different genders, grades, student sources, and majors at the private university in Shandong Province.
- (3) To explore the relationship between students learning burnout and self-efficacy at a private university in Shandong Province, China.

Literature review

The concept of self-efficacy

Self-efficacy, first proposed by Bandura (2018), refers to an individual's speculation and judgment on whether he or she can complete a certain behavior. In simple terms, it is the expected outcome of one's future behavior. People with a higher sense of self-efficacy will have more confidence in completing a task and believe that they can successfully complete it. Performance in learning means having strong learning motivation and interest, which are common characteristics of successful learners, but a modern society also needs a state of mind.

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According to related research on self-efficacy, the different degrees of self-efficacy affect the students' burnout situations differently. In the face of the same course, people with high self-efficacy experience less pressure and lower burnout. People with low self-efficacy have lower confidence in their own abilities and have more worries.

Therefore, college students with low self-efficacy need more support and assistance from others; otherwise, they have a strong sense of burnout. Conversely, college students with high self-efficacy have considerable confidence in their own abilities, think they can solve learning problems, and have a lower sense of burnout.

Concepts of learning burnout

"Burnout," which means "burnout" in English, was introduced into the field of psychology by Freudenberger in 1974 in an article on the study of emotional exhaustion and lack of motivation at work.

At the outset, the definition of learning burnout is unclear. Scholars refer to the concept of "job burnout" to describe learning burnout, that is, a phenomenon in which students hold a negative attitude towards school curriculum and academic work and are accompanied by the behavior of "losing enthusiasm for learning and school activities, showing a negative state, and having an indifferent and distant attitude towards classmates and friends."

In China, learning burnout is a psychological phenomenon in which students' energy is exhausted due to long-term academic pressure and burden, their enthusiasm for study and activities gradually disappears, their attitude towards classmates is cold and distant, and they have a negative attitude towards studying; that is, students are tired of learning due to learning pressure or a lack of interest in learning (Liao, 2010).

Meanwhile, Yang et al. (2005), focusing on the specific performance of Chinese college students and middle school students, defined learning burnout as when students have no interest in learning or lack of motivation but must get tired of learning, then produce a psychological state of physical and mental exhaustion and treat learning activities negatively.

Lian et al. (2005) defined learning burnout in a more specific way, believing that learning fatigue refers to students' lack of interest and motivation in learning, which leads to their psychological exhaustion and negative attitude towards learning.

Differences in Students' Academic Self-Efficacy and Learning Burnout under Different Demographic Factors

With different background variables, college students' sense of learning self-efficacy is completely different. In their study of the influence of gender and emotion on learning self-efficacy, scholar Li et al. (2023) argued that college students tend to affect their learning self-efficacy because of their different gender and emotional states. Good love relationships can stimulate self-efficacy and reduce learning burnout, but bad love relationships will affect self-efficacy and improve learning burnout, which will affect their studies.

In the study of private colleges and universities, different sources of students and teachers have an impact on students' learning burnout and self-efficacy. Yang et al. (2023) found in the study of private secondary vocational students that students from different sources have different academic self-efficacy, and rural students are more prone to learning burnout than urban students. Therefore, rural students' self-efficacy will be lower, urban students' self-efficacy will be higher, and their learning burnout will be lower, while rural students need stronger external stimulation to improve self-effectiveness and reduce learning burnout.

Liang & Zhou (2005) conducted a study on the learning situation of students in Xinjiang University and found that: From the perspective of gender, when male college students have low mood, low sense of learning achievement, and improper learning behaviors, their score of learning burnout is higher than that of female students in the same situation; generally speaking, students scored higher in depression than freshmen, highest in misbehavior and learning burnout in junior year, and tended to show a low sense of learning achievement in senior year. Students from rural areas, on the other hand, tend to score lower for learning burnout than students from urban areas.

In addition, when analyzing the influence of different grade levels on learning burnout in college groups, Xu (2023) believed that there are also different influences on learning burnout at the grade level of college students. The difference between freshmen and sophomores, juniors and seniors is not obvious, but the greater the difference between grades, the more obvious the difference between learning burnouts. When students come to the third and fourth years, there is often pressure to find employment and study, and they begin to prepare for postgraduate entrance examinations, civil servant examinations, study abroad, work, and various certificate examinations, so the difference between freshmen and sophomore students is more significant.

The relationship between college students' academic self-efficacy and learning burnout

Some scholars found a negative correlation between academic self-efficacy and learning burnout through empirical questionnaire research. Yang et al. (2013) conducted in-depth research on college students majoring in information management and found a negative correlation between their self-efficacy and learning burnout; that is, the lower the individual's self-efficacy, the higher the degree of learning burnout.

They all believed that self-efficacy reflects students' confidence in their learning ability and can affect individual attitudes and behaviors in learning by affecting students' emotions, sense of acquisition, and psychological state.

In addition, Chen (2023) pointed out that students with a high sense of efficacy enjoy the learning process and regard learning as a pleasure, while students with a low sense of efficacy are quite the opposite. Subsequently, students with high self-efficacy will also invest more money in the learning process, adopt positive learning strategies, and overcome learning difficulties, thus reducing the degree of learning burnout.

Research methodology

Participants

This study's survey respondents were college students in the School of Business at a private university in Shandong Province, China, and 450 students participated in the survey using convenient sampling methods. Questionnaires were distributed through WeChat and QQ groups to the college students since the beginning of December 2023 in the School of Business at this private university.

Students were encouraged to participate in the investigation voluntarily, and the questionnaires were collected and sorted out by December 30, 2023.

Finally, a total of 406 valid questionnaires were collected from the students, reaching 96% of the returned rate.

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Instrument

In this study, the researcher used a questionnaire consisting of three parts, including Part 1: the students' demographic factors; Part 2: the learning burnout scale; and Part 3: the academic self-efficacy scale. Part 2 was based on the "Learning Burnout Survey Scale for College Students" compiled by Lian et al. (2005), including depression, a low sense of accomplishment, and improper behavior in three dimensions, for a total of 20 items.

Part 3 is from the Academic Self-Efficacy Scale, compiled by Liang & Zhou (2000), and was designed from 22 items in two dimensions: self-efficacy of learning ability and self-efficacy of learning behavior. Both parts were scored on five Likert levels.

The specific scoring requirements were 5 points for strongly agreeing, 4 points for agreeing, 3 points for neutral, 2 points for disagreeing, and 1 point for strongly disagreeing. The higher the scores in each dimension, the stronger the self-leadership of college students.

Part 2-3 in this questionnaire was directly from previous researchers and had high validity; meanwhile, the Cronbach's α coefficient of the Part 2-3 scales was more than 0.9, indicating very good reliability.

Findings

Participants' demographic information

The results of the survey participants' demographic factors showed that, from the perspective of gender, males accounted for 35.96% and females accounted for 64.04%, as for the students from different grades, which showed 25.12% in Grade 4, 30.05% in Grade 3, 20.44% in Grade 2, and 24.38% in Grade 1.

In terms of student sources, the number of students from rural areas is higher than that from urban areas. As for the students' majors, there are three majors in the business school; accounting major students are the most. Tab. 1 displays the basic information about students who participated in the questionnaire.

Table 1 - Basic information about participants
(made by co-authors)

Variable name	Options	Number	Percentage
Gender	Male	155	38.18
	Female	251	61.82
Grade	Senior	94	23.23
	Junior	121	29.85
	Sophomore	87	21.29
	Freshman	104	25.63
Source of students	Rural	323	79.45
	Urban	83	20.55
Major	Accounting	225	55.31
	Management	98	24.20
	Finance	98	20.49

Research objective 1

To explore the differences in students' learning self-efficacy in college with different genders, grades, student sources, and majors in the private university of Shandong province.

Tab. 2-3 compares differences in students' learning self-efficacy with different genders, grades, student sources, and majors at the private university in Shandong province.

As the independent sample t-test of Tab. 2 showed, there are significant differences in students' learning self-efficacy in colleges with different genders and sources, as well as in the private universities of Shandong province. Female students have higher learning self-efficacy than males; students from urban areas have higher learning self-efficacy than those from rural areas.

Table 2 - Results of an independent sample T-test of students' learning self-efficacy with their gender and sources
(made by co-authors)

Variable	Group	Mean	SD	T	P
Learning self-efficacy	Male	2.32	1.182	1.799	0.026*
	Female	2.52	1.316		
	Rural	2.36	1.272	1.157	0.025*
	Urban	2.66	1.321		

Note: $p < 0.05$ *

Moreover, the F-test result from the one-way ANOVA of Tab. 3 showed there are differences in students' learning self-efficacy in college with different grades and student majors in the private university of Shandong Province, China.

Senior students have the highest learning self-efficacy, while sophomore students have the lowest learning self-efficacy; in terms of major, accounting students have the highest learning self-efficacy, while finance students have the lowest learning self-efficacy in the School of Business at the private university of Shandong Province, China.

Table 3 - Results of a one-way ANOVA of students' learning self-efficacy with grades and majors
(made by co-authors)

Variables	Group	Mean	SD	F	P
Learning self-efficacy	Senior	2.838	1.028	1.265	0.010*
	Junior	2.284	1.416		
	Sophomore	2.127	1.191		
	Freshman	2.522	1.201		
	Accounting	2.683	1.15	1.347	0.041*
	Management	2.646	1.416		
	Finance	2.435	1.537		

Note: * $P < 0.05$

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Research objective 2

To explore the differences in students' learning burnout with different genders, grades, student sources, and majors in the private university of Shandong Province.

Tab. 4-5 compares the differences in students' academic burnout with different genders, grades, student sources, and majors in the private university of Shandong province. As the independent sample t-test of Tab. 2 results showed, there are no significant differences in students academic burnout with different genders, but students from urban areas have higher learning burnout than those from rural areas.

Table 4 - Results of an independent sample T-test of students' academic self-efficacy with their gender and sources
(made by co-authors)

Variable	Group	Mean	SD	T	P
Learning burnout	Male	3.205	1.223	1.606	0.545
	Female	3.234	1.321		
	Rual	3.571	1.328	1.157	0.023*
	Urban	3.648	1.212		

Note: *P<0.05

Moreover, the F-test result from the one-way ANOVA of Tab. 5 showed there are differences in students' learning burnout with different grades and student majors in the private university of Shandong Province, China.

Senior students have the highest learning self-efficacy, while sophomore students have the lowest learning self-efficacy; in terms of major, accounting students have the highest learning self-efficacy, while finance students have the lowest learning self-efficacy in the School of Business at the private university of Shandong Province, China.

Table 5 - Results of a One-way ANOVA of students' academic self-efficacy with grades and majors
(made by co-authors)

Variables	Group	Mean	SD	F	P
Academic self-efficacy	Senior	3.325	1.323	1.286	0.094
	Junior	3.427	1.272		
	Sophomore	3.446	1.301		
	Freshman	3.187	1.325		
	Accounting	3.517	1.24	0.956	0.003**
	Management	3.512	1.01		
	Finance	3.211	1.475		

Note: *P<0.05

For Research Objective Three

To investigate the relationship between student learning burnout and self-efficacy at a private university in Shandong Province, China.

This study uses Pearson correlation analysis to investigate the significance and direction of the linear correlation degree between variables. According to Tab. 6 below, the correlation value between learning burnout and low mood is 0.724, with a significance level of 0.001, indicating that there is a significant negative correlation between students' learning burnout and academic burnout.

Table 6 - Correlation between students' learning burnout and academic self-efficacy
(made by co-authors)

Variables	Learning burnout
Academic self-efficacy	Pearson -0.724 Sig 0.001***

Noted: *** P<0.001

Discussion

This study found that there were significant differences in students' learning self-efficacy with different genders, grades, student sources, and majors in the private university of Shandong Province. Female students have higher learning self-efficacy than male students; students from urban areas have higher learning self-efficacy than those from rural areas. There was no significant difference in academic burnout among students of different genders, but students from urban areas had higher learning burnout than those from rural areas. There was a significant negative correlation between students' learning burnout and academic burnout.

As Xiang et al. (2023) found, individuals with self-efficacy of learning behavior and learning ability can constantly change their self-efficacy of learning. Therefore, if the school wants to improve the learning status and effectiveness of different students, it is naturally necessary to make targeted adjustments to their self-efficacy.

Different background variables will affect the level of learning burnout. Among them, gender has little influence on the level of learning burnout, and both boys and girls may suffer from learning burnout. In addition, as Chen (2023) pointed out in his research, students studying in private colleges and universities are also essentially family members who are willing to change their growth path from the dimension of education. So, there's no big difference between boys and girls who are bored with school. However, grades, student origin, and major will all have an impact on learning burnout.

In terms of grade, the highest level of learning burnout is sophomore, followed by junior, indicating that in private colleges and universities, sophomore and junior students are most likely to have learning burnout. The results of our questionnaire survey are consistent with Chen (2014) research, which showed that learning burnout will reach a peak in the junior year. This is often because students at this stage do not have a fresh sense of study and have not entered the huge pressure of choosing a career and studying (Li, 2012). Therefore, they are not under much pressure, and the difficulty of learning is not great, so they are prone to burnout (Lian et al., 2005).

To sum up, students with different demographic factors may have different academic self-efficacy and learning burnout; only when students show less burnout can they achieve better (Chang, 2020).

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The correlation analysis confirms the relationship between learning burnout and academic self-efficacy. In other words, when an individual has a stronger sense of learning self-efficacy, his low mood, improper behavior, and low sense of accomplishment will reduce the impact on his learning behavior and learning ability.

In other words, the higher the level of learning burnout, the lower the self-efficacy that college students can control, thus affecting their learning ability and habits.

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