

The Influence of High School Students' Learning Motivation on Learning Burnout

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Abstract. Nowadays, high school education has become more important. However, learning burnout is a problem influencing students' study in many aspects. The study talks about the correlations between learning burnout and learning motivation of high school students in order to correctly comprehend the situation of students and try to find reasonable suggestions and measures to solve the problems. Quantitative research methods are used in the study to not only collect but also analyze the data. Two scales are used to evaluate the situation of 100 testees who are studying in a high school in Yangzhou. The results show that students in high school have a high level of learning burnout and a low level of learning motivation. The learning motivation of students in high school is negatively correlated to learning burnout. Teachers and parents should take measures to stimulate the student's extrinsic and intrinsic motivation in learning.

Keywords: High school students, learning motivation, learning burnout, regression analysis.

1. Introduction

At an important conference held by the communist party of China, President Xi said that education should follow the policy about education made by the party, complete the basic task of moral education, develop the education of high quality, enable students to enjoy equal education, allow more people to enter high school, and try to let more children receive fair education of high quality [1]. General high school education plays an important role in students' physical and mental development and academic progress. As a result, high school education should try to ensure the active participation of all students in the class. However, students at this stage are prone to form learning burnout and other wrong behaviors caused mainly by learning motivation, which may affect their personality development. Therefore, this has always been one of the topics of great concern to researchers. The problem of learning burnout is diverse, and the factors are different.

In the current study, there is no clear definition of learning burnout. Researcher Yang believed that it refers to the task stress, load, or other psychological factors that occur in learning which results in emotional exhaustion, low-level sense of entitlement, and depersonalization [2] while Chinese scholars think that learning burnout shows students' negative learning psychology, which is the negative attitude and behavior of students when they are under pressure [3]. Some scholars have pointed out that the occurrence of learning burnout is caused by the need to face studying pressure for a long time and form negative performance. For example, the exhaustion of energy, loss of enthusiasm for learning, and so on [4]. Internal and external factors are two main factors that influence learning burnout. Internal factors include learning motivation, attention in class, and so on. External factors mainly include school and family environment, and social relationships.

Learning motivation is an important factor that determines whether a learning burnout problem will occur. It can be defined as a state of mind that stimulates individuals to learn, maintains existing learning situation, and enable the learning activities of students to develop toward a certain learning goal [5]. Self-determination theory is a commonly used theory to define motivation. It divides motivation into three types: non-motivation, external motivation, and internal motivation. External motivation depends on rewards, which are usually weak and easy to lose while internal motivation is often determined by inner interests. Compared with the former, it pays more attention to the object itself, which is stronger and stays for a longer time.

Researchers have found that learning burnout and learning motivation are correlated [6-7]. Students' learning motivation will influence their learning goals, attitudes, and methods [8]. However, few people have researched into the specific group of students in senior high at home and abroad on this topic. Few studies deeply research into whether learning motivation is correlated to learning burnout, which highlights the significance of this study.

This study will research the relationship between learning burnout and the learning motivation of high school students to correctly understand the situation of those students who have learning burnout problems, find ways to correct students' learning problems, give reasonable suggestions to the problem, and enrich the research materials of high school students to alleviate academic burnout.

2. Method

2.1. Design

The learning burnout scale used in this study was compiled by Professor Lian Rong and student Yang Lixian of Fujian Normal University in 2005. The table contains a total of 20 questions, using the Likert five-point scoring method. Completely inconsistent is represented by 1, 2 represents relatively inconsistent, 3 represents neutral, relatively consistent is represented by 4, and completely consistent is represented by 5. The scale mainly contains the following dimensions: low mood, improper behavior, and low sense of achievement [9].

The learning motivation scale used in the study is the Chinese version of the motivational regulation strategy scale compiled by Professor Li Beilei. The table contains a total of 30 questions, also using the Likert five-point scoring method. The scale mainly contains the following dimensions: improving interest, mastering goal arousal, performance goal arousal, self-reward, environmental control, and value regulation [10].

The internal consistency reliability test of the learning burnout scale showed that the overall α coefficient was 0.865. The split-half and internal consistency reliability coefficient of the scale and each dimension of the learning motivation scale showed that the split-half and internal consistency reliability coefficient of the total scale and each subscale were higher than 0.8, which shows that the two scales are both reliable [9, 10].

2.2. Study Object

In the research, 100 randomly selected high school students were chosen as subjects. Their studying situation was collected through questionnaires.

2.3. Research Process

First, a large number of articles are read to learn about the background information to determine the research topic and select the suitable scale. Then, several questionnaires were randomly given to high school students and answered anonymously. Questionnaires were selected as soon as possible to ensure the validity. At last, analyze the data and get the final results.

Based on the research goal, the following assumptions are made.

H01: Students in high school have a high degree of learning burnout.

H02: Few students in high school show a high level of motivation to learn.

H03: There is a strong negative correlation between learning burnout and learning motivation of high school students.

2.4. Analysis Methods

Regression analysis is used to analyze the influence the learning motivation on learning burnout of students in high school.

3. Results

3.1. The Level of Learning Burnout of Students in High School is High

Single sample t-tests and descriptive statistics were performed on the four variables of learning burnout: Depressed mood, improper conduct, and low sense of achievement.

Table 1. t-test and descriptive statistics of learning burnout

	N	mean	medium	standard deviation	total
Depressed mood	100	3.4475	3.125	0.874	344.75
improper conduct	100	3.755	3	0.5433	375.5
sense of achievement	100	3.6333	3	0.7853	363.33

From the table 1, 100 data sets are valid. The mean of the three variables are each 3.4475, 3.755, and 3.6333, and they are all larger than their medium. Among them, the one with the highest score is improper conduct. The standard deviation is 0.874, 0.543, 0.785. Among them, the highest one is depressed mood, which shows that its data dispersion degree is the largest while improper conduct has a low score, so its data dispersion degree is smaller. So it suits the assumption of a high degree of learning burnout of students in senior high.

3.2. Few Students in High School Show Low Motivation to Learn

Single sample t-tests and descriptive statistics were performed on the six variables of learning motivation: improving interest, mastering goal arousal, performance goal arousal, self-reward, environmental control, and value regulation.

Table 2. t-test and descriptive statistics of learning motivation

	N	mean	medium	standard deviation	total
goal arousal	100	2.8878	3	1.0209	288.78
performance goal arousal	100	2.746	3	0.912	274.6
self-reward	100	2.389	3.1	1.02312	238.9
environmental control	100	2.11	2.3	0.6358	261
value regulation	100	3.1425	3	0.465	314.25
improving interest	100	3.684	3	0.94503	368.4

From the table 2, 100 data sets are valid. The mean of six variables are each 2.8878, 2.746, 2.389, 2.11, 3.1425, 3.684. Four of them are smaller than their medium and the other two are smaller. Among them, the one with the highest score is improving interest. The standard deviations are each 1.0209, 0.912, 1.02312, 0.6358, 0.465, and 0.94503. Among them, the highest one is self-reward, which shows that its data dispersion degree is the largest while value regulation has a low score, so its data dispersion degree is smaller. So it suits the assumption that high school students have a low level of learning motivation.

3.3. The Learning Motivation and Learning Burnout of Students in High School is Negatively Correlated

A correlation test is done on the two variables: learning motivation and learning burnout. The dependent variable is learning motivation and the predictor (Constant) is learning burnout.

Table 3. ANOVA test between learning motivation and learning burnout

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.002	1	0.002	0.004	0.00 ^b
	Residual	51.275	97	0.529		
	Total	51.276	98			

Table 4. Coefficients test between learning motivation and learning burnout

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.	Collinearity Statistics	
	B	Std. Error	Beta		Tolerance	VIF
(Constant)	3.206	0.573		<0.001		
1 Learning burnout	-0.011	0.187	-0.603	<0.00	1.000	1.000

From Table 3, the data of significance is 0.00^b, which shows that it has a high significance and means that learning burnout and learning motivation are strongly correlated. From Table 4, the data of standardized coefficients is -0.603, which shows the correlation is negative.

4. Discussion

4.1. Factors Affecting High School Students Learning Motivation

There are a great number of factors that have a great influence on students learning motivation. For example, the researcher Hu Yanbo says that it can mainly be divided into two aspects: the inner factors and the outer factors [11]. Inner factors include gender, personality, intelligence, the inner need for students, the inner value of students, the interest in studying new knowledge, and so on. Outer factors include teachers' teaching styles, expectations from both teachers and families, and so on. Inner factors usually have a larger and longer influence on students learning motivation than outer ones. However, they are harder to improve.

4.2. Suggestions for Stimulating Extrinsic Motivation for High School Students to Learn

First, teachers and parents should try to give students positive comments and useful suggestions after they reach their goals. In this way, the student can be aware of their learning conditions and also have confidence and be willing to study further. This can be an important extrinsic motivation for high school students as they may want to gain more attention from adults. Moreover, schools should hold some competitions to stimulate students' competitive desire. This allows students to have stronger motivation to study as they want to win the first prize among students. Last, some appropriate rewards can be helpful. However, the unsuitable number of rewards may make the students too utilitarian.

4.3. Suggestions for Stimulating the Intrinsic Motivation of High School Students in Learning

Learning motivation is related to internal factors. There is a study that mentions self-confidence is good for the individual [12]. Based on the result, it can be seen that the most important one is to improve students' learning interests and eagerness for learning. Only when students are interested in knowledge itself can they have continued interest in study. For example, teachers can change teaching styles and enable students to join in the classroom interaction actively. Teachers should mention the importance of the class activities at the beginning to students [13], which can help them connect learning tasks with individual development. What's more, compared with those high school students with no clear goals or the goal of unity of all, setting different goals for students with various abilities can better stimulate their intrinsic motivation in learning as Students can gain sustained and visible progress.

5. Conclusion

In conclusion, the quantitative research method is used to collect and analyze the data collected from 100 high school students in Yangzhou in the study. The research gets the following outcomes. First, there are many students with learning burnout problems in senior high. Many students in secondary school show low motivation to study. High school students' learning motivation and

learning burnout are negatively correlated. Teachers and parents should help students to stimulate their learning motivation from two aspects: extrinsic and intrinsic. These results can be the basis for giving useful suggestions for reducing the learning burnout of high school students. Further research can be done about the variables that play a mediating role between learning motivation and learning burnout and the differences between high school students after different ways of actions are taken to reduce learning burnout.

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