

# The Effect of Passive Social Media Use on Learning Burnout in Middle School Students

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**Abstract:** To explore the relationship between passive social media use and learning burnout among middle school students, and the mediating role of parental support in the relationship. Methods: The Passive Social Media Use Scale, the Parental Support Scale and the Learning Burnout Scale were used to investigate middle school students. Results: (1) Passive social media use was significantly negatively correlated with parental support and positively associated with learning burnout; (2) Parental support was significantly negatively correlated with learning burnout. (3) Parental support partially mediates the relationship between passive social media use and learning burnout. Conclusion: Passive social media use has a positive predictive effect on learning burnout, and parental support plays a mediating role between the two.

**Keywords:** passive social media use, learning burnout, parental support

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## Introduction

With the popularity of the Internet, social media has become an important channel for teenagers to obtain information and interpersonal communication. According to the 2021 National Report on Internet Use by Minors, 53.4% of minors regularly chat online and 47.6% watch short videos<sup>[1]</sup>. However, the use of social media has an impact on the physical and mental health of young people, which is gradually attracting the attention of all sectors of society.

There are two types of social media use: active and passive, and active use refers to the direct communication and sharing between individuals and other users online the act of information; Passive use is when a user acts as "consumer" of social media content, not creating content, and not engaging with others direct interaction, there is less research on passive social media use. Studies have found that passive social media use can have negative effects on adolescents' cognition, behavior, and mood, such as reducing sleep quality and triggering negative emotions such as loneliness and depression<sup>[2]</sup>, academic stress and the accumulation of negative emotions lead to physical and mental exhaustion, which leads to learning burnout. Learning burnout refers to students' lack of motivation and interest in learning, which is manifested as a sense of low efficacy and emotional exhaustion and academic alienation<sup>[3]</sup>. Students who burn out cannot find the meaning and value of learning, which is not conducive to their growth and development. Therefore, this study aims to explore the impact of passive social media use on learning burnout among middle school students.

Learning burnout is affected by many factors, and social support is the main factor affecting learning burnout. Social support refers to the substantial and mental support and understanding provided by individuals from various aspects such as family, school, and society. Individuals with more social support can effectively alleviate learning burnout<sup>[4]</sup>. Research shows that parental support is the primary source of social support for middle school students and is the only source of support that can predict high levels of academic achievement<sup>[5]</sup>. Which shows that parental support can alleviate learning

burnout to a certain extent.

In summary, this study hypothesizes that passive social media use has a positive impact on learning burnout (H1); Passive social media use had a negative effect on parental support, and parental support had a negative effect on learning burnout (H2). Parental support mediates passive social media use and learning burnout (H3).

## **1. Research objects and methods**

### **1.1 Research objects**

Participants from two middle schools in Kunming in Yunnan Province were tested collectively from randomly selected classes using a cluster sampling method and questionnaires were distributed 832 questionnaires, after eliminating invalid questionnaires, 756 questionnaires were finally obtained serving, the effective rate is 90.9%. There were 331 boys and 445 girls, Age ranged from 13 to 17 years.

### **1.2 Research tools**

#### **1.2.1 Passive social media use scale**

Based on the revision of the passive social networking site usage scale compiled by Liu Qingqi et al. and Tandoc et al., the passive social networking site usage scale was used, including browsing dynamic information, friend homepages, and the update status of friends in three dimensions, with a total of 5 items. A 5-point Likert scoring method is used. The higher the total score, the higher the degree of passive social media use. After testing, the internal consistency coefficient of the scale was 0.769. The scale has good construct validity ( $\chi^2/df = 1.323$ , GFI = 0.999, CFI = 1, TLI = 0.998, RMSEA = 0.021).

#### **1.2.2 Learning burnout scale**

The learning burnout scale for middle school students developed by Hu Qiao, Dai Chunlin et al. was used, including four dimensions: emotional exhaustion, lack of motivation, reduced efficacy, and teacher-student alienation, with a total of 20 items. The 5-point scoring method was used, and the higher the score, the higher the level of learning burnout. The internal consistency coefficient of the scale was 0.879. The scale has good construct validity ( $\chi^2/df = 2.243$ , GFI = 0.979, CFI = 0.987, TLI = 0.979, RMSEA = 0.041).

#### **1.2.3 Parental support scale**

The Perceived Social Support Scale developed by Zimet et al. was used to modify the scale, which had a total of 10 items, including two dimensions: parental support and parental absence. The 5-point scoring method was used, in which the dimension of parental absence was scored backwards. A higher overall score indicates that middle school students receive more parental support. The internal consistency coefficient of the scale was 0.879. The scale has good construct validity ( $\chi^2/df = 2.243$ , GFI = 0.979, CFI = 0.987, TLI = 0.979, RMSEA = 0.041).

#### **1.2.4 Data processing**

Excel is used for data entry, organization, and use Statistical Product and Service Solutions (SPSS) was used for descriptive statistics, correlation analysis, and mediating effect tests.

## **2. Research results**

### **2.1 Descriptive statistics and correlation analysis**

The mean value, standard deviation, and correlation coefficient of the study variables are shown in Table 1. The results showed that passive social media use was significantly negatively correlated with parental support, passive social media use was significantly positively correlated with learning burnout, and parental support was significantly negatively correlated with learning burnout. Gender was not significantly correlated with the variables studied, so it was not treated in subsequent analyses.

Table 1 Descriptive statistics and correlation analysis of variables

variable	$\bar{x}\pm s$	1	2	3	4
1 Gender	1.59±0.49	1			
2 Passive social media use	11.30±3.21	0.02	1		
3 Parental support	29.52±4.91	-0.04	-0.09*	1	
4 Learning burnout	31.76±7.77	-0.06	0.26**	-0.34**	1

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\*  $p < 0.001$ .

## 2.2 Mediator effect test

Based on Wen Zhonglin's mediating effect analysis, the mechanism of parental support on the relationship between passive social media use and learning burnout was investigated, using the SPSS macro program developed by Hayes Model4 was used to test the mediating effect, using Bootstrap Methods the significance of the mediating effect was tested, and results are shown in Table 2. Passive social media use significantly positively predicted learning burnout ( $\beta = 0.62$ ,  $t = 7.30$ ,  $P < 0.001$ , 95% C.I. = (0.45, 0.79)), which significantly negatively predicted parental support ( $\beta = -0.14$ ,  $t = -2.49$ ,  $P < 0.05$ , 95% C.I. = (-0.25, -0.03)), When passive social media use and parental support were put into the regression equation, passive social media use still significantly positively predicted learning burnout ( $\beta = 0.55$ ,  $t = 6.84$ ),  $P < 0.001$ , 95% C.I. = (0.39, 0.71)).

Table 2 Regression analysis of the relationship between variables

Outcome variables	Predictors variables	R	R <sup>2</sup>	F	$\beta$	$t$
Learning burnout	Passive use	0.26	0.07	53.36***	0.62	7.30***
Parental support	Passive use	0.09	0.008	6.18*	-0.14	-2.49*
Learning burnout	Passive use	0.41	0.17	75.24***	0.55	6.84***
	Parental support				-0.50	-9.53***

The results showed that passive social media use had a significant direct impact on learning burnout. Therefore, parental support plays a partial mediating role between passive social media use and burnout. Specifically, the total mediating effect of parental support in passive social media use and learning burnout was as follows: 0.62. Indirect Effect Bootstrap (5000 times) 95% confidence interval [0.01, 0.14] without 0, with an indirect effect size of 0.07, the mediating effect was significant, accounting for 11.30%. Direct Effect Bootstrap Confidence Intervals [0.39, 0.71] are not included 0, the direct effect value was 0.55, the direct effect was significant, accounting for 88.70%. Thus, the mediating effect of parental support on the relationship between passive social media use and learning burnout was significant, and the mediating effect accounted for 11.3% of the total effect, and the mediation model was established.

## 3. Discussion

### 3.1 Passive social media use and learning burnout

The results showed that passive social media use positively predicted learning burnout, that is, the more passive social media use of middle school students, the higher their learning burnout level, and the hypothesis H1 was true. Studies have found that in the process of passive social media use, Lack of communication and interaction is not conducive to maintaining good interpersonal relationships and has a negative impact on their mental and emotional well-being<sup>[7]</sup>, are Psychological attrition.

The theory of psychological resources holds that the psychological resources possessed by individuals are limited. The reduction or depletion of mental resources can affect the quality of subsequent self-management activities<sup>[8]</sup>. When middle school students experience negative emotions in passive social media, they spend a lot of mental resources

to adjust and make them available for learning. The mental resources used in the activity are reduced, which leads to a decrease in the quality of the tasks that control the learning activity, triggering a negative learning experience. Meanwhile, social media use can cause physical wear and tear on adolescents, which is manifested in poor sleep quality and lack of sleep, resulting in physical exhaustion and lack of energy, while middle school students need to spend a lot of time on studying, consuming mental and physical strength. Lack of sleep can lead to physiological exhaustion. So, in the process of passive use of social media, self-depletion of body and mind becomes an important factor leading to learning burnout.

### **3.2 Parental support and learning burnout**

This study found that parental support significantly negatively predicted the level of learning burnout in middle school students, and the hypothesis H2 was true. Middle school students often travel back and forth between school and home, and parental support is an important part of their social support. However, social support can play a direct role in individual learning burnout, and can also play an indirect role through mediating variables such as academic emotions and coping styles, so parental support, as an important part of social support, it can directly or indirectly affect a student's burnout level. Good parental support can alleviate students' learning pressure and negative emotions, provide them with companionship and emotional support, and reduce learning burnout. Parents' psychological neglect and emotional deficit will increase the risk of depression in adolescents, which is not conducive to their mental health and increases burnout.

According to the theory of self-determination, human psychological needs of human beings include the need for autonomy, kinship, and ability<sup>[9]</sup>. When an individual satisfies these three psychological needs in the social environment in which he or she lives, it can promote the internalization and help of external motivations individuals persist in an activity for a longer time, maintain a positive psychological state, and produce positive behavioral results. Conversely, the environment that prevents the satisfaction of these three needs reduces the individual's autonomy and well-being. A high level of parental support can provide the care and encouragement that children need, improve their ability to cope with academic pressure, and enhance their motivation to learn. Increase the initiative and persistence of learning, and effectively alleviate learning burnout. However, children who lack parental support feel more pressure and helplessness when facing learning troubles and difficulties, and tend to adopt negative coping methods, which reduces their motivation to learn, which in turn leads to the development of children Learning burnout.

### **3.3 The mediating role of parental support**

This study found that passive social media use not only directly led to learning burnout, but also through low levels of parental support, suggesting that parental support is the role of students passive social media use is an effective adaptation mechanism.

Family plays an important role in the socialization process of individuals. Negative emotions such as loneliness and depression can arise due to the lack of communication and interaction. In families with high levels of support, the support provided by parents can be an effective means of alleviating these negative emotions, increasing their well-being and sense of security, and reducing browsing socialization the anxiety and uneasiness brought about by the media reduce the consumption of psychological resources and prevent emotional exhaustion. On the other hand, children who feel more support from their parents will have less behavior of seeking support and satisfying needs from others in the online world, and will have more time and energy to devote to learning, reducing the level of learning burnout. In families with low levels of support, parents can provide little care and support, especially some left-behind teenagers, who are unable to get timely support when they encounter setbacks, and may form learned helplessness and negative coping with academic difficulties and setbacks withdrawal and fear of difficulties occur, self-efficacy decreases, and learning burnout is formed.

In conclusion, parental support plays a partial mediating role between passive social media use and learning burnout, which is an important protective factor to prevent learning burnout among middle school students. A high level of parental support respects the needs of their children to grow up independently and understands their children's emotions feelings, stimulate their intrinsic motivation, effectively alleviating learning burnout.

#### 4. Prospects

In summary, middle school students should minimize the use of passive social media; Secondly, parents should spend more time with their children, establish high-quality emotional connections, make them psychologically and emotionally compensated and satisfied, and reduce the emotional friction caused by social media. Let children form a confident and optimistic psychological quality, and better cope with learning pressure.

The limitation of this study is the use of a cross-sectional approach to investigate: The effect of passive social media use on learning burnout among middle school students, and the causal relationship and dynamic development between different variables could not be determined in the future, longitudinal research can be considered to explore the impact of passive social media use. In addition, parental support is only one aspect of social support, and other aspects of support can also have an impact on student burnout, such as teacher-student relationships and peer friendships. In the future, the relationship mechanism between passive social media use and learning burnout can be explored by integrating various dimensions of social support.

#### Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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