The Relationship Between Boredom Proneness and Recessive Truancy Partial Mediating Effect of Academic Burnout

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ABSTRACT
In recent years, there are many types of research about boredom because it becomes more and more usual and it brings other negative feelings and behaviors. In school, academic burnout and recessive truancy are serious problems and maybe the part reason is boredom. Therefore, this research purpose is to know the level of boredom proneness, academic burnout and recessive truancy in college, their correlations were calculated. It is necessary to analyze some demographic information and those three factors. Using a questionnaire which includes the Short Boredom Proneness Scale (SBPS), the College Students’ Learning Burnout Scale (CSLBS) and the Recessive Truancy Scale (RTS) and to survey 197 undergraduate students. The conclusion is higher boredom proneness and higher academic burnout lead more recessive truancy and they have a positive correlation. In addition, academic burnout has a partial mediating effect on the level of boredom proneness and recessive truancy.

Keywords: Boredom proneness, Academic burnout, Recessive truancy, Undergraduate students.

1. INTRODUCTION
With the emphasis on mental health and education, it is found that many college students are in a state of confusion. Many people talk about boredom, accompanied by negative emotional experiences such as depression, anxiety and lack of exploration. In terms of behavior, there may be various adverse phenomena such as evasion, procrastination and skipping classes. Therefore, the research on boredom at home and abroad is increasing rapidly. For example, boredom can positively predict problem tobacco and alcohol use behavior, as well as problem mobile phone use, game addiction and impulsive online shopping behavior. In the COVID-19 study, there are studies that show that high boring people are more likely to violate social rules to improve their boring state[1], and are more likely to cause a decline in academic performance[2]. In the research on cognition and sleep, people with the high level of boredom proneness will also increase the frequency of cognitive failure. At the same time, there is a certain degree of loss of attention and selective attention function, which will further affect bedtime delay and reduce sleep quality[3]. Therefore, the influence of boredom is very extensive and studying these effects can put forward new views and ideas for the improvement of some behaviors.

In today's university campuses, most students do not have their pursuit of ideals and beliefs, and they may not like the major they study. In addition, they are afraid of difficulties, resulting in a lack of interest in learning. Because the requirements for students' autonomy in university learning are higher than that in middle school, the problem becomes more serious. Other studies have shown that people with high academic burnout also have higher anxiety[4], not only their academic performance will decline, but also the level of social support will be lower. The family environment will affect the level of academic burnout, from which self-control plays a regulatory role[5], and dormitory atmosphere and self-evaluation will also affect the level of academic burnout.

Since most classes will turn attendance into part of the final assessment results, truancy at the physical level will not be particularly serious in universities, but recessive truancy, which is difficult to control, is very common. Most of the research on recessive truancy is to explore its causes, current situation and counter measures.

Based on the above background, this study assumes that recessive truancy is a bad behavior caused by
boredom proneness and academic burnout. Boredom proneness and academic burnout have a direct impact on implicit truancy, and boredom proneness can indirectly affect recessive truancy through the intermediary effect of academic burnout. Because existing studies focus on finding the protective factors of these three factors. Therefore, exploring the relationship between them can not only inspire to find their common protective factors, but also better understand the learning situation of contemporary college students, which is helpful to the innovation of teaching work.

2. INTRODUCTION OF CONCEPTION

In 2018, Liu Yong et al. explained boredom as people's inability to experience full satisfaction of needs when facing poor stimuli in life or perceived that external stimuli do not match internal standards, and then feel boring, empty, helpless and unhappy. It is a generally negative emotional experience and has the function of stimulating individual subsequent behavior. Today's academic circles divide boredom into state boredom and trait boredom. State boredom emphasizes the current behavior, while trait boredom emphasizes a tendency of people's internal stability. People with high boredom proneness are also more sensitive to boredom. There is no doubt that boredom has a positive predictive effect on many negative behaviors.

The concept of academic burnout originated from job burnout, which refers to negative attitudes and behaviors that are tired of learning due to learning pressure or lack of interest in learning.

Recessive truancy refers to a kind of psychological truancy, which means that students attend classes on time, but engage in some psychological truancy behaviors unrelated to classroom teaching, such as playing mobile phones, dazing or sleeping.

3. INTRODUCTION OF RESEARCH

3.1. Research object

The objects of this study are undergraduate students from different universities. By means of online questionnaire survey, 197 questionnaires were collected which 185 were valid (93.9%).

| Table 1. Descriptive analysis |
|-----------------------------|
|                            | number | min | max | average | standard deviation |
| Boredom proneness           | 185    | 8   | 53  | 26.58   | 10.08              |
| Academic burnout            | 185    | 28  | 61  | 42.20   | 5.21               |
| Recessive truancy           | 185    | 69  | 126 | 83.36   | 9.10               |

3.2. Research tools

Short Boredom Proneness Scale (SBPS): Prepared by Struk et al.[6], there are 8 items in total, and 7 points are scored from 1 (totally disagree) ~ 7 (totally agree). The higher the score, the greater the tendency of boredom. This scale’s α coefficient is 0.92.

College Students’ Learning Burnout Scale (CSLBS): Prepared by Qiu Baiyang et al.[7], there are 13 items in total, which are divided into three dimensions: low self-efficacy, interpersonal alienation and physical and mental exhaustion. 5 points ranging from 1 (completely unqualified) to 5 (fully qualified) are used for scoring. The higher the score, the higher the degree of academic burnout. This scale’s α coefficient is 0.767.

Recessive Truancy Scale (RTS): Prepared by Su Minghong et al.[8], there are 28 items in total, which are divided into five dimensions: Academic cognition, learning habits, self-adjustment, classroom cognition and learning environment. 5 points from 1 (completely inconsistent) to 5 (fully consistent) are used for scoring. The higher the score, the more serious the hidden truancy. This scale’s α coefficient is 0.85.

3.3. Statistical method

Using spss 22.0 for statistical analysis, including descriptive analysis, t-test, correlation analysis and intermediary analysis. The intermediary analysis was by process program.

4. ANALYZE RESULT

4.1. The general situation of College Students' boredom proneness, academic burnout and recessive truancy

The total score of SBPS is 56, and the score of boredom proneness is 26.58±10.08, which is basically at the average level. The total score of CSLBS is 50, the score of academic burnout is 42.20±5.21 and the level of academic burnout is very high. The total score of RTS is 140, the score of recessive truancy is 83.36±9.10, and the level of recessive truancy is high.
4.2. Correlation among boredom proneness, academic burnout and recessive truancy

Table 2. Correlation analysis

|       | 1    | 2     | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   |
|-------|------|-------|------|------|------|------|------|------|------|------|------|
| 1     | 1    |       |      |      |      |      |      |      |      |      |      |
| 2     | 0.370** | 1    |      |      |      |      |      |      |      |      |      |
| 3     | -0.144 | 0.483** | 1    |      |      |      |      |      |      |      |      |
| 4     | 0.241** | 0.724** | 0.131 | 1    |      |      |      |      |      |      |      |
| 5     | 0.520** | 0.762** | 0.034 | 0.312** | 1    |      |      |      |      |      |      |
| 6     | 0.401** | 0.383** | 0.069 | 0.254** | 0.390** | 1    |      |      |      |      |      |
| 7     | 0.451** | 0.255** | -0.039 | 0.144 | 0.336** | 0.721** | 1    |      |      |      |      |
| 8     | 0.354** | 0.306** | -0.044 | 0.212** | 0.369** | 0.679** | 0.401** | 1    |      |      |      |
| 9     | 0.245** | 0.138 | -0.075 | 0.173* | 0.141 | 0.541** | 0.287** | 0.279** | 1    |      |      |
| 10    | 0.188* | 0.248** | 0.122 | 0.169* | 0.197** | 0.634** | 0.282** | 0.245** | 0.134 | 1    |      |
| 11    | 0.003 | 0.266** | 0.261** | 0.113 | 0.179* | 0.587** | 0.223** | 0.246** | 0.067 | 0.343** | 1   |

Note: 1 represents boredom proneness, 2 represents academic burnout, 3 represents low self-efficacy, 4 represents interpersonal alienation, 5 represents physical and mental exhaustion, 6 represents hidden truancy, 7 represents academic cognition, 8 represents learning habits, 9 represents self-adjustment, 10 represents classroom cognition, and 11 represents learning environment.

Note 2: *P<0.05 **P<0.01

Through the correlation analysis of boredom proneness, academic burnout, recessive truancy and their different dimensions, it is found that there is a high positive correlation among boredom proneness, academic burnout and recessive truancy. Boredom proneness is not related to low self-efficacy and learning environment, and academic burnout and self-adjustment were not related.

In the research on the dimensions of academic burnout and recessive truancy, it is found that low self-efficacy is not related to other dimensions except academic burnout and learning environment, interpersonal alienation is not related to academic cognition and learning environment, and self-adjustment is not related to classroom cognition and learning environment.

4.3. The mediating relationship between boredom proneness, academic burnout and recessive truancy

Table 3. Mediating relationship analysis

| academic burnout | recessive truancy | recessive truancy |
|------------------|-------------------|-------------------|
| coeff | t   | coeff | t   | coeff | t   |
| boredom proneness | 0.195 | 5.461** | 0.361 | 5.857** | 0.267 | 4.171** |
| academic burnout | 0.481 | 3.893** |
| R² | 0.379 | 0.403 | 0.477 |
| F | 10.117 | 11.681 | 13.235 |

Table 4. Breakdown of total effect direct effect and mediating effect

|                     | effect value | standard error | lower limit | upper limit | relative effect value |
|---------------------|--------------|----------------|-------------|-------------|-----------------------|
| mediating effect    | 0.094        | 0.032          | 0.037       | 0.161       | 26%                   |
| direct effect       | 0.267        | 0.071          | 0.133       | 0.411       | 74%                   |
| total effect        | 0.361        | 0.071          | 0.228       | 0.504       |                       |
Figure 1 Mediating effect model diagram

Under the control of gender and the only child or not, the total score of boredom proneness was used as the independent variable (x), the total score of recessive truancy was used as the dependent variable (y), and the total score of academic burnout was used as the regulatory variable (m). Using process program, model 4 is selected to analyze the mediating effect of academic burnout between boredom proneness and recessive truancy. The formation interval of the lower limit and upper limit in the indirect effect does not include 0, and there is an intermediary effect. The formation interval of the lower limit and upper limit in the direct effect does not include 0, so it is part of the intermediary effect. It can be summarized in table 4 and the conclusion can be shown in figure 1.

5. DISCUSSION

Through the analysis of demographic data, it is found that the sample size collected this time can be statistically analyzed in terms of gender and whether it is an only child, which have no difference. But the data is quite unevenly in different dimensions of school type and grade, which shows that the coverage of this study is not wide enough to represent the population of each dimension. So the analysis of grade and school type was not continued. It can be speculated that boredom, as a trait, may not be different in school type and grade.

By calculating the average score of the three scales, we can see that the scores of academic burnout and recessive truancy are higher than the average score. This may be due to teaching having just resumed after COVID-19 at that time. After a long period of online learning, many students have lost their regular learning and life in school. The need to make up lessons in school virtually increases the learning pressure too.

This study found that there is no difference in the scores of boredom proneness, academic burnout and recessive truancy in terms of gender and the student is the only child or not, which is different from the previous research results. This result may be relate to the large difference in the number of male and female students in this study. However, it is also possible that the uncorrelated of gender and academic burnout is because most of the samples in this study are about graduates, so they do not have a lot of pressure of examinations or learning.

The correlation analysis of this study found that there was a high positive correlation between boredom proneness, academic burnout and recessive truancy, which was consistent with the hypothesis. There are many results in the correlation analysis of each dimension of the two scales of academic burnout and recessive truancy. Boredom proneness has no correlation with the learning environment. It can be understood that boredom proneness is an internal and stable trait, which has nothing to do with the external learning environment.

There is no correlation between academic burnout and self-adjustment. Because self-adjustment belongs to a dimension in the scale, there is no specific definition. From the title of the scale, it focuses on the arrangement of students' learning time and state. Maybe the relationship between students themselves and academic burnout is more reflect in self-control. This shown that self-regulation could not improve the situation of academic burnout. Even if it can positively affect the situation of interpersonal alienation, it could not play a great role in the overall situation of academic burnout.

The results of this study are instructive to find the protective factors of academic burnout and recessive truancy. For students with high boredom proneness, they may need higher self-control to ensure the quality of learning. We also can find a variety of teaching methods to help such students maintain better classroom attention, such as improving self-evaluation and self-control, then reducing recessive truancy.

6. CONCLUSION

There is a high positive correlation between boredom proneness, academic burnout and recessive truancy. The higher level of boredom proneness and academic burnout, the more recessive truancy. The level of boredom proneness can not only directly affect the recessive truancy, but also indirectly affect the recessive truancy through the mediating role of academic burnout. There are no differences in boredom proneness, academic burnout and recessive truancy between college students of different genders, and there are no differences between only children and not only children.

However, from the demographic statistical analysis, it is found that the sample distribution of this study is not uniform enough, so it can not be analyzed in the two dimensions of school type and grade, which will confuse the results. However, it is worth exploring whether there are differences between the two factors in academic burnout and recessive truancy, which has great enlightenment on the causes and solutions of these three factors. If we continue to study, we should use the method of stratified sampling to ensure a sufficient sample size for further research.

In the correlation analysis, it is found that the low self-efficacy in the academic burnout scale has no correlation.
with other factors except the learning environment, which is also an unsolved problem. There are many studies on self-efficacy shown that high self-efficacy will make people more positive, more active in learning and more sense of achievement. Although it is because boredom proneness and recessive truancy belong to relatively negative characteristics and behaviors. When people feel bored and dazing, they do some-things irrelevant with learning and will make people feel no sense of achievement in learning. This result may be due to other reasons, which can used as a subject for further research.

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