

The Impact of Boarding on Anxiety Among High School Students

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Abstract: The difference of high school students in the degree of anxiety are the highlight questions in educational psychology. Some researchers have found that boarding and non-boarding have a significant impact on the formation of anxiety. However, there is still a lack of unified explanation for the formation mechanism and scope of anxiety. Therefore, the research topic of this paper is the impact of boarding on anxiety. The research method include: firstly, the data of the anxiety self-measurement form are collected; secondly, the data are analyzed based on different groups. Comparison between groups was conducted. Based on the results, it is found that boarding has no significant effect on anxiety level. There are limitations in this study, which only takes students in FTS students. There are still many other influencing factors, such as family status, school day system, which are not considered in this study. However, this study provides empirical evidence on the impact of boarding on anxiety.

1 INTRODUCTION

1.1 The Backgrounds of Theory

There are many ways in which boarding schools differ from non-boarding schools. In terms of living environment, it decouples students from their original home and community environment, making the school the primary and singular environment for students' growth; In terms of social relationships, students spend less time with their parents and other family members, and spend more time with classmates and teachers, thus forming closer relationships. From the perspective of school management, boarding schools not only provide education and accommodation, but also have a more refined management model, and students' daily life, learning and entertainment are regularly managed. This study studied the differences in anxiety caused by different factors such as learning pressure, competitive environment, and self-expectation caused by different management styles. That is, whether boarding can have an impact on students' mental health, and what are the differences between boarding students and students in full-time schools

(FTS), are issues that need to be studied urgently. Therefore, this study selected boarding students and non-boarding students in semi-boarding high schools as the survey subjects to study the differences in their anxiety status.

By systematically combing the relevant literature, this study aims to clarify the theoretical framework and evolution path of this field, and provide in-depth knowledge support for academic research. In addition, it is hoped to provide enlightenment for the optimization and supplementation of theoretical models.

Through the analysis of methods and practices in the literature, this study will provide an empirical reference for solving specific problems.

1.2 Research Review

International Scholars conducted research on sleep, exploring the effects of sleep on anxiety. Since high school students have very short breaks, the impact of adequate sleep on high school students is very high.

Additionally, boarding students might have more chances to engage with and pick up knowledge from their teachers and peers (Martin et al., 2014). When

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they register, boarding students encounter particular difficulties, including as acclimating to a new setting where they are cut off from friends, family, and culture for as long as 40 weeks annually. Sleep is one such difficulty. Another challenge is coping with the need for sleep and its potential impact on mental health (Reardon et al., 2023).

Regarding boarding school syndrome, research in countries other than China shows a diverse trend. Although there is rare evidence that boarding schools have a negative impact on students, "boarding school syndrome" is widely recognized. There is a link between boarding school syndrome and a higher incidence of mental health problems (Hope Therapy & Counselling Services, 2023).

In recent years, Chinese scholars have made remarkable progress in family education. Regarding the impact of anxiety caused by boarding, Chinese scholars, in terms of the influencing mechanisms, through an investigation of parent - child relationships, peer relationships, and school management, have found that because boarding increases bullying on school and decreases parent-child engagement, it has an impact on students' mental health. Within boarding schools, the negative emotions of peers are more contagious. In schools with long regulated study hours and strict management, boarding affects students' anxiety.

A full-time institution that offers residential accommodations to students is known as a boarding school, such as accommodation and meals. It must be fully responsible for students' study, daily life, and safety during their time at school. Compared with students in FTS, the responsibility of family education is more transferred to the school than in non - boarding schools. Another type of boarding school usually emerges to solve the educational problems of children from disadvantaged and needy groups. In China, boarding schools are usually located in economically underdeveloped rural areas. This paper will focus on the issue of anxiety for discussion. Anxiety refers to the anticipation of future worries and is more related to muscle tension and avoidance behavior. This research indicates that anxiety leads people to try to avoid situations that trigger or exacerbate its symptoms. Work performance, academic performance, and interpersonal relationships can all be affected (Muskin et al., 2023). Another set of studies shows that being separated from parents in childhood and boarding at school can lead to psychological alienation, which is then associated with a series of emotional problems (Ingoglia et al., 2011; Mander et al., 2015; Mander & Lester 2017). Some studies also believe that boarding

brings many beneficial conditions to students. According to certain empirical research, boarding on campus benefits students' academic and emotional growth. They argue that boarders can experience a communal living and learning environment through boarding schools. Boarders can spend more time using school facilities like libraries and gyms than non-boarders (Wang & Zhang, 2020).

Although research in China on the impact of the environment on anxiety started relatively late, many studies have achieved breakthroughs through Bronfenbrenner's ecological systems theory which holds that there is an interaction between people and the environment. The mental health of adolescents is also affected by their surrounding environment, and the microsystem theory of the ecological system reveals that family, peers, and school in adolescence all have a more direct, intuitive, and important impact on the development of adolescents' mental health. Boarders and students in FTS are in different environments. Students in FTS not only have a lot of contact with teachers and classmates in the school environment but also have close contact with family members in the home environment. However, the main living and learning environment for boarders is the school, and they spend less time in the home environment. Therefore, they lack contact with parents and have more contact with teachers and classmates. Moreover, the emotional support from teachers and peers can, to a certain extent, compensate for the emotional support from their parents. Thus, there are certain differences between boarders and students in FTS in the environments they have close contact with (Zhu, 2023). A comparative analysis of the differences in the impact of boarding and day - school management on the anxiety of high - school students has not been fully explored.

1.3 Implications of the Literature Review and Research Directions

Based on a comprehensive summary of existing research, future research can be deepened in the following aspects:

Researchers integrate multiple psychological theories to further explore the unresolved issues in anxiety and construct a more universal theoretical framework. By introducing new research tools and techniques (such as artificial intelligence, behavioral experiments), researchers can improve the accuracy of data and the persuasiveness of results. At the same time, in response to the practical problems in the current field, more operational plans can be designed,

and their effectiveness can be verified through field research or pilot projects.

2 RESEARCH OBJECT

2.1 Sample

The study selected boarding high school students and FTS high school students as the objects of investigation. The specific implementation method is to randomly select 45 boys and 45 girls from boarding schools of different grades in the same high school, and select 45 and 45 from students in FTS of different grades in the same high school, a total of 120 high school students, the male-female ratio is 1:1.

2.2 Scale Description

The study used the Self-Rating Anxiety Scale (SAS) developed by American paediatrician Zung, a scale used to review an individual's anxiety status. A total of 20 questions (5 points for each question) were answered according to the self-assessment, and the total score was added up with excel, multiplied by 1.25 and then rounded to obtain the standard score (Zung, 1971). The results of three grades of a high school were divided into four parts: Normal: standard score less than 50 points Mild anxiety: 50-59 Moderate anxiety: 60-69 Severe anxiety: ≥ 70 . The scale is composed of 15 somatic symptoms and 5 sonatic symptom and Safective symptom. Cronbach reliability analysis method was used to test the reliability of the scale. The reliability of the scale was controlled in the range of 0.7-0.8.

The Self-rating Anxiety Scale is applicable to normal people of various occupations, cultural classes and age groups or patients with mental disorders. It can accurately and quickly reflect the subjective anxiety degree of the subjects, and can be used for the subjects to understand their own anxiety status, and can also be used to compare the situation of anxiety patients before and after treatment.

2.3 Procedure

The study was conducted in Shanghai on December 22, 2024 totally 180 questionnaires (90 boys and 90 girls) (90 boarders and 90 students in FTSs) were distributed to each grade of the high school (60 questionnaires for each grade).

All the questionnaires were collected from each grade of a high school on December 25, 2024. In the

study, descriptive statistics were used to analyze the difference of anxiety between boarding and day school students. The reliability test of the ASA anxiety self-rating scale was carried out, and the difference of students' anxiety degree was analyzed.

3 RESULTS

A total of 180 high school students were selected in the study, and the ratio of boarding and students in FTSs was 1:1. The completion rate of the 20 questions in the questionnaire was 100%, and the answer efficiency was 100%.

Table 1. The results of the difference test.

	Boarding or not		t	P
	Yes(n =103)	No(n =19)		
Anxiety	39. 08±13. 52	36. 26±11. 31	0. 853	0. 395

The results of independent sample T-test showed that boarding or not had no significant influence on anxiety, $t(120) = 0.853$, $p=395$. The average anxiety degree of boarding students ($n=103$) was 39.08 ($SD=13.52$), and that of non-boarding students ($n=19$) was 36.26 ($SD=11.31$). This suggests that there is no statistically significant association between students' boarding status and their anxiety levels in this study sample (See Table 1).

4 DISCUSSION

The sample is high-school students, whose age is higher than that of the groups in previous psychological studies on students in FTS and boarders. High - school students, aged 16 - 18, are at the end of adolescence. Their mental state, thinking ability, and the validity of their responses to questionnaires are higher than primary and middle - school students in previous studies. Students at this age can answer questions about their current psychological state more objectively and rationally. Secondly, this study focuses on the impact of FTS and boarding on the anxiety level of the research subjects. Previous studies, however, mainly concentrated on the influence on students' character cultivation, development, and daily life. The choice of high - school students as the research group in this study is mainly due to the fact that high - school

students face greater academic pressure and higher parental expectations. Taking boarding as a variable is more in line with the actual situation of China's education system. The results of previous studies mainly emphasized the disadvantages of boarding, while this study delves deeper into whether there is an inevitable connection between boarding and students' psychological state.

Only one school is the selected, but for students in FTSSs and boarders, there are still many other influencing factors such as family status and school system, which are not taken into account in this study. In terms of research methods, this paper only selects students from one high school for questionnaire survey without considering the influence of different schools and regions, so the sample range is narrow and the sample size is relatively small. Secondly, from the perspective of day school and boarding variables, the study considers some other factors in the actual situation, such as the distance of the best home address, the family education atmosphere, school dormitory atmosphere, and the severity of the class system. The selection of influencing factors for variables is not comprehensive and does not cover all the contents. Thirdly, there is a lack of knowledge to supplement the previous studies and literature citations, and there are few references in this study, which leads to the exploratory and preliminary nature of the study. As for the future direction, the teaching effect of the current education system in China should be investigated. Future research may consider the differences between the boarding or not, and the family status of students and the school management system as variables.

5 CONCLUSION

The impact of boarding on the anxiety levels of high school students were investigated in this study. Data were gathered from 180 students in a Shanghai high school, evenly split by boarding status and gender, using the self-report scale. The findings indicated that no significant difference between day and boarding school students. Although boarding students' average anxiety scores were marginally higher, the difference was not statistically significant, indicating that boarding status may not have a major impact on anxiety on its own. These findings offer a fresh perspective on the boarding school experience, highlighting the importance of contextual factors in shaping students' mental health outcomes.

AUTHORS CONTRIBUTION

All the authors contributed equally and their names were listed in alphabetical order.

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