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Effect of school on anxiety in high school students: A questionnaire-based study

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Article Info	ABSTRACT
  Corresponding author: Lee Chang. Psychologist, Beijing, China. psychology.world96@gmail.com	Anxiety in high school students is a prevalent concern, impacting academic performance, mental health, and well-being. While numerous factors contribute to anxiety, the school environment itself plays a significant role. This study aimed to investigate the relationship between different aspects of the school environment and anxiety levels in high school students. An online questionnaire using Google Forms was distributed to high school students. The questionnaire assessed self-reported anxiety levels (Generalized Anxiety Disorder-7 scale), academic pressure, perceived teacher support, peer relationships, and bullying experiences. Descriptive statistics and correlation analyses were conducted to analyze the data. A total of 68 students participated in the study. The findings revealed a significant positive correlation between academic pressure and anxiety levels ($p<0.001$). Perceived teacher support had a significant negative correlation with anxiety ($p<0.001$), indicating that higher support is associated with lower anxiety. Positive peer relationships also showed a significant negative correlation with anxiety ($p<0.001$). Conversely, bullying experiences were significantly positively correlated with anxiety levels ($p<0.001$). This study underscores the significant impact of the school environment on student anxiety. Addressing academic pressure, building supportive relationships, and preventing bullying are crucial steps towards creating anxiety-reducing school environments that foster the well-being of high school students.

INTRODUCTION

High school is a critical juncture in life, marked by academic demands, social pressures, and personal growth. For many students, this period is also characterized by heightened anxiety, a mental health concern that can significantly impact their well-being, academic performance, and future prospects. The prevalence of anxiety among high school students is alarming. Studies have shown that up to 30% of adolescents experience clinically significant anxiety symptoms, with rates steadily increasing in recent years. This rise in anxiety has been attributed to various factors, including academic pressure, social media use, and changing societal expectations (1-3).

While numerous factors contribute to student anxiety, the school environment itself plays a particularly significant role. The school can be a source of both stress and support, depending on its characteristics and practices. Studies have shown that school-related factors such as academic pressure, lack of teacher support, negative peer relationships, and bullying can exacerbate anxiety symptoms in students. Conversely, supportive school environments characterized by low academic pressure, positive teacher-student relationships, and strong peer support can act as protective factors against anxiety (3-6).

The present study aimed to investigate the effect of academic pressure or school environment on high school students.

METHODS

Participants

A convenience sample of high school students aged 15-18 years old was recruited through online student forums and social media groups. The study advertisement briefly described the research aims and eligibility criteria (being enrolled in high school) and provided a link to the online questionnaire formed using Google Forms.

Participation was voluntary and anonymous. Students who had previously received a clinical diagnosis of anxiety or were currently undergoing treatment for the condition were excluded from the study.

Data Collection

An online questionnaire using Google Forms was developed to collect data on self-reported anxiety levels, academic pressure, perceived teacher support, peer relationships, and bullying experiences. The questionnaire consisted of the following sections:

Demographics: Information on age, gender, grade level, school type, and family socioeconomic status was collected.

Anxiety: The Generalized Anxiety Disorder-7 (GAD-7) scale, a validated 7-item self-report measure, was used to assess anxiety symptoms experienced in the past two weeks. Each item is rated on a 4-point Likert scale (0 = never, 3 = almost every day), with higher scores indicating greater anxiety severity.

Academic Pressure: A 5-item self-report scale adapted from previous studies assessed students' perceptions of academic pressure, including workload, deadlines, and pressure to perform well. Each item was rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores indicating higher perceived pressure.

Teacher Support: A 4-item scale assessed students' perceptions of teacher support and availability, including emotional support, academic guidance, and encouragement. Each item was rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores indicating greater perceived support.

Peer Relationships: A 5-item scale assessed the quality of students' peer relationships, including feeling accepted, supported, and comfortable within their peer group. Each item was rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores indicating stronger positive relationships.

Bullying: A 4-item scale assessed students' experiences of bullying, including verbal, physical, and cyberbullying. Each item was rated on a 3-point Likert scale (1 = never, 3 = often), with higher scores indicating more frequent bullying experiences.

Statistical analysis

Descriptive statistics were used to summarize the participants' demographic characteristics, anxiety levels, and scores on the various scales. Pearson correlation coefficients were calculated to analyze the relationships between anxiety levels and academic pressure, perceived teacher support, peer relationships, and bullying experiences. Statistical significance was set at the alpha level of 0.05.

Ethics

The study adhered to the ethical principles of informed consent, anonymity, and confidentiality. Participants were provided with complete information about the study and their right to withdraw at any time. All data was collected and stored anonymously, and all procedures were approved by the institutional review board.

RESULTS

A total of 32 (47.1%) of the participants were male, and the median age was 17 (range: 15-18) years. The findings revealed a significant positive correlation between academic pressure and anxiety levels ($p<0.001$). Perceived teacher support had a significant negative correlation with anxiety ($p<0.001$), indicating that higher support is associated with lower anxiety. Positive peer relationships also showed a significant negative correlation with anxiety ($p<0.001$). Conversely, bullying experiences were significantly positively correlated with anxiety levels ($p<0.001$).

Table 1. Findings of the questionnaire.

Factor	Correlation with Anxiety	Significance Level (p-value)
Academic Pressure	Positive	$p < 0.001$
Perceived Teacher Support	Negative	$p < 0.001$
Positive Peer Relationships	Negative	$p < 0.001$
Bullying Experiences	Positive	$p < 0.001$

DISCUSSION

The findings of this study present a compelling tapestry of the complex interplay between the school environment and student anxiety. Our results confirm the multifaceted nature of anxiety in high school, where academic pressure, teacher support, peer relationships, and bullying experiences collectively weave a narrative of vulnerability and resilience.

Our data paint a stark picture of academic pressure as a potent catalyst for anxiety. The constant weight of deadlines, workload, and expectations can exert a heavy toll on students' mental well-being. This finding aligns with previous research, highlighting the detrimental impact of high-pressure academic environments on student anxiety and engagement (3). It underscores the need for schools to foster learning environments that prioritize holistic development over relentless academic demands.

Amidst the shadow of pressure, our study also illuminates the beacon of teacher support. The significant negative correlation between perceived teacher support and anxiety levels showcases the vital role educators play in mitigating student anxiety. When students feel understood, supported, and guided by their teachers, the burden of anxiety tends to ease. This reinforces the importance of building strong teacher-student relationships, promoting open communication, and providing individualized support (7-10).

The study further highlights the crucial role of peer relationships in shaping the anxiety landscape. Positive peer interactions, characterized by acceptance, support, and a sense of belonging, emerge as a protective factor against anxiety. This finding resonates with prior research emphasizing the influence

of social connection on emotional well-being (5). Schools can foster positive peer relationships through fostering collaborative learning environments, promoting conflict resolution skills, and encouraging inclusive social settings (11-13)

Our study paints a grim picture of how bullying experiences exacerbate anxiety. The constant threat of physical, verbal, or cyberbullying can leave deep emotional scars, amplifying feelings of fear, isolation, and vulnerability. This aligns with existing research, highlighting the detrimental impact of bullying on anxiety and depression in students (4). Therefore, it is crucial for schools to implement robust anti-bullying measures, foster empathy and respect among students, and create safe spaces for students to seek support.

Our findings invite us to move beyond a piecemeal approach towards student anxiety and consider the school environment as a synergistic ecosystem. To effectively mitigate anxiety, a multi-pronged approach is necessary, encompassing curriculum reforms, teacher training, peer support programs, and robust anti-bullying initiatives. Reducing academic pressure without neglecting academic rigor, fostering supportive teacher-student relationships, promoting positive peer connections, and actively combating bullying are key threads that must be woven into the fabric of every school experience (14-16).

While this study provides valuable insights, it has limitations. The self-reported nature of data introduces potential bias, and the cross-sectional design limits causal inference. Future research employing longitudinal designs, objective measures, and qualitative methods can expand on these findings and explore the dynamic interplay between school environment and student anxiety more deeply.

Ultimately, our study reinforces the notion that student anxiety is not a singular thread, but rather a complex tapestry woven from the myriad experiences students encounter within the school environment. By understanding the intricate relationships between academic pressure, teacher support, peer relationships, and bullying, we can strive to create schools that are not only centers of academic learning, but also havens of support, resilience, and well-being for all students. Only then can we truly hope to unravel the tapestry of anxiety and pave the path towards a more positive and fulfilling high school experience for every student.

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