

Self-efficacy and Academic Stress in Senior High School Students Plus Assa'adah, Banten

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Abstract

Background: The National Education System Law No. 20/2003 states that education aims to develop student potential. A religious learning approach is one of many methods to develop student potential. High School Plus Assa'adah uses this approach. However, this approach can increase students' academic stress due to busy schedules and tasks. Low self-efficacy can cause students to lack confidence in facing these tasks. This study aims to determine the relationship between self-efficacy and academic stress in high school students.

Method: This study used a cross-sectional design with observational analytics. A total of 90 respondents were studied with an age range of 14 - 17 years. The sampling technique was consecutive non-random sampling, with the inclusion criteria being students who were in eleventh-grade and physically filled out the questionnaire during the study. Exclusion criteria were students who were taking antidepressant and antianxiety drugs. Assessment of self-efficacy and academic stress using the General Self-Efficacy Scale and Student-Life Stress Inventory, the validity and variability tests of which are based on previous research. Chi-Square test was used to analyze the data with a significance level (p) <0.05.

Result: Most respondents were male (52.2%), and the highest age was 16 (64.4%). Most students had moderate self-efficacy (65.6%), while the others had moderate academic stress (57.8%). The Chi-Square test showed no relationship between self-efficacy and academic stress (p=0.277).

Conclusion: Self-efficacy was not associated with academic stress in high school plus students. It is necessary to look for other factors besides self-efficacy that can cause academic stress so that academic results can be improved.

Keywords: Academic stress, High school plus students, Self-efficacy

INTRODUCTION

The National Education Law No. 20/2003 emphasizes education as a conscious and planned effort to develop individual potential, including spiritual strength, personality, noble character, self-control, intelligence, and skills.¹ Education can be obtained through formal education (elementary, junior high, high school, university), focusing on skills functional in society.² High school students are generally adolescents (WHO 10-18 years, Ministry of Health 10-19 years).³

Adolescents experience biological, cognitive, and socio-emotional changes that require adaptation.⁴ Various factors influence these changes, one of which is an external factor, namely the environment, especially the educational environment which can be obtained through schools.⁵ Although schools are considered important as a place of development, in reality, schools can be the cause of problems, such as stress among students.⁶ A study conducted by Gaol revealed that stress is the feeling most often felt by students because of the many demands that must be met.⁷

Stress occurs due to a mismatch between individual expectations and biological, psychological, or social conditions.⁸ Pressure and demands are known as academic stress, especially in academic

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©2025 Jurnal Ilmiah Kesehatan Masyarakat: Media Komunikasi Komunitas Kesehatan Masyarakat Open access under CC BY NC–SA license. Published by Public Health Department, Faculty of Health Science, Universitas Pembangunan Nasional "Veteran" Jakarta activities.⁸ Based on the study of Taufik et al., academic stress in students can occur due to demands that exceed their abilities from parents or schools.⁹ Research by Antari et al. on 51 students showed a prevalence of academic stress of 70.5%.¹⁰ This high academic stress can be harmful to physical and mental health. In addition, academic stress also triggers various psychological and social responses that interfere with memory and attention.¹¹ The emergence of academic stress is influenced by internal aspects, such as thinking patterns, personality, and self-confidence, as well as external aspects, such as course load, achievement demands, and competition between parents.¹² This study focuses on the internal aspect, namely self-confidence. The self-belief in question is a person's belief in their ability to make specific efforts to obtain their goals, which can also be referred to as self-efficacy.¹³

A previous study conducted by Faizah and Panduwinata found that self-efficacy affects academic stress, and self-efficacy helps overcome pressures that can lead to academic stress.¹⁴ Students with low self-efficacy tend to give up quickly and feel depressed; they doubt their abilities and skills, which can increase stress. In contrast, high self-efficacy provides confidence in completing tasks.¹⁵⁻¹⁶ However, both studies by Antari and Maulida and Darminto showed no relationship between self-efficacy and academic stress levels.^{10,17}

Senior High School Plus Assa'adah has religious-based learning; the education delivered in addition to general education lessons includes religious lessons. Busy times and tasks can trigger academic stress. Likewise, low efficacy can lead to feelings of inability to complete the assigned tasks. Judging from this background, as well as the pros and cons of whether self-efficacy is related to academic stress, it attracts researchers to conduct further research.

METHOD

Participants and Study Design

This study used a cross-sectional research design with analytic observations to evaluate whether self-efficacy was associated with academic stress in Senior High School Plus Assa'adah students, Banten. The study was conducted from September to November 2023. The study population involved 102 eleventh-grade students at Senior High School Plus Assa'adah. Eleventh-grade students were chosen as respondents in this study because they have been attending school for at least one year, so they have experienced various learning conditions, such as more and more difficult subjects and assignments. While the tenth-grade class was not even one year old and is still adapting to learning conditions at the school, the twelfth-grade class cannot be included as research respondents because they are already busy with exam activities.

The study sample consisted of eleventh-grade students of Senior High School Plus Assa'adah who met the inclusion and exclusion criteria. Inclusion criteria involved eleventh-grade students who were present during the study. In contrast, exclusion criteria included students who were not willing to participate, and students who were taking antidepressant and anti-anxiety drugs. The sample size was determined using the single-sample proportion formula. First, the infinite population was used, namely using the prevalence of academic stress obtained from the results of other studies, which amounted to 70.5%.10 The results obtained were then entered into the calculation using the finite population from Senior High School Plus Ass'adah, with a significance level of 95%, which amounted to 1.96. The results were obtained from 78 samples. It was calculated that there is a 15% dropout rate of 12 students. Then the total sample for this study was 90 people. The samples taken have met the inclusion and exclusion criteria. The sampling method uses simple random sampling.

Measurements and Procedure

Research materials and instruments used primary data with questionnaires. The variables studied were self-efficacy and academic stress. The self-efficacy variable was measured using Nurhaliza's General Self-Efficacy (GSE) questionnaire.¹⁸ The questionnaire consisted of 18 types of statements with a Likert scale divided into favorable and unfavorable statements with a score of 1-5. A total score of <42 indicated low self-efficacy, 42-65 indicated moderate self-efficacy, and more than 66 indicated high self-efficacy.¹⁸ Eighteen questions have been tested for validity and declared valid, with the Cronbach's Alpha value for the reliability test is 0.859 (very high).¹⁸ The academic stress variable was measured using the Student-Life Stress Inventory questionnaire by Wardani.¹⁹ The questionnaire consisted of 54 types of statements with a Likert scale with a score of 1-5. A total score

of <126 indicated low academic stress, 126 - 197 indicated moderate academic stress, and more than 198 indicated high academic stress. The questionnaire was validity tested and found to be valid with a Cronbach's Alpha value for the reliability test of 0.950 (very high).¹⁹

Statistical Analysis and Ethical Clearance

Statistical software was used to analyse the data, which involved the Chi-square statistic test with a significance level of <0.05. This study has received approval from the research ethics committee of the Faculty of Medicine, Trisakti University Jakarta No. 114/ker-fk/vii: 114/KER-FK/VII/2023. One of the ethical principles upheld in the ethical approval is that if adolescents fill out the questionnaire and symptoms of stress arise due to reading the questionnaire or unwanted things in health problems during the study, the teenager is referred to the nearest hospital at the expense of the researcher.

RESULT

In Table 1, of the 90 participants, the majority were 16 years old and were mainly male students. The results showed that most respondents experienced moderate self-efficacy 65.6%, and 57.8% experienced moderate academic stress. In Table 2, the students with moderate and high categories are combined into one group, making up 54 students, because there are only two students with high academic stress. This table shows that among all research participants, students who experienced moderate to high academic stress were those with moderate self-efficacy, reaching 55.9% (Table 2). Statistical test results showed no significant relationship between self-efficacy and academic stress in high school students (p=0.277).

Variables	Frequency	Percentage (%)
Age (years)		
14	1	1.1
15	14	15.6
16	58	64.4
17	17	18.9
Gender		
Male	47	52.2
Female	43	47.8
Self-efficacy		
Mild	0	0
Moderate	59	65.6
High	31	34,4
Academic Stress		
Mild	36	40.0
Moderate	52	57.8
Heavy	2	2.2

 Table 2. Relationship between Self-Efficacy and Academic Stress

 Academic Stress

Academic Stress				-		
	Low (Low (n=90)		Medium- High (n=90)		p-value
	n	%	n	%	-	
Self-efficacy						
Medium	26	44.1	33	55.9	59	0.277*
High	10	32.3	21	67.7	31	

DISCUSSION

Overview of Respondent Characteristics Age

Based on Table 1, the number of students in this study was limited to students aged 14 to 17 who were in eleventh grade. The results showed that the majority were 16 years old, as many as 64.4%. Similar to Agustina's findings, the participants in the study were students aged 15 to 17 years with the highest distribution of respondents at the age of 16 years, namely 66%.²⁰ Several researchers conducted studies with the same variables but in different age groups, such as a study by Widiani et al. on students aged 17 to 19 years, and students aged 18 years were the most respondents, namely 62.1%.²¹ Another study by Wulandari and Rachmawati also revealed contrasting findings; the participants in the study were students aged 14 to 18 years, where the most respondents were 15 years old, namely 39.95%.²²

Gender

Based on Table 1, this study revealed that the number of male respondents reached 52.2%, the largest group. This finding is similar to Paramita et al.'s study, which noted that the highest gender distribution was also found in males, at 58%.²³ However, the findings from Sari and Rahayu's study showed different results, where the highest gender distribution was female, at 51.1%.¹⁵ A similar study by Antari et al. also provided similar findings, where the highest distribution of gender characteristics was female, at 92.2%.¹⁰

Respondents' Self-Efficacy Overview

Based on Table 1, this study found that the majority of respondents, as many as 65.6%, showed moderate self-efficacy. This finding aligns with the results of Utami's research, where students with a moderate level of self-efficacy are 50.7%.⁵ Another study with similar findings was conducted by Pramesta, where respondents with a moderate level of self-efficacy amounted to 48%.¹³ Wistarini and Marheni found contrasting results, where most respondents showed high levels of self-efficacy, reaching 44.7%.²⁴ Faizah and Panduwinata also provided different findings, as many as 87.9% showed high levels of self-efficacy.¹⁴

Overview of Academic Stress

This study found that 57.8% experienced moderate academic stress. Studies conducted by Faizah and Panduwinata also found the same thing, where respondents with moderate academic stress levels were 55.2%.¹⁴ Another study by Antari et al. stated that as many as 62.7% experienced moderate levels of academic stress.¹⁰ However, different findings were revealed by Miyono et al., where the majority of respondents had high academic stress, as many as 34.4%.⁶

Relationship between Self-Efficacy and Academic Stress

This study at Senior High School Plus Assa'adah shows that most students, 55.9%, have moderate self-efficacy and experience mild to high academic stress. Moreover, it was found that there was no relationship between self-efficacy and academic stress (p=0.277). This disconnection may be caused by other things not included in this study. These may come from internal or external aspects. Internal factors consist of three factors: thinking patterns, personality, and self-efficacy. An uncontrolled mindset can increase a person's stress level. The more confident a person can cope with certain situations, the lower the likelihood of stress they experience. A person's personality type can also affect their resilience to stress. Students with optimistic personalities tend to be more resilient to stress than pessimistic students.

Meanwhile, students with self-confidence in interpreting the surrounding situation can also affect their stress level.^{8,12,17} External factors affecting academic stress include four things, namely a greater number of lessons, pressure to achieve high achievement, the urge to improve social status, and competition between parents. A superior education system can result in increased competition, study duration, and student task load. The pressure for high achievement on students often comes from various parties, including parents, family, teachers, neighbors, classmates, and even the students themselves. In addition, education used as a person's social status can also affect academic stress.

People with high academic competence will be respected, while people who do not have it are considered low in society. Students who succeed academically are liked, recognized, and praised. Unsuccessful students are labeled as slow or lazy, considered a nuisance, dumped by teachers, criticized by parents, and abandoned by classmates. In addition, competition among parents to produce talented children in various fields also increases the likelihood of academic stress that can be experienced by students.^{12,17} The same results were also obtained by Maulida and Darminto on 267 high school students in Magetan city (p=0.280).¹⁷ The results of Nurhasanah and Hawadi's research on 80 State Islamic University of Sunan Gunung Djati Bandung students aged 18 to 24 also showed no relationship between self-efficacy and academic stress (p=0.193).²⁵ Antari et al. also found no relationship with 51 undergraduate nursing students in Yogyakarta aged 20 to 21 years (p=0.516).¹⁰ However, the study differentiated respondents based on parents' average income and place of residence, while in the current study, these factors were not the basis for separating respondents. The unrelated results obtained in the three studies were caused by other unexamined factors originating from internal and external factors. Internal factors such as self-control, hardiness, optimism, achievement motivation, and self-control, as well as external factors such as parental support, learning pressure, heavy learning conditions, and residential status.^{10,17,25}

In contrast, research conducted by Avianti on 101 students of the Faculty of Medicine, Malahayati University Lampung aged 17 to 22 years, found that self-efficacy was significantly associated with academic stress (p=0.000). Academic stress can increase self-efficacy in students because pressure during stressful conditions can shape their perceptions and prepare them to face increasingly severe challenges in the future.²⁶ This difference in results may be because the respondents in Avianti's study were university students. In contrast, the current study involved high school students. Factors such as heavier learning loads and pressure to achieve higher at the university level may be different from those experienced by high school students. Daneswari and Immanuel also found a relationship between self-efficacy and academic stress (p=0.000) in their study of 146 Undergraduate Medical Study Program students at the Faculty of Medicine, Udayana University, Bali. These results indicate that self-efficacy has a role in reducing academic stress because if students are confident in their ability to complete their tasks, they will be able to deal with the situations they experience.^{2,7} This difference in results could be because the study not only looked for the relationship between self-efficacy and academic stress, but also considered social support as one of the factors contributing to academic stress.²⁷ This differs from the current study's focus, which is limited to the relationship between self-efficacy and academic stress.

CONCLUSION

Most found moderate self-efficacy and academic stress in Senior High School Plus students. There was no relationship between self-efficacy and academic stress in Senior High School Plus students. As a suggestion, future research should consider other factors that may contribute to academic stress that were not included in this study. These factors can be internal aspects, namely mindset and personality, as well as external aspects such as excessive learning load, pressure to achieve high achievement, encouragement of social status, and influence from competing parental environments.

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