Academic Self-Efficacy And Stress Levels Among Final-Year Students During The COVID-19 Pandemic

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ABSTRACT

This study examines the relationship between academic self-efficacy and stress levels among final-year students during the COVID-19 pandemic. The hypothesis posits a negative and significant relationship between academic self-efficacy and stress levels. The sample consisted of 138 students aged 20 to 25 years. Data were collected using an academic self-efficacy scale and a stress level scale, and the analytical technique applied was parametric correlation (Pearson's product-moment correlation). The results indicate a correlation coefficient (r) of -0.510 with $p = 0.000$ ($p < 0.01$), demonstrating a significant negative relationship between academic self-efficacy and stress levels. The acceptance of the hypothesis in this study yields a coefficient of determination (R^2) of 0.260, suggesting that academic self-efficacy accounts for 26% of the variance in stress levels. The remaining 74% is influenced by other factors, such as stress coping mechanisms, resilience, optimism, social support, and ethnic identity.

Keywords: Stress levels, academic self-efficacy, final-year students.

Introduction

The COVID-19 pandemic has emerged as a global health threat, significantly impacting countries worldwide. The World Health Organization (WHO) classified this outbreak as a pandemic, and as of April 25, 2022, Indonesia reported 6,044,467 confirmed cases and 156,133 deaths (COVID-19 Task Force, 2022). WHO has emphasized COVID-19 as a public health emergency of international concern, posing a substantial risk to countries with vulnerable healthcare systems (Sohrab et al., 2020).

One of the major impacts of the COVID-19 pandemic has been on the education sector. According to Abidah (2020), COVID-19 disrupted educational institutions, preventing them from functioning as usual. In response, the Indonesian government implemented online learning policies to minimize physical contact and promote social distancing. However, this transition has presented significant challenges for students, particularly university students facing academic stress (Harahap et al.,

2020). For final-year students, the pressure to complete academic requirements, such as a thesis, has intensified. Yulianto (in Henricus Dimas, 2016) explains that a thesis serves as a mandatory academic paper and a final requirement for obtaining academic qualifications.

The pressure associated with thesis completion can contribute to increased stress among students, potentially hindering their progress. Rachman and Indriana (2013) note that thesis completion is frequently delayed by obstacles such as uncertainty on where to start, self-doubt, unsupportive environments, and procrastination. During the pandemic, ineffective online guidance, delays in research and data collection, and limited access to resources further complicated the thesis completion process for students (news.detik.com, 2020).

Interviews with seven final-year students from various universities in Yogyakarta revealed that four experienced symptoms such as anxiety, fear of mistakes, headaches, and irritability, while three reported sleep disturbances, appetite loss, low self-confidence, and hopelessness. These symptoms underscore the intensified stress linked to thesis completion amid the challenges of the pandemic.

Stress, as defined by Sarafino and Smith (2012), results from an imbalance between an individual's biological and psychological states and environmental demands, resulting in tension and discomfort. Stress can be categorized as mild, moderate, or severe. While mild to moderate stress may manifest as irritability, impatience, and anxiety, severe stress can lead to adverse effects such as depression, hopelessness, and a sense of meaninglessness (Puspitha, 2018). For students, stress often becomes a barrier to thesis completion, lowering productivity and self-confidence in their academic capabilities.

The confidence in one's ability to complete academic tasks is referred to as academic self-efficacy. Academic self-efficacy is defined as the belief in one's capacity to face challenges, perform competently, and achieve positive outcomes in academic tasks. Bandura (in Adian, 2018) posits that self-efficacy can assist individuals in overcoming negative experiences, emotions, and health issues encountered during adaptation. Furthermore, Bandura (in Ghufron & Risnawita, 2012) explains that self-efficacy is the belief in one's capability to execute the actions required to achieve specific goals, which significantly influences academic motivation and performance (Mukti, 2019).

High academic self-efficacy can play a protective role by enhancing resilience and motivation, thereby enabling students to manage academic stress and work towards success (Ghufron & Risnawati, 2012). Feist and Feist (2010) suggest that self-efficacy influences decision-making and bolsters confidence in one's ability to control life circumstances, reducing stress triggers. Consequently, high academic self-efficacy may empower students to cope effectively with the demands of thesis completion (Ana, 2014).

In Yogyakarta, research has shown that students with low academic self-efficacy tend to experience high stress levels when working on their thesis during the pandemic, suggesting a potential link between self-efficacy and stress. Therefore, this study aims to examine the relationship between academic self-efficacy and stress levels among final-year students during the COVID-19 pandemic.

Methods

This study employed a quantitative approach, commonly used to investigate specific populations or samples through statistical analysis and hypothesis testing (Suryanto, Herdiana, & Alfian, 2012). The population for this study included final-year university students in Yogyakarta who were working on their thesis during the COVID-19 pandemic. Using purposive sampling, 138 participants were selected based on specific criteria: (1) final-year students engaged in thesis work during the pandemic, (2) active enrollment at universities in Yogyakarta, and (3) ages ranging from 20 to 25 years (Sugiyono, 2009).

The instruments utilized in this study were scales designed to measure academic self-efficacy and stress levels. A preliminary test was conducted on 83 final-year students from universities in Yogyakarta who were working on their thesis during the pandemic. The stress scale, consisting of 50 items, was tested for validity and reliability, with 49 items determined to be valid and showing high reliability (α = 0.962).

Data were analyzed using SPSS version 25, employing Pearson's product-moment correlation to assess the relationship between academic self-efficacy and stress levels.

Results and Discussion

Before conducting data analysis, descriptive analysis, normality test, linearity test, and correlation test were performed. The categorization results for the academic self-efficacy variable are shown in Table 1:

Table 1. Distribution of Academic Self-Efficacy Categorization

Variable	Score Range	Category	Frequency	Precentage
Academic Self-Efficacy	X≥57	High	1	0,7%
	38≤X≤57	Medium	73	52,9%
	X<38	Low	64	46,4%

The stress level categorization results are shown in Table 2:

Table 2. Distribution of Stress Level Categorization

Variable	Score Range	Category	Frequency	Precentage
Stress Level	X≥57	High	1	0,7%
	38≤X≤57	Medium	135	97,8%
	X<38	Low	2	1,4%

In this study, the normality test was conducted using the Kolmogorov-Smirnov Test. A distribution is considered normal if the significance is greater than 0.05 (Priyatno, 2010). The normality test results are shown in Table 3:

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Stress Level	,051	138	,200*	,993	138	,721
Academic Self-Efficacy	,072	138	,080	,987	138	,214

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

With significance values greater than 0.05, the distributions of both variables are considered normal. Linearity tests show a linear relationship between academic self-efficacy and stress levels ($F = 51.229$, $p = 0.000 < 0.05$), confirming linearity between the variables.

The hypothesis testing using Pearson's product-moment correlation confirms a significant relationship between academic self-efficacy and stress levels among final-year students during the pandemic. Table 5 provides the correlation test results:

Table 4. Linearity Test

Variable	F	Significance Level
Academic Self-Efficacy Stress Level	51,229	0,000

Based on the results of the linearity test, it was found that the variables of academic self-efficacy and stress level showed a linear relationship, with F = 51.229 and p = 0.000 (p < 0.05). This analysis indicates that there is a linear relationship between the variables of academic self-efficacy and stress level.

From the hypothesis, it was determined that there is a correlation between academic self-efficacy and stress levels among final-year students during the pandemic. The hypothesis aims to identify whether the independent variable is significantly associated with the dependent variable. The correlation analysis used in this research was Karl Pearson's product-moment correlation. The findings of this correlation test are displayed in Table 5 below:

Table 5. Correlation Test

Variable	Pearson Correlation	Sig	r^2
Academic Self-Efficacy Stress Level	-0,510	0,000	0,260

The results demonstrate a correlation between academic self-efficacy and stress levels, with a correlation value of r=−0.510 and significance at p=0.000p = 0.000p=0.000 (p < 0.05). This outcome validates the research hypothesis, indicating a significant relationship between academic self-efficacy and stress levels in final-year students during the pandemic.

The R-Square value reveals that academic self-efficacy accounts for 26% of the variance in stress levels, while the remaining 74% is attributed to other unexamined factors in this study.

The negative direction of the relationship, r=−0.510r = -0.510r=−0.510, implies that higher academic self-efficacy correlates with lower stress levels among final-year students during the pandemic. Conversely, lower academic self-efficacy is associated with higher stress levels.

The findings of this study align with prior research conducted by Saputri (2020), which indicated that higher self-efficacy is associated with lower stress levels among final-year students, while lower self-efficacy correlates with higher stress levels. This relationship is further supported by theoretical explanations suggesting that academic self-efficacy relates to an individual's ability to think constructively and positively when facing challenges and to perceive and approach problems

strategically. Therefore, individuals with high academic self-efficacy are more resilient when dealing with academic difficulties (Fatimah, 2021).

Another study by B. Mukti & F. Tentama (2019) found that students with low academic self-efficacy are more likely to experience self-doubt, which can lead to behaviors that hinder academic performance or decrease academic achievement, such as avoiding tasks. Reduced academic performance in turn diminishes students confidence in their ability to complete academic tasks, especially amid the challenges presented by the pandemic. This decrease in confidence contributes to an affective state in students that increases their susceptibility to stress.

The results of the academic self-efficacy scale categorization indicate that 46.4% of subjects fall into the high category, 52.9% into the moderate category, and 0.7% into the low category. This finding reveals that a portion of students still possesses low academic self-efficacy, highlighting a lack of confidence in their academic abilities. Such low self-efficacy leads to higher stress levels, as Olejnik and Holsechuh (2007) suggested that academic stress is often caused by a lack of self-confidence in one's ability to meet academic demands, resulting in doubt and uncertainty.

In examining academic self-efficacy by gender, among the 78 female students, 35 (44.9%) had high self-efficacy, while 43 (55.1%) were in the moderate category, with none in the low category. Among the 60 male students, 29 (48.3%) showed high self-efficacy, 30 (50%) moderate, and 1 (1.7%) low. These results indicate that, based on gender, male students are more likely to have lower academic self-efficacy than female students when working on final assignments during the pandemic.

The categorization of stress levels shows that 0.7% (1 individual) of participants were in the high-stress category, 97.8% (135 participants) in the moderate category, and 1.4% (2 participants) in the low category. Several internal factors influence stress levels, including students' ineffective coping strategies, which prevent them from properly managing emotions and addressing problems. Additionally, low self-efficacy, resilience, and optimism when facing academic commitments, particularly in final assignments or theses during the pandemic, contribute to heightened stress levels (Nevid, 2014).

Stress levels were also analyzed by gender. Among the 78 female participants (56.5%) and 60 male participants (43.5%), 1 female was in the high-stress category (0.7%), while no males were in this category. Conversely, there were no females in the low-stress category, whereas 2 males (1.4%) fell into this category. These findings suggest that female students tend to experience higher stress levels than their male

counterparts, consistent with prior research by Nasrani (2015), which reported that females generally experience higher stress levels than males.

A limitation of this study was the distribution of the scales online via Google Forms, which prevented the researchers from directly observing whether participants responded hastily, potentially leading to discrepancies between results and actual conditions. However, the study still effectively demonstrates a significant relationship between academic self-efficacy and stress levels among final-year students during the pandemic, thereby supporting the hypothesis and reinforcing existing theoretical perspectives.

Conclusion

The results of this study indicate a significant negative relationship between academic self-efficacy and stress levels among final-year students in Yogyakarta working on their final assignments or theses during the COVID-19 pandemic. This finding suggests that higher academic self-efficacy enhances students' ability to think constructively and approach challenges with a problem-solving mindset during the thesis process amid pandemic constraints. In contrast, lower academic self-efficacy is associated with reduced confidence in academic abilities, making it more difficult for students to manage stressors effectively. Consequently, these students are more likely to experience elevated stress levels and face delays in completing their final assignments or theses.

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