Academic Self-Efficacy and Thesis-Related Anxiety Among Undergraduates:
A Comparative Analysis

Regina Sekkar Adinda[1], Christiana Hari Soetjiningsih[2]
[12] Faculty of Psychology, Satya Wacana Christian University
E-mail: reginasekar11@gmail.com

ABSTRACT

This study aimed to examine the relationship between academic self-efficacy and thesis-related anxiety among undergraduate students. A total of 202 participants were involved, and data were collected using Likert scale questionnaires assessing academic self-efficacy and thesis-related anxiety. The results revealed a significant negative correlation between academic self-efficacy and thesis-related anxiety, indicating that higher levels of academic self-efficacy were associated with lower levels of anxiety and vice versa. The majority of participants displayed moderate academic self-efficacy, while most experienced low anxiety levels. Additionally, the duration of thesis work was found to impact anxiety levels and academic self-efficacy, with longer durations correlating with increased anxiety and decreased self-efficacy. These findings highlight the importance of addressing academic self-efficacy to alleviate anxiety during the thesis process. However, it is essential to consider other influencing factors, such as personal resilience and institutional support, and to acknowledge that anxiety levels can be influenced by various external factors not explored in this study.

Keywords: academic self-efficacy; thesis-related anxiety; undergraduate students; correlation; psychological well-being

INTRODUCTION

An undergraduate thesis, or Skripsi, represents an academic work meticulously crafted by undergraduate students, typically those pursuing their S1 program, exploring a distinct topic or field based on extensive literary reviews compiled by subject matter experts, empirical findings from field research, or product development through experiments (Mansnur, 2009). Undoubtedly, a multitude of students perceive the arduous process of thesis writing as a daunting and strenuous endeavor. Nonetheless, the reality is contrary to this prevailing notion; thesis writing ceases to be terrifying when executed with utmost responsibility and commitment. To fulfill this responsibility, students are expected to complete their thesis, hence paving the way for the culmination of their higher education journey. However, an array of students continue to encounter myriad impediments that induce anxiety, such as during the execution and finalization of their thesis (Fausiah & Widury, 2008).

Certain influential factors significantly hinder students' progress in their final project or thesis, including doubt in topic selection, confusion about where to start, difficulty in procuring supporting literature, and anxiety in dealing with supervising faculty members, all contributing to the challenge of completing their scientific written work (Mahardika, 2011). These circumstances

can pressure students, subsequently triggering anxiety related to thesis development. This is also in line with the preliminary interview results carried out by researchers with several final-year students working on their theses, revealing their anxiety rooted in their uncompleted theses. This anxiety is further compounded by worries about their incapacity to complete their thesis, frequent revisions from supervisors due to non-compliance with stipulations, and lack of self-confidence in executing their thesis.

Anxiety is an emotional response incited by fear, wherein unpleasant feelings surface when fear is stimulated (Beck, Emery, and Greenberg, 1985). Nevid (2005) defines anxiety as a state wherein an individual guards themselves due to their apprehension about an unpleasant incident befalling them. Anxiety, according to Beck, Emery, and Greenberg (1985), consists of four aspects: Physiological, Cognitive, Behavioral, and Affective. When individuals exhibit low self-confidence in their abilities to work on their thesis, a perception of incompetence emerges, sparking feelings that tend towards avoiding thesis work, these feelings of inability and helplessness ultimately incite anxiety in performing thesis work (Nevid, Rathus & Greene, 2005). This, in the long run, could lead to anxiety causing students to lose motivation, thus delaying their final assignment or thesis. Among the factors affecting anxiety in doing a thesis, one is academic self-efficacy (Suyanti & Albadri, 2021). Students who believe they can cope with pressure well will not feel anxious and scared during the thesis process, unlike those unsure about managing emerging pressures during thesis work, tend to dwell on their incapacity and stress in doing their thesis. Individuals doubtful about their abilities in the thesis process and having low self-efficacy can easily surrender to challenging situations (Purnamasari, 2014).

Academic self-efficacy, as stated by Bandura (1997), pertains to a student's ability to accomplish and complete their tasks with predetermined output targets and timelines. Academic self-efficacy is characterized by three aspects, namely level, strength, and generality (Bandura, 1997). Several studies have substantiated the correlation between academic self-efficacy and anxiety in doing a thesis, including research conducted by Astuti (2013) which asserts a significant negative correlation between self-efficacy and anxiety in students of the BK 2009 class who are working on their thesis. Another study (Firmawati, 2018) indicates a significant negative correlation between self-efficacy and anxiety in final-year students at AKAFARMA Banda Aceh. Similarly, research by Liyana (2013) shows a significant negative correlation between self-efficacy and national exam-related anxiety among ninth-grade students at SMP N I Sumowono. Consistent with these findings, Pratiwi's (2008) research also reports a very significant negative correlation between self-efficacy and anxiety in the thesis counseling process of psychology students at Muhammadiyah Malang.

Given the discussions outlined above, this study seeks to test the relationship between academic self-efficacy and thesis-related anxiety among students at Satya Wacana Christian University. The hypothesis of this research is that a significant negative correlation exists between academic self-efficacy and thesis-related anxiety. Higher academic self-efficacy correlates with

lower thesis-related anxiety among students at Satya Wacana Christian University and vice versa. Lower academic self-efficacy correlates with higher thesis-related anxiety among these students.

METHOD

This study is underpinned by a quantitative approach employing a correlational design, targeting the discernment of the relationship between academic self-efficacy and thesis-related anxiety among undergraduate students at Satya Wacana Christian University. The quintessence of correlational design in this research is to draw a statistical correlation between the aforementioned variables, providing an insight into the interactional dynamics they possess and establishing a quantifiable link between them.

Participants

The selection of the study's subjects was determined via convenience sampling, a non-probability sampling technique where participants are selected based on their convenient accessibility and proximity to the researchers. The sample pool for this study comprises 202 undergraduate students from Satya Wacana Christian University, carefully selected considering the required parameters and relevance to the research.

Instrumentation

The data collection techniques employed in this study encompass Likert scale questionnaires, widely acknowledged for their simplicity, validity, and reliability in gathering quantifiable data. This research incorporates two distinct scales. The first is the Thesis-Related Anxiety variable, gauged using the Beck Anxiety Inventory (BAI), developed by Beck (1988) and modified by the researchers to tailor to the research's context. The reliability of the BAI scale was evaluated using Cronbach's Alpha, yielding a coefficient of 0.920. This scale consists of 21 items. The second variable, Academic Self-Efficacy, derived from Alimah and Khoirunnisa's research, was informed by Bandura's (1977) theory. The reliability of this scale, assessed using Cronbach's Alpha, yielded a coefficient of 0.926, comprised of 29 items.

Data Analysis

The data analysis techniques used in this research include descriptive analysis and hypothesis testing. The descriptive analysis is intended to categorize the research data and present an initial understanding of the sample's attributes. The hypothesis testing was conducted using Spearman's rank correlation coefficient, preceded by normality and linearity tests to ensure the applicability and legitimacy of Spearman's test to the data. This was aimed at generating a more sophisticated understanding of the data and determining the correlation between academic self-efficacy and thesis-related anxiety.

RESULTS AND DISCUSSION

The study engaged a total of 202 participants, all students from Universitas Kristen Satya Wacana. This cohort comprised 58 male participants (28.79%) and 144 female participants (71.21%). The participant body spanned various student years, including the class of 2014 with 1 participant (0.50%), 2017 with 1 participant (0.50%), 2018 with 24 participants (11.88%), 2019 with 165 participants (81.68%), and 2020 with 11 participants (5.45%).

Observing the duration of participants' thesis work, 27 students were found to have been working on their thesis for one semester (13.4%), 61 students for two semesters (30.2%), and 114 students for more than two semesters (56.4%). For more detailed demographic data, please refer to Table 1.

Table 1. Demographic Data

Gender	Male	58	28, 79%
	Female	144	71, 3%
Years	2014	1	0,50%
	2017	1	0,50%
	2018	24	11,88%
	2019	165	81,68%
	2020	11	5,45%
Time to Work on Thesis	1 Semester	27	13, 4 %
	2 Semester	61	30,2 %
	>2 Semester	114	56, 4 %
Faculty	Faculty of Agriculture and Business	3	1,49%
	Faculty of Language and Arts	8	3,96%
	Faculty of Information Technology	21	10,40%
	Faculty of Economics and Business	28	13,86%
	Faculty of Medicine and Health Sciences	3	1,49%
	Faculty of Social and Communication Sciences	8	3,96%
	Faculty of Teacher Training and Education	20	9,90%
	Faculty of Electronics and Computer Engineering	2	0,99%
	Faculty of Psychology	88	43,56%
	Faculty of Law	21	10,40%
Total		202	100%

Moreover, academic self-efficacy was categorized and presented in Table 2, indicating that scores ranged from a low of 29 to a high of 92, with an average score of 92.81 (SD=10.239). Consequently, the majority of the participants (2.97%) exhibited high academic self-efficacy, while 53.96% and 43.07% displayed moderate and low academic self-efficacy, respectively.

Table 2. Results of *Academic Self-Efficacy Cataloging*

Interval	Category	F	Percentage
$\leq\ \leq x < 92$	Tall	6	2,97%
$50 \leq\ \ 50 \leq\ < 71$	Keep	109	53,96%
$\leq\ \leq x < 49$	Low	87	43,07%
Sum		202	100%
Min = 29; Max = 92; Mean = 92.81; SD = 10.239			

To elaborate further, anxiety related to thesis work, as demonstrated in Table 3, was scored between 23 and 72, with an average score of 46.30 (SD=10.239). Therefore, most participants exhibited high (5.94%), moderate (28.71%), and low (65.35%) anxiety levels, respectively.

Table 3. Results of Categorization of anxiety doing a thesis

Interval	Category	F	Percentage
$\leq\ \leq x < 72$	Tall	12	5,94%
$40,3 \leq\ \ 40,3 \leq\ < 56,6$	Keep	58	28,71%
$\leq\ \leq x < 39,3$	Low	132	65,35%
Sum		202	100%
Min = 23; Max = 72; Mean = 46.30; SD = 10.239			

Normality testing was conducted via the One Sample Kolmogorov-Smirnov method. Both scales, i.e., the anxiety of thesis work (K-S-Z=0.118, p<0.05) and academic self-efficacy (K-S-Z=0.137, p<0.05), did not exhibit a normal distribution. Linearity was assessed using the ANOVA method, signifying a linear relationship between the two variables as the significance deviation from linearity was 0.051 (p>0.05).

Table 4. Normality Test Results

	KS-Z	Sig.	information
Academic self-efficacy	0,137	0,000	tidak normal
Anxiety Working on a Thesis	0,118	0,000	tidak normal

Table 5. Linearity Test Results

	F	Sig.	Information
Deviation from linearity	1,446	0,051	linear

Results from the Spearman Rho correlation technique used for hypothesis testing revealed a significant negative relationship (rxy = -0.998, p < 0.05) between academic self-efficacy and anxiety regarding thesis work among the students of Universitas Kristen Satya Wacana.

Table 6. Hypothesis Test Results

Variabel	r_{xy}	sig.	information
Variabel X-Y	- 0,998	0,000	

Upon reflection, a significant negative relationship was observed between academic self-efficacy and anxiety about thesis work among the participants. This denotes that higher academic self-efficacy resulted in lower thesis-related anxiety and vice versa. Hence, the research hypothesis was accepted. This aligns with previous studies conducted by Astuti (2013), Pratiwi (2008), and Firmawati (2018), confirming the negative correlation between self-efficacy and anxiety among students undertaking their thesis work.

Further, a closer examination of the academic self-efficacy scale, as shown in Table 2, revealed that the majority of the participants (53.96%) fell under the moderate category. This suggests that participants were fairly confident in their abilities to complete their academic tasks. A breakdown of the anxiety scale (Table 3) indicated that most participants (65.35%) fell under the low category. This connotes that most participants experienced high anxiety levels while working on their thesis. It was further determined that the duration students spent on their thesis work played a significant role in their anxiety levels and academic self-efficacy. The data suggested that as the duration of thesis work increased, the level of student anxiety also increased, and self-efficacy decreased. This connection might be due to the mounting pressure of prolonged thesis work, which can lead to a drop in confidence over time as students become increasingly anxious about the eventual completion and result of their work. The dispersion of thesis duration in our participant body (Table 4.2) demonstrated that more than half of the students (56.4%) had been working on their thesis for more than two semesters. This suggests that a significant number of students might be experiencing high anxiety levels and lowered self-efficacy due to the extended duration of their thesis work. When viewing these results, it is important to acknowledge that academic self-efficacy is multifaceted and can be influenced by various other factors not explored in this study, such as personal resilience, stress management, and institutional support. Similarly, anxiety levels can also be influenced by various external factors, such as personal circumstances, support systems, and overall mental health, which this study has not investigated.

CONCLUSION

The findings of this study demonstrate a significant negative relationship between academic self-efficacy and anxiety related to thesis work among students at Universitas Kristen Satya Wacana. Higher levels of academic self-efficacy were associated with lower levels of anxiety, while lower academic self-efficacy corresponded to higher levels of anxiety. These results highlight the importance of addressing academic self-efficacy in order to alleviate anxiety and promote a more positive experience during the process of working on a thesis. Further research

and interventions aimed at enhancing academic self-efficacy among students can contribute to reducing anxiety and improving overall well-being in academic settings.

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