# The Relationship between Self-Regulated Learning and Academic Stress in Student who are Working on Their Thesis while Working

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**Abstract.** To be able to live independently, students must endeavor to distance themselves from engagement with other people, notably their parents, in terms of their economic, social, and psychological well-being. Finances constrain students who work, have fulfilling leisure time, and are treated more professionally. However, the fact that there is a contradiction between the roles of job and study, which has an effect and is a cause of stress, cannot be denied. This study aims to determine the relationship between self-regulated learning and academic focus in a student who are working on their thesis and work at the same time. This research uses quantitative methods with a correlational test research type. This study was conducted on 125 students who were working on their thesis and working at the same time—purposive sampling was used as a sampling technique in this study. The sample criteria are a student working in their view and work (part-time or full-time). The results show no significant positive relationship ($r = 0.103$, $p=0.251$ ($p>0.05$). Thus, it may be stated that the student experiences more academic stress the more self-regulated learning he owns. The findings, precisely the existence of knowledge and concepts that are diverse and unique to each individual, force students to manage their learning strategies independently, put forth an effort to study and work and engage in interactions with various environmental conditions.

**Keywords:** *Self-Regulated Learning, Academic Stress, Students Working on Their Thesis, Working Students*.

## 1 Introduction

As their roles and responsibilities grow, students struggle to maintain relationships with others, particularly their parents, on an economic, social, and psychological level so they can live independently. To be able to live independently, students must endeavor to distance themselves from engagement with other people, notably their parents, in terms of their economic, social, and psychological well-being.

As a student, some needs and obligations need to be fulfilled to complete their studies, such as tuition fees, buying stationery and books, training costs, research costs, internet costs, and additional living costs such as housing, travel, basic needs, and so on. Various types and levels of needs in education and living costs. Fulfilling the obligations shouldered by students leads them to the early adult development stage with a period of searching, fulfilling, and stabilizing self-adjustment to a new pattern of life (1). As their roles and responsibilities grow, students

ISPsy 2023, July 18-19, Purwokerto, Indonesia

DOI 10.4108/eai.18-7-2023.2343392

struggle to maintain relationships with others, particularly their parents, on an economic, social, and psychological level so they can live independently.

To be able to live independently, students must endeavor to distance themselves from engagement with other people, notably their parents, in terms of their economic, social, and psychological well-being. Various reasons for students to study while working include financial restrictions, help and relieve the burden on parents, finding new experiences, improving skills, occupying leisure time, and so on. Through this, some students attempt to find a solution by juggling their studies and jobs. Students engaging in two distinct roles while studying and working has been widely observed (2). However, it is undeniable that there are role conflicts between work and study that have an impact and are a source of stress, absenteeism, and capacity (3). Studying while working that is undertaken by students gets a lot of demands to be responsible for completing task properly.

They were working while studying can have a significant positive or negative impact on students. Having experience outside of the classroom, developing skills, learning about various jobs, and taking responsibility for the work are all benefits students who study while working might experience. Students who work have trouble balancing their time and concentrating while studying and working, giving employment priority over college (4). This has adverse effects that should be considered.

A preliminary survey conducted on five students obtained the results that students working on their thesis while working show indications of academic stress. This situation is evidenced by the information that students do not have much time to complete assignments and rest; students also reveal that they cannot divide their time properly so that they cannot fully concentrate; erratic moods make students do chores depending on their mood, feel like dropping out in the middle of 7th semester, heavy loads and fatigue, sudden schedules that change so that student have to adjust their work schedules and feel panic and fear of being scolded by their superiors if they secretly work while studying or vice versa. Students also revealed not only experiencing a decrease in grades, feeling more sensitive, having a lot of thoughts, feeling excessive anxiety about deadlines, and fear of not graduating.

The phenomenon of academic stress experienced by final-year students who work is a polemic in itself. In this condition, students try hard to balance their college activities and hope to continue their studies by working to be able to pay off tuition fees. The density of these activities makes students unable to pass the existing academic demands, causing academic stress.

Academic stress occurs because students cannot fulfill the requirements of their ability (5). Sohail (6) proved that high-stress levels are associated with poor academic performance. Academic factors are the leading cause of stress for most students, followed by physical, social, and emotional factors. In addition, in a study by Reddy et al. (7), it was explained that the stress experienced by students occurs because of parental expectations, making students carry a heavy burden. Perceived academic stress has an impact on cognitive, physiological, emotional aspects, and behavioral changes.

Academic stress is identified with poor work performance, a non-conducive environment, poor lecturer-friend relationships, inadequate financial resources, inadequate time to do assignments, and so on (8). Academic stress felt by students can have an impact on their mental state and lead

to depression, anxiety, behavioral and emotional disorders, and, in the most extreme cases, suicide.

A student who already has independence can determine what actions help him avoid academic stress. Students must manage their time, formulate activity strategies, and evaluate their abilities. The system that can be used is self-regulated learning. Self-regulated learning is the procedure of focusing cognitive, affective, and behavioral outcomes on the acquisition of academic goals (9). Self-regulated learning involves detailed knowledge of a skill that requires self-awareness (metacognition), self-motivation, and behavior to be able to apply the knowledge possessed appropriately (9).

Students who have self-regulated learning are evidenced by the behavior setting good learning strategies, being able to submit assignments on time, and being able to repeat lecture material again before exams in order to obtain good academic results and reduce the academic stress experienced. Thus, high self-regulated learning in students allows them to control themselves during learning and does not cause academic stress (10). Conversely, if students are accustomed to doing bad learning strategies, submitting assignments not on time, and not repeating lecture material, this proves that low self-regulated learning results in students experiencing high academic stress.

Self-regulated learning is task-orientated when individuals want to understand learning, work on tasks with higher levels of difficulty, and apply more effective learning strategies. Facing the problem of division of tasks and work makes it difficult for students to apply self-regulated learning. This is in accordance with the results of research by Daulay and Rola (11), which found that there are differences in self-regulated learning with academic stress in working and non-working students. Students who do not work show higher self-regulated learning than students who work. This will have an impact on improving student achievement; self-regulated learning owned by students makes them not easily experience academic stress because they can control themselves while learning. Therefore, self-regulated learning is important for students because it can help them apply learning strategies, focus on their learning goals, and calculate what to do to help them avoid academic stress in the application of their tasks and jobs.

## 2 Literature Review

Academic stress is an individual's assessment of academic pressures and demands that are perceived to exceed their abilities and arise from academic and non-academic factors, such as sociocultural, environmental, and psychological characteristics, by physical, social, and emotional factors (12). Internal factors of academic stress include mindset, personality, and beliefs, and external factors include crowded education and parental and social support.

Bedewy and Gabriel (12) explained academic stress in three dimensions. First, academic expectations are defined as a great intellectual aspiration that comes from both one's environment and oneself. Second, the demands of lectures and exams are defined as student opinions on all forms of education and tests. Problems taking examinations or attending classes will arise from excessive pressure. Third, student academic self-perception is associated with a poor academic reputation brought on by students' inability to satisfy existing academic

demands. The Perception of Academic Stress Scale (PASS) by Bedewy & Gabriel (12) is used to assess these three dimensions.

Self-regulated learning is defined as an effort used to overcome various cognitive difficulties, motivation, behavior, knowing interests and talents, knowing how to use the skills possessed, making learning decisions, and achieving the desired goals (13). Self-regulated factors include beliefs, motivation, and goals. This study uses the Self-Regulated Learning – Self-Report Scale (SRL – SRS) from Toering, et al. (13), which is derived according to 6 dimensions. First, planning defined as the capacity to prepare a task before beginning it is known as planning. Second, self-monitoring involves executing the task more frequently. Third, evaluation is defined as the procedure and outcomes following plan implementation. Fourth, reflection is defined as the process of taking stock of how something has been done in the past. Fifth, effort, the most effort possible, must be made in order to maintain and increase efforts in order to perform at an ideal level. Sixth, self-efficacy is the self-assurance to successfully accomplish goals through maximizing effort, perseverance, and resistance to failure.

## 3 Method

This study used quantitative methods with the type of correlational test research to find the relationship between two or more variables. The population in this study are completing their thesis at the University Muhammadiyah Prof. Dr. Hamka, who are active workers. This study employs a technique called purposive sampling, and the respondents in it have the following characteristics: (1) student who is working on their thesis at University Muhammadiyah Prof. Dr. Hamka, and (2) multiple roles as student and active workers (as a part-timer or full-timer).

The Perception of The Academic Stress Scale (PASS) from Bedewy and Gabriel (12) is an instrument that has been modified for use in this study to measure students' perceptions of academic stress. Eighteen items on this scale have four Likert response options: strongly disagree (1), disagree (2), disagree (3), and strongly agree (4).

**Table 1.** Item Sample according to Perception of the Academic Stress Scale

| Aspects | Item |
|---|---|
| Academic Expectations | I am confident that I will become a successful student. |
| Demands of Lecture and Exams | I have plenty of free time to rest after completing assignments. |
| Student Academic Self-Perception | The questions in exams are usually quite difficult. |

The second variable was measured with the Self-Regulated Learning – Self-Report Scale (SRL-SRS) from Toering et al. (13). Fifty items in this scale have four Likert response options: strongly disagree (1), disagree (2), disagree (3), and strongly agree (4).

**Table 2.** Item Sample according to Self-Regulated Learning-Self Report Scale

| Aspects | Item |
|---|---|
| Planning | I determine how to solve the problem before starting to work on it. |
| Self-Monitoring | While working on assignments, I often ask myself to avoid giving wrong answers. |

| | |
|---|---|
| Evaluation | I double-check my assignments to ensure they are correct. |
| Reflection | I reassess my experiences so that I can learn from them. |
| Effort | I persist in completing tasks even when they are difficult. |
| Self-Efficacy | I know how to handle unexpected situations because I can think of strategies to deal with new situations. |

## 4 Result

**Table 3.** Demographic Data according to research sample

| Characteristics | Frequency | Percentage (%) |
|---|---|---|
| **Gender** | | |
| Male | 45 | 32 |
| Female | 80 | 68 |
| **Age** | | |
| 18 | 0 | 0 |
| 19 | 4 | 3 |
| 20 | 7 | 6 |
| 21 | 36 | 29 |
| 22 | 50 | 40 |
| 23 | 19 | 15 |
| 24 | 3 | 2 |
| 25 | 6 | 5 |
| **Faculty** | | |
| FT | 7 | 6 |
| FAI | 15 | 12 |
| FKIP | 6 | 5 |
| FISIP | 15 | 12 |
| FEB | 3 | 2 |
| FFS | 9 | 7 |
| FPSIKOLOGI | 70 | 56 |
| **Job Type** | | |
| Part-Time | 90 | 72 |
| Full Time | 35 | 28 |
| **Length of Work** | | |
| 1-3 month | 50 | 40 |
| 4-6 month | 20 | 16 |
| 7-9 month | 8 | 6 |
| 10-12 month | 10 | 8 |
| Above 1 year | 37 | 30 |
| **Work Duration** | | |
| Below 40 hours/week | 75 | 60 |
| 40 hours/week | 25 | 20 |
| Above 40 hours/week | 25 | 20 |

Based on data in **Table 3**, it is known that this study was dominated by women gender, with 80 respondents (68%). Most respondents aged 22 years were 50 respondents (40%). Most respondents were from the Faculty of Psychology, with as many as 70 respondents (56%). Most respondents work as a part-timer. As many as 90 respondents (72%) with length of work are 1-3 months, and as many as 50 respondents (40%). The largest range of working hours is less than 40 hours, with as many as 75 people (60%).

**Table 4.** Hypothesis Test

| Model | *R* | Significant |
|---|---|---|
| *Pearson Correlation* | 0,103 | 0,251 |

Based on the hypothesis test, it can be seen that the Pearson Correlation (r) value is 0.103 with a significant level (p) 0.251 (p>0.05); it can be said that there is no relationship between self-regulated learning and academic stress. These results also show that the direction of the relationship that occurs is positive, so it can be said that the higher the self-regulated learning owned, the higher the academic stress felt.

## 5 Discussion

Based on the results of the analysis conducted by researchers on the research sample using 125 final year students of Universitas Muhammadiyah Prof. Dr. Hamka who work with an age range of 18-25 years, it is stated that there is no significant positive relationship between self-regulated learning and academic stress in final year students of Universitas Muhammadiyah Prof. Dr. Hamka who work. This is known from the results of correlation analysis obtained Pearson Correlation (r) value of 0.103 with a significant level (p) 0.251 (p>0.05), which means that there is no significant positive relationship between self-regulated learning and academic stress in the final year students of Muhammadiyah Prof. Dr. Hamka University who work.

According to Zimmerman (9), self-regulated learning cannot be separated from self-awareness (metacognition), motivation, and behavior regarding perceptions or views of what is being learned, what students should do during the learning process and the strategies they can apply. Good self-regulated learning ability in an individual has a stable psychological condition that allows him to adapt to a new environment and achieve his learning goals. Baumeister in (14) explained that self-regulated learning is an important aspect of an individual's life to adapt. If students have high self-regulated learning, they are able to direct themselves to adapt and manage the goals they want to achieve. Meanwhile, low self-regulated learning students are less able to direct themselves to adapt and manage the goals to be achieved.

According to Stone, Schunk & Swartz in (15), there are three success factors of self-regulated learning, namely self-efficacy, motivation, and goals. Self-confidence (self-efficacy) shows self-confidence in learning and performing self-skills such as completing tasks, applying strategies for learning, and being able to adjust needs to learning conditions. Motivation can drive activities to achieve goals by showing more effort to stay concentrated on doing tasks based on self-belief to be able to carry them out. Goals become the main benchmark for individuals in reviewing their learning improvements.

In this study, the insignificant correlation between self-regulated learning and academic stress can be explained by individual differences that can determine differences in self-regulated learning abilities possessed by final-year students. This individual difference is associated with Zimmerman's (16) theory that cannot be separated from the self-efficacy that students have toward their abilities and self-confidence. With the existing findings, namely the existence of diverse and different knowledge and self-concepts from each individual, students have their

own way of organizing their learning strategies, mobilizing themselves to learn and work, and interacting with different environmental conditions.

Students facing various tasks and activities cannot be separated from their ability to achieve goals and complete tasks or work with a predetermined time target. This ability possessed by students is referred to as self-efficacy; self-efficacy is a form of knowledge about the self that is carried in everyday life. Bandura (17) defines self-efficacy as a belief in one's ability to improve performance so that the desired goals can be achieved.

Based on the results of the study, it is found that students who have self-efficacy will be able to do self-regulated learning so that they can learn and perform self-skills such as completing tasks, applying strategies for learning, and being able to adjust needs to learning conditions. Conversely, in the results of this study, when students do not have self-efficacy, they will be less able to do self-regulated learning due to negative thoughts in individuals, differences in social status, cultural factors, and economic status.

Another aspect that influences differences in self-regulated learning ability is the difference in social and cultural factors. This aspect explains how individuals learn to interact and adapt in an environment or situation that emphasizes responsible activities, thinking, and problem-solving abilities determined by adaptation to values, beliefs, and habits in the social and cultural environment (18).

It is known in the additional analysis test in this study that the results obtained that overseas students experience the process of adaptation to a new environment and culture in a new environment will experience an adaptation process that affects their way of thinking, behavior, and psychology. Based on the results of additional analyses in the study, it was found that male students have higher self-regulated learning compared to female students. In this case, self-regulated learning owned by male students is higher than that of female students, in line with the results of research Pajares & Miller (19)showing that women have higher anxiety compared to men. Not only that, in peer groups, women are more oriented towards interpersonal relationships compared to men (20).

As for academic stress, female students are higher than male students. In line with the theory of Agolla and Ongori (8) that the level of academic stress in women is much higher than that of men, this is because women use task-oriented strategies so that they are more easily identified, while men use ego so that men are much more relaxed in facing academics.

This adaptation aspect allows the insignificant correlation between self-regulated learning and academic stress. Respondents in this study are final-year students who work; therefore, final-year students who work are very influential in terms of adaptation both in trying to complete their final assignments and adapting to the work environment. According to (21), adaptation is a process when individuals try to overcome self-needs, urgency, failure, and conflict to achieve compatibility between environmental and internal demands.

The adaptation process cannot be separated from the development of age owned by individuals. Additional analysis that has been conducted by researchers found that students aged 24 years

have high self-regulated learning compared to students aged 21-22 years. In this case, 24 years old is an age that includes the early adult stage; the early adult stage is a period of adjustment to a new lifestyle and social (22). Students aged 24 years are in transition both financially and not towards independence, freedom of opinion, and views of the future. In line with the research results, 24-year-old students have higher self-regulated learning because they have been able to carry out exploration and experimentation stages in life planning with continuous change.

The highest number of respondents in this study, aged 22 years old, is in accordance with the research criteria, namely final year students of Universitas Muhammadiyah Prof. Dr. Hamka, aged 18-25 years, and undergoing college while working either part-time or full-time. The average final-year student of Universitas Muhammadiyah Prof. Dr. Hamka is 22 years old, which is in line with the development and stage of education in Indonesia. Based on Higher Education Statistics data (23), the college age of students is in the range of 18-24 years, and the number of students in the undergraduate program is dominant at the age of 18-30 years, so in general, students who enter higher education are 18 years old, and the average student will graduate from the undergraduate program at the age of 22-23 years.

Working that is undertaken by final-year students is very influential in their academic stress conditions. The inability of individuals to adapt between work and academic demands allows students to experience academic stress. In addition to individual differences and adaptation, the insignificant correlation between self-regulated learning and academic stress is caused by internal factors, including ways of thinking, personality traits, and self-confidence. At the same time, external factors include crowded education, pressure to excel, competing parents, and social support.

Self-adaptation reflects an individual's ability to change behavior that aims to harmonize environmental and social conditions and meet the demands of a better life based on internal and external factors. This adaptation ability will be able to facilitate individuals in fulfilling their psychological needs (24). By making adaptations, it is hoped that students who undergo dual roles by studying and working can achieve harmony in environmental conditions and themselves (21). Adaptations made by students can help them overcome academic stress and have a positive self-concept (25). Prof. Dr Hamka Muhammadiyah University's final year students who work based on the results of the additional analysis test found that the average student has a part-time job. Students who work part-time have lower self-regulated learning and higher academic stress than students who work full-time. It is proven by the results of the independent samples test on the academic stress variable that there are differences in the types of part-time and full-time jobs among students. This goes back to the adaptation process of students who have just started working; this adaptation process makes it difficult for students to divide their time between college and work, do assignments, and so on so that their self-regulated learning is low. Meanwhile, students who work full-time already have better time management.

The part-time job undertaken by students makes them spend some time, energy, and responsibility in completing the final assignment of the lecture. The duration of work undertaken by students also affects the student adaptation process. Based on additional analysis test data, students with a work duration of less than 40 hours have higher self-regulated learning

and academic stress. This is what makes students experience the demands and pressures felt at work; they must be able to complete their work by exerting all their abilities in self-regulation. Conversely, when students complete the final project of the lecture, the demands to get good grades and graduate on time must be balanced by applying the right learning strategy to get these results.

The test results of additional analysis of students based on length of work found that students who work 1-3 months have low self-regulated learning and experience high academic stress. This is because adaptation students who have just entered the world of work will experience harder efforts in adjusting to a new social environment so that achieving compatibility between environmental demands and within themselves is higher. This academic stress makes it difficult for students to manage time between college and work, so student activities increase and their assignments are delayed.

It is evidenced in the results of interviews that students reveal that they are undergoing adaptation to their work by adjusting themselves in lecture activities to complete their final assignments. Students said that they experienced academic stress when the work they had to complete coincided with the final assignment that had to be done, making them panic. However, when there is not much work, or there is no project, students tend not to experience academic stress and can regulate themselves in the learning process and complete their assignments.

Thus, students who undergo a dual role between college and work must be able to adapt or adjust themselves by being able to overcome problems and tasks, both in academic and work tasks.

## 6 Conclusion

Based on the results of the study, it can be concluded that there is no significant positive relationship between self-regulated learning and academic stress in final-year students of Universitas Muhammadiyah Prof. Dr. Hamka. So, it can be concluded that the higher the self-regulated learning owned, the higher the academic stress felt.

The limitation of this study lies in only one scope of research, University of Muhammadiyah Prof. Dr. Hamka. Even though similar research can be carried out in a wider scope, there are many factors that can affect academic stress, such as self-efficacy, time management, academic achievement, procrastination, social support and so on. Students are also expected to have good self-regulated learning skills to help reduce the academic stress they feel by being responsible in completing work, doing assignments, and regulating themselves. Faculties or educational institutions are also expected to assist students in improving self-regulated learning by providing information related to independence skills and paying attention to psychological aspects in students that can be developed.

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