

The Correlation Between Time Management and Anxiety in Master of Education Graduate Students in XYZ University Jakarta

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Abstract

There are many factors due to the increasing number of graduate students experiencing anxiety during their studies. One of the factors can be related to time management since many graduate students are students that have jobs, families, and other responsibilities. Having so much on their plate might be a cause of anxiety when it is done with poor time management on their end. Therefore, the purpose of this study is to find out whether there is a relation between time management and anxiety, and whether gender plays important role in time management among the students of Master of Education Graduate Students of XYZ University. This research paper is a quantitative study which uses inferential statistics. The sample of this study was selected using purposive sampling technique. A total of 40 participants were recruited for this study. The data of time management were collected using a 5-point Likert scale ranging from Seldom True (1) to Very Often True (5), meanwhile for anxiety the Likert scale ranging from Not Present (1) to Very Severe (5). The questionnaire was presented using Google Form in Bahasa then distributed through WhatsApp group. The data reliability was measured using Cronbach's Alpha with the result of 0.70. According to the survey 5 (12.5%) students had high time management, 29 (72.5%) students had moderate, and 6 (15%) students had low time management. This study concludes that there is no correlation between time management with anxiety and the average of female students' time management is as same as male students' time management. In addition, regarding time management skill, it can be synthesized that most of the Master of Education Graduate Students of XYZ University are having moderate time management. Nevertheless, it is recommended that a thorough further research regarding this study should aim to investigate additional variables and factors that may contribute to the understanding of the relationship between time management and anxiety among Master of Education graduate students, so that it can have a better comprehensive evaluation in the future.

Abstrak

Ada banyak faktor yang menyebabkan meningkatnya jumlah mahasiswa pascasarjana yang mengalami kecemasan selama studi mereka. Salah satu faktor dapat terkait dengan pengelolaan waktu karena banyak mahasiswa pascasarjana adalah mahasiswa yang memiliki pekerjaan, keluarga, dan tanggung jawab lainnya. Memiliki begi banyak hal yang harus dilakukan dapat menjadi penyebab kecemasan ketika memiliki pengelolaan waktu yang buru. Oleh karena itu, tujuan dari penelitian ini adalah untuk mengetahui apakah ada hubungan antara pengelolaan waktu dan kecemasan, dan apakah jenis kelamin memainkan peran penting dalam pengelolaan waktu di antara mahasiswa pascasarjana Program Studi Magister Pendidikan Universitas XYZ. Artikel penelitian ini adalah sebuah penelitian kuantitatif yang menggunakan statistik inferensial. Sampel penelitian ini dipilih menggunakan teknik purposive sampling. Sebanyak 40 partisipan direkrut untuk penelitian ini. Data pengelolaan waktu dikumpulkan menggunakan skala Likert 5 poin yang berkisar dari Tidak Selalu Tepat (1) hingga Sangat Sering Tepat (5), sedangkan untuk kecemasan menggunakan skala Likert yang berkisar dari Tidak Sama Sekali (1) hingga Sangat Berat (5). Kuesioner menggunakan Google Form dalam Bahasa dan didistribusikan melalui grup WhatsApp. Reliabilitas data diukur menggunakan Cronbach Alfa dengan hasil 0,70. Menurut survei, 5 (12,5%) mahasiswa memiliki pengelolaan waktu yang tinggi, 29 (72,5%) mahasiswa memiliki pengelolaan waktu sedang, dan 6 (15%) mahasiswa memiliki pengelolaan waktu rendah. Penelitian ini menyimpulkan bahwa tidak ada korelasi antara pengelolaan waktu dengan kecemasan dan rata-rata pengelolaan waktu mahasiswa perempuan sama dengan pengelolaan waktu mahasiswa laki-laki. Sela itu, mengenai keterampilan pengelolaan waktu, dapat disimpulkan bahwa sebagian besar mahasiswa Program Studi Magister Pendidikan Universitas XYZ memiliki pengelolaan waktu sedang. Meskipun demikian, disarankan untuk melakukan penelitian lebih lanjut yang lebih mendalam mengenai studi ini agar dapat menginvestigasi variabel dan faktor tambahan yang mungkin berkontribusi. Diantaranya pada pemahaman hubungan antara pengelolaan waktu dan kecemasan pada mahasiswa pascasarjana Program Studi Magister Pendidikan, sehingga dapat memiliki evaluasi komprehensif yang lebih baik di masa mendatang.

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1. INTRODUCTION

"The key is not to prioritize what is on your schedule, but to schedule your priorities." (Stephen Covey, 2004). Pursuing education is not just for the sake of acquiring knowledge, but for igniting a passion and curiosity that can last a lifetime. For many individuals, pursuing a master's degree can be indeed like a dream come true where the goal might have been set for a long time ago, which consists of the culmination of years of hard work, dedication, and academic achievement. Obtaining a master's degree can be seen as a leap of significant milestone to one's personal accomplishment in his/her academic study. Moreover, it provides a

sense of fulfilment or satisfaction as it allows individuals to fulfil their professional passions and they can contribute positively to their chosen field of study and their life. In addition, it also provides an opportunity to delve deeper into advanced knowledge and skills which later can be a lever to open new gates of career opportunities.

However, behind those shimmering and promising ideas about a master's degree, there are some *downsides* too. Obtaining a master's degree can be demanding and challenging, especially related to time management. Speaking of time management, in fact, everyone has an equal amount of time which is 24 hours a day, 168 hours a week and 720 hours a month, but why some claim that they are run over by the time. On the other hand, some claim they made the most of it. This similar obstacle arises in most of the graduate students who come from various backgrounds who mostly have already had their professional career initially. Many of them have additional roles such as being working moms/dads. Nevertheless, these students are prone to have overwhelming assignments, employment, family obligations and personal matters. Failing to organize and manage the time, Graduate students may experience anxiety related to academic performance. According to the World Population Review, around six percent of people aged 15 and above display symptoms of anxiety or depression, and about 1.72% of them have severe illnesses like psychosis in Indonesia (Chan, 2019). Furthermore, around 19% of Indonesian youth have had suicidal thoughts, and 45% of them have admitted to self-harm. Anxiety is one of the most common mental health illnesses. This can lead to a cycle of avoidance and procrastination, making it even harder for the graduate students to manage time effectively which can impact their academic performance further.

Therefore, based on the stated problems above the authors would like to investigate whether there is a correlation between time management and anxiety in Master of Education graduate students of XYZ University in Jakarta. The purpose of this study is to test the following 2 hypotheses:

1. There is a correlation between time management and anxiety.
2. The average of female students' time management is higher than male students' time management.

Last but not the least, hopefully this paper will provide insights for the graduate students to identify their skills level in time management and anxiety which can be used as a reflection to have a better understanding of oneself to find a proper balance among the academic, professional, and personal life.

Time Management

According to Aeon and Aguinis (2017), they defined time management as a form of decision making used by individuals to structure, protect, and adapt their time to changing conditions. This definition suggests a sense of urgency in which the individual is fully responsible for how a person uses the time wisely; the person is to be proactive and intentional in making decisions about how to allocate his/her time. Most studies on time management focused on two main outcomes which are well-being and performance. According to the American Psychology Association Dictionary of Psychology (American Psychology Association, n.d.), well-being is a state of happiness and contentment, with low levels of distress, overall good physical and mental health and outlook, or good quality of life. Aeon, Faber, and Anaccio (2021) further suggest that while time management helps with one's overall sense of well-being, it shows relatively lower effects to relieve one's level of distress. This is due to the different nature of well-being and distress. Distress refers to one's negative emotions due to neuroticism and life events which are not within the purview of time management.

There are some benefits of effective time management for students in order to be more organized in their work. While creating an overview of a task, students can set goals and work according to the set timeline. This way, students are less stressed as they know how much time they must accomplish a task and have an overall good feeling of satisfaction over the result. Because of having the daytime planned out, students will have

more 'down time' to relax and enjoy their personal life. This will in turn continue to protect one's sense of well-being. On the other hand, students with poor time management skills will have higher risk of failing their grades, developing unhealthy lifestyles as their eating, and sleeping habits are compromised, and enhancing the stress level while trying to meet the deadline.

According to Macan (1994), in her studies about time management behaviours, she found that people reported higher job satisfaction when they were able to accomplish the high-priority activity; suggesting a conscious attempt to prioritize tasks, allocate specific time to accomplish the task, and a reflection over how the individual used the time to accomplish the task. In another word, by implementing time management techniques such as setting goals and priorities, a person is able to experience control over what can be done within the time that he/she has. This feeling, in turn, has a positive effect on job satisfaction and lower job-related stress.

Macan then presented a time management training program that leads to three types of time management behaviors which resulted in one's perceived control over time. The indicators of time management that are used for this study is as the following:

1. Setting goal and priorities
2. Mechanic of time managements
3. Preference for organization
4. Perceived control over time

Anxiety

According to Ressler and Nemeroff (2019), anxiety is defined as "a subjective feeling of fear, apprehension, and/or worry that is usually linked with anticipation of a potential threat, either internal or external" (Ressler and Nemeroff 2019, 1-22). This definition also highlights that anxiety is a normal and often necessary response to potential threats, but it becomes a disorder when it is a regular or excessive occurrence that is persistent and interferes with the way a person conducts their day. Anxiety is a natural and reasonable response that can be identified in both animals and humans, as stated in (Michałowska and Konieczny 2022, 2). It is linked to the functioning of the nervous system in our brain, which leads to physical reactions such as body tremors, sweating, increased heart rate and blood pressure, and increased muscle tone. According to the research done by Michałowska and Konieczny, there are two types of anxiety:

1. Trait anxiety refers to an individual's predisposition to manifest a particular reaction, which were developed through a psychometric approach.
2. State anxiety is characterized by physiological arousal and the accompanying conscious feeling of tension, agitation, and emotions related to anxiety.

The psychological aspect of anxiety is evident in the behaviour, emotions, and cognitive functioning of the person that is going through it.

According to the recent research regarding anxiety in university students. It has examined that there are various factors that may contribute to the prevalence of mental health problems, such as gender, academic level, academic year, and geographic location (Bruffaerts et al. 2018, 97). When a student is overwhelmed by the pressure that they are facing, anxiety can be seen in their physical symptoms such as rapid heartbeat, sweating, and shaking. Students may also experience negative thoughts and feelings of hopelessness. Based on the explanation regarding anxiety above, it can be synthesized that anxiety can become pathological if it is not appropriately handled as its symptoms can negatively impact the students' academic performance and overall, wellbeing.

According to Thompson (2015), anxiety can be measured by Hamilton Anxiety Rating Scale (HAM-A) which is known to be one of the first scales made to measure anxiety and its symptoms. Due to its popularity, this instrument has been widely used in both research, general and psychological health settings to measure stress or anxiety in the workplace or other specific locations. Hamilton Anxiety Rating Scale (HAM-A) consists

of 14 items, and each is identified by a specific symptom that measures psychic and somatic anxiety. Psychic being mental agitation and psychological distress, and somatic anxiety being physical complaints related to anxiety indicators, which stated as follows:

1. Feelings of uneasiness
2. Stress
3. Worries
4. Difficulty sleeping
5. Cognitive abilities
6. Feelings of sadness
7. Muscular discomfort
8. Sensory discomfort
9. Symptoms related to the heart and blood vessels
10. Symptoms related to breathing
11. Symptoms related to the digestive system
12. Symptoms related to the urinary and reproductive systems
13. Symptoms related to the nervous system
14. Observable behaviour during the interview

These indicators will be used by the authors to measure the level of anxiety in the questionnaires.

2. METHODS

This research is a quantitative study that consists of data analysis based on inferential statistical methods. The sampling technique which is used in this study is purposive sampling. Purposive sampling involves selecting individuals for a study based on specific characteristics predetermined by the researcher. This sampling method proves valuable when the researcher requires information from a particular target group (Stockemer, 2019). The authors use correlation methods to examine the relationship between variables.

Correlation is a statistical technique that helps to determine whether two variables are related, if so, how strongly they are related. There are several reasons why the study uses correlation analysis. First, it helps to identify patterns and relationships between variables that might not be apparent through other methods of analysis. Second, correlation analysis can provide insights into the direction and strength of the relationship between variables. Third, correlation analysis can be used to test hypotheses and to make predictions about future outcomes based on past data.

The study is conducted by using a survey where data is collected using a set of Likert Scale questionnaires. According to Nurgiyantoro (2014:91), a questionnaire is a series of written question lists addressed to research participants/respondents about certain issues, with the aim of obtaining responses from the student respondents. According to Arikunto, questionnaire or survey is a set of written questions used to obtain information from respondents in terms of their personal report or their knowledge of certain things. There are 2 types of questionnaires (Arikunto, 2014):

1. Closed-ended questionnaires: These questionnaires typically ask respondents to choose from a fixed set of options, such as yes/no, or multiple-choice.
2. Open-ended questionnaires: These questionnaires allow respondents to provide free-form answers, often in their own words.

The authors use two questionnaires in this study. The first questionnaire is to measure one's time management skills. It is a modification of the Time Management Behavior Scale (TMBS) which was first developed by Macan et. al. (1990). The second questionnaire is to measure one's level of anxiety. It is a modification of the Hamilton Anxiety Rating Scale (HAM-A.). Below are the steps of how the authors obtain the data collection:

1. Develop the instruments into questionnaires.

2. Distribute the questionnaires to the graduate students.
3. Collect the questionnaires.
4. Analyse and interpret the data from the questionnaires.

3. RESULT AND DISCUSSION

The variable of this study consists of an independent variable, which is time management (X), and a dependent variable, which is anxiety (Y). Thus, this study aims to examine the correlation between time management and anxiety in XYZ Graduate students. The data for this study were collected based on the Time Management Questionnaire (TMQ) and Hamilton Anxiety Rating Scale (HAM-A.) questionnaire was distributed on April 8, 2023, then collected on April 16, 2023. The participants consisted of 40 respondents of XYZ Master Education Graduate Students. There were 9 males (22.5%) and 31 females (77.5%). 18 out of 40 or 45% of the respondents were single, meanwhile 55% of the respondents had been married.

The Time Management Questionnaire (TMQ) consisted of 34 questions that measured four indicators of time management. Setting goals and priorities 10 items (X1), Mechanics of time management 11 items (X2), Preference for organization 8 items (X3), Perceived control over time 5 items (X4). In this study the authors used a 5-point Likert scale ranging from seldom true (1), occasionally true (2), true about as often as not (3), frequently true (4), very often true (5). The underline items are unfavourable items where the highest point would be calculated on Seldom True (1).

Since there were certain items in instrument consistently yield unreliable responses, they could decrease the overall reliability of the measurement, therefore the authors eliminated 12(*) items out of 34 questions, leading to an improvement of its reliability.

No.	Indicators	Item Numbers
1	Setting goals and priorities	1*, 2, 8, 14, 15, 21, 25*, 28*, 31, 32
2	Mechanics of time management	3, 6, 10*, 11*, 17, 18, 19, 22, 26, 29*, 33
3	Preference for organization	<u>4</u> , 5*, <u>12*</u> , <u>16</u> , <u>23*</u> , <u>27</u> , <u>30</u>
4	Perceived control over time	<u>7*</u> , <u>9*</u> , 13, <u>20</u> , <u>24</u> , <u>34*</u>

Table 1. Indicators of Time Management Questionnaire

The authors analysed the validity and reliability using Microsoft Excel. For the instrument to be considered valid, the Pearson correlation coefficient (r) should be equal to or greater than the critical value (r-table) at a significance level of 5% or 1%. The number of students (N = 40), so r-table will be 0.32. Therefore, the instrument will be deemed valid if the Pearson correlation \geq r-table.

Indicator	X1	X2	X3	X4
Correlation	0.83	0.89	0.55	0.47
r-table	0.32	0.32	0.32	0.32
Validity	1	1	1	1

Table 2. Validity

Among 34 questions in the TMQ, those 34 items were confirmed to be valid. According to the validity measurement above, it shows that X1-X4 variable are higher than r-table, thus it can be stated that the instrument of those four of X variables, they are all valid.

Meanwhile, for the reliability test the authors evaluated by calculating the internal consistency. For evaluating the internal consistency of a questionnaire, it is commonly estimated using the coefficient alpha, which is also known as Cronbach Alpha with the formula as follows:

$$r_{11} = \left(\frac{n}{n-1} \right) \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right)$$

Cronbach’s $\alpha = 0$, indicating that none of the items are correlated with one to another. Meanwhile $\alpha = 1$ indicates a perfect internal consistency. A minimum of 0.50-0.70 will be considered as moderate, meanwhile 0.70-0.90 will be considered as high reliability. Out of 34 items, 12 items were removed to enhance the reliability.

Indicator	X1	X2	X3	X4
XTotal				
Variance	14.85	23.59	8.46	2.95
105.13				
Cronbach Alpha (α)	0.70			

Table 3. Reliability

Based on the table above the reliability test result for this study is 0.70 which is considered as high reliability. The next phase for this study is to measure the normal distribution test using Chi Square.

$$X^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

N		40
Normal parameter	Min	57
	Max	98
	Mean	83.28
	Standard deviation	10.25
	Interval	4.5
	Probability	0.95
	Error	9.52
X2 table		15.42

Table 4. Normal Distribution Test

According to the analysis above, the error < X2 table, 9.52 < 15.42, it can be summarized that the data has fallen into a **normal distribution**. For further information and details, it can be found in the attachment. The data has normal distribution and categorized as interval data which is considered as parametric data therefore Pearson test will be applied into correlation test to prove the following hypothesis:

H₀: There is no correlation between time management and anxiety.

H₁: There is a correlation between time management and anxiety.

Correlation	-0.28
r-table	0.32

Result Accept H₀

Table 5. Pearson Correlation Test

By using Pearson correlations test it shows that the correlation of X and Y variable is at -0.28 which is smaller than r-table. Therefore, Ho is accepted.

For the next step the authors will test the second hypothesis as the following:

H₀: The average of female students' time management is the same with male students' time management.

H₁: The average of female students' time management is higher than male students' time management.

In this test the authors conducted a mean testing. Before conducting the Mean testing, the authors examined the normal distribution data of time management based on gender. The result indicated that the males' time management followed a normal distribution meanwhile females' time management did not meet the criteria of a normal distribution. Therefore, the authors used the Mann Whitney U-test which is a non-parametric test that suitable for comparing two independent samples when the normality is not met. Below is the formula for determining the Mann Whitney test that the authors used in Ms. Excel. Initially, the authors determined the U first, μ_U, standard deviation (σ_U), Z-score, then Z-table (p-value) respectively. If the p-value is less than the chosen significance level of 0.05, the null hypothesis can be rejected, indicating a significant difference between the two samples.

$$U = n_1n_2 + \frac{n_1(n_1 + 1)}{2} - W_1$$

$$\mu_U = \frac{n_1 \cdot n_2}{2} \quad \sigma_U = \sqrt{\frac{n_1n_2(n_1 + n_2 + 1)}{12}}$$

$$z = \frac{U - \mu_U}{\sigma_U}$$

W	593.5	226.5
N	31 (F)	9 (M)
U	181.50	

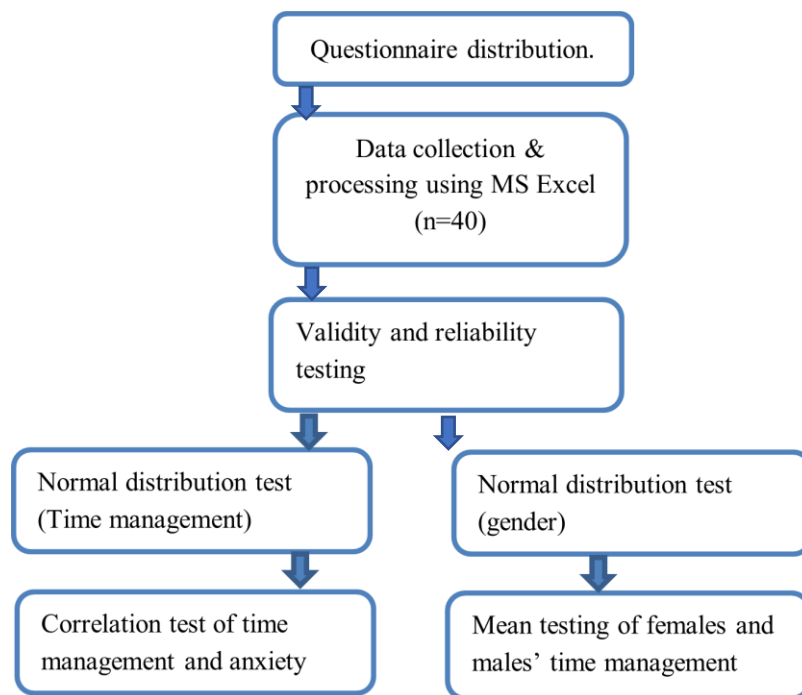
μ_u	139.50
σ_u	30.87
Z-Score	1.36
Z-table	1.64

Table 6. Mann Whitney Mean Testing

According to the data respondents, there are 31 females and 9 males. After being calculated, the result for Z-score is less than Z-table (p-value) therefore the null hypothesis (H_0) is accepted, meaning, the average of female students' time management is as same as male students' time management.

Discussion

Flow chart of data analysis process:



Having gone through of the data processing above, there are some findings in this study that raises several suggestions which might be useful for further research. Since there is no significant relationship between time management and anxiety in this study, it might be interesting to investigate other factors that could potentially influence anxiety levels in graduate students.

Therefore, exploring other variables such as workload, stress levels, or social support, will be recommended as it could provide a more comprehensive understanding of the factors affecting anxiety in graduate students. In addition, increasing the sample size also might improve the power of the statistical tests, which might allow a better reliability of the study findings. Lastly, despite the instruments used are reported and shown to be valid and reliable, it is still valuable to periodically reassess their effectiveness and explore alternative measures to ensure the most accurate assessment of the variables.

4. CONCLUSION

Based on the study above, the following findings can be derived:

- The study involves 40 respondents of XYZ graduate students university in Jakarta, the instruments that used are valid and reliable. The reliability of X variable is 0.70 which is considered as high reliability.
- From the correlation testing H_0 is accepted, meaning there is no correlation between time management and anxiety.
- According to mean testing, H_0 is accepted therefore the average of female students' time management is the same as with male students' time management.

Nevertheless, time management is essential skill and an everlasting process which involves one's life, it's a personal process that requires planning, self-awareness, discipline that needs to be developed continuously to protect one's time efficiently. Though, having a good time management alone may not guarantee success, it is an ultimate or important skill that can help individuals strengthen and optimize their efforts, make progress towards their goal, and maintain a balanced and fulfilling life.

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