

#### **PROCRASTINATION OF STUDENTS IN WORKING MATHEMATICS**

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Abstract --- This research is motivated by the existence of one behavior that can have a negative impact that harms students. One of them is manifested in the form of doing the assignments given by the teacher not on time. The tendency to delay completing tasks by doing other activities that are not useful results in tasks not being completed on time in completing math tasks, which is commonly referred to as procrastination. Based on these problems, the formulation of the problem in the study is (1) How is academic procrastination in doing math assignments for male students? (2) How is academic procrastination in doing math assignments for female students? (3) Is there a difference between the academic procrastination of male students and female students?. This study uses a quantitative method with a research population of class XI high school. The research sample was taken from 10 classes. There are 250 students in 7 classes, 120 male students and 130 female students. This research was carried out by distributing questionnaires to students, a questionnaire containing 40 questions. The results of this study are (1) academic procrastination in doing math assignments for male students is classified as moderate with a percentage of 35.53%. (2) Academic procrastination in doing math assignments for female students is low with a percentage of 33.33%. (3) There are differences in academic procrastination in doing math assignments between male and female students. The conclusion of this study is that students' academic procrastination in doing math assignments between male and female students are at different levels. One of the reasons for the difference in procrastination is the motivation to learn mathematics.

Keywords: Academic Procrastination, Mathematics Tasks

#### **INTRODUCTION**

Article 31 paragraph (1) of the 1945 Constitution states that every Indonesian citizen has the right to education. In Article 2, PIP (Regulation of the Minister of Education and Culture of the Republic of Indonesia concerning the Smart Indonesia Program), the Government aims to support the implementation of universal secondary education or pilot 12-year compulsory education (PIP). Where this program requires Indonesian children to get compulsory education starting from the elementary school, junior high school, high school level. Of the three levels of education above, the most important level of education is Senior High School. This is because high school is the final level of formal education.

In Law No. 20 of 2003 concerning the National Education System, Article 14 states that secondary school is one of the levels of formal education in addition to basic education and higher education (Sisdiknas, 2003). Article 18 paragraphs 1 to 3 of the National Education System states that, secondary education is a continuation of basic education, secondary education consists of general secondary education and vocational secondary education, secondary education is in the form of Senior High School, Vocational High School.

High School is one of the educational institutions that aims to support the realization of national education goals. Senior High Schools are held to increase competitiveness in the face of continuing levels, namely higher education levels in all fields. In the teaching and learning process at the high school level, it does not only get explanations and materials from the teacher,



but the teacher gives assignments to students and demands students to do them. Students as subjects who study in high school will not be separated from learning activities, doing assignments from teachers and other activities.

Many school activities are carried out by students in addition to studying and doing assignments given by the teacher, there are also some students who become activists who take part in extra activities in school, so it takes the ability to manage good time so that all activities can run well and in balance. between one another. The fact that it was found that not all high school students have the ability to manage time well (Jannah and Muis, 2014), especially this usually happens to students who take part in activities or organizations both at school and outside of school. Often face school assignments reluctant or lazy to do it. Students who delay assignments will tend to do it in a hurry.

Procrastination is one of the behaviors that can have a very negative impact on oneself. This can be realized in the form of doing the assignments given by the teacher on time. The tendency to delay starting to complete tasks by doing other activities that are not useful so that the task becomes slow, does not finish on time, and is often late is called procrastination. People who do delaying behavior are called procrastinators (Jannah and Muis, 2014: 2).

While academic procrastination can also be interpreted as an attempt to complete academic tasks but in a period that is not in line with expectations. The behavior of procrastinating work related to academics in psychology is termed academic procrastination. Academic procrastination itself occurs because of the irrational beliefs that students have. Irrational beliefs are beliefs that in their way of thinking instill suspicion.

Regarding procrastination, gender plays an important role. Gender is the difference in roles, functions, status and responsibilities of men and women as a result of socio-cultural construction that is embedded through the process of socialization from one generation to the next. Thus, gender is the result of an agreement between humans that is not natural (Puspitawati, 2012: 1). We know that there are biological and social differences, they also have differences in the way they think and solve the problems they face. Moreover, in the level of procrastination, there may be differences between the two. Dagun in Pramesti (2014) states that men and women have their respective advantages, men excel in the visual spatial field while women excel in the verbal field.

From the results of several studies, it proves that someone doing academic procrastination is caused by several factors, and every individual must also have their own reasons for doing so. Incidents like this of course also experienced by every school. Likewise, what happened in high school, in this study the researchers focused on class XI high school students. This school is one of the educational institutions that highly values success in learning, as evidenced by the fact that its students qualify for several state universities which can be said to be favorites, although not so many, besides that this school has also received many achievements in the non-academic field.

In this study, the researcher took class XI because of this class. In addition, the researcher also found a case when conducting observations in high school, that class XI students were not



punctual in collecting assignments. The delay in collecting the assignments indicated that there was procrastination in class XI high school students. After this research is completed, the researcher hopes that students can develop a sense of self-awareness in completing assignments, influencing teacher performance in teaching students, and increasing learning motivation. Motivation is also expected to be given with a larger portion both from teachers, parents, the environment around students or the students themselves. So all of that can be increased to the next class so that the procrastination level of students is reduced or even non-existent. Based on the background above, in doing procrastination each student must have different reasons.

## **RESEARCH METHOD**

Based on the problems and objectives to be achieved, this research uses a quantitative approach. In this study, the researcher wanted to compare students' procrastination in doing math assignments in terms of gender by conducting a comparative study. These independent variables include: (a) Male students, which are expressed in L, (b) Female students, which are expressed in P. In this study, the dependent variable is the tendency of academic procrastination behavior, which is expressed in Y.

This type of research technique is comparative. This study uses a quantitative research method approach. This study uses a comparative model between two independent samples, i.e. the samples are strictly separated from each other where one sample member is not a member of the other sample.

This research was carried out in a high school in class XI with approximately 25 students in each class. The population in this study were all students of class XI high school from 10 classes with a total of 250 students.

This study uses a research instrument in the form of a closed questionnaire, where the respondent only needs to choose the answer from the question or statement that has been stated in the questionnaire according to his situation. The instrument is an academic procrastination questionnaire. For scoring the questionnaire, the researcher used a Likert model scale with 4 alternative answers because the researcher wanted students to have an opinion on the level of agree and disagree. The next instrument is an academic procrastination questionnaire. The procrastination scale in this study refers to the academic procrastination theory of Ferrari in (Ghufron and Risnawita, 2012: 158). Each question item in this questionnaire is given 4 alternative answers, namely: Strongly Agree, Agree, Disagree, Strongly Disagree. For scoring guidelines as follows:

Table 1 Scoring Guidelines		
Answer	Item	
	Favourable	Unfavourable
Strongly agree	4	1
Agree	3	2
Disagree	2	3

# Table 1 Scoring Guidelines



Strongly disagree	1	4	

Validation of the instrument by testing the validity and reliability. The process of data analysis in this study includes normality test, homogeneity test and hypothesis testing. The procedures for collecting data using the lifting method are preparation and implementation. The following decision norms are used to answer the research hypothesis.

- a. The level of academic procrastination in doing math assignments for male class XI students can be categorized as very high, high, middle, low, very low.
- b. The level of academic procrastination in doing math assignments for female class XI students can be categorized as very high, high, middle, low, very low.

To find out whether there is a significant difference or not in the level of academic procrastination, which is viewed from gender as follows. Because the statistical test uses an independent sample t test, the conditions are as follows.

- a. If a significance > 0.05 is obtained, then Ho is accepted, which means that there is no difference in the level of academic procrastination in doing math assignments between men and women.
- b. If a significance <0.05 is obtained, then Ho is rejected, which means that there are differences in the level of academic procrastination in doing math assignments between men and women.

# **RESEARCH RESULTS AND DISCUSSION**

## Research result

1. Analysis of Academic Procrastination in Doing Mathematics Tasks for Class XI Male Students

After testing the validity and reliability of the instrument, then removing invalid and unreliable item items, the researcher obtained a table of interpretations of the male procrastination score conversion.

<b>Conversion Guidelines</b>	Calculation	Result
Mean+(1,5x SD)	79,41 + (1,5 x 11,062)	96,003
Mean+ $(1,5 \text{ x SD})$	79,41 + (0,5 x 11,062)	84,941
Mean-(1,5 xSD)	79,41 - (0,5 x 11,062)	73,879
Mean-(1,5 xSD)	79,41 - (1,5 x 11,062)	62,817



With the conversion guidelines above, it can be grouped into the following categories:

Score	Category
X1≥96	Very High
$84 \le X_1 \le 95$	High
$73 \le X1 \le 84$	Middle
$62 \le X_1 \le 73$	Low
X1≤62	Very Low

**Table 3 Interpretation of Male Procrastination Score Conversion** 

From Table 3 we can use it to find out how many frequencies and percentages of each category are in male procrastination.

Kategori	Frequency	Percentage
Very High	6	4,42 %
High	35	31,23 %
Middle	43	35,53 %
Low	27	21,37 %
Very Low	9	7,45 %
Total	120	100 %

# Table 4 Number of Respondents in Each Category of Male Procrastination

Based on Table 4 it can be concluded that male students who have very high procrastination are 4.42%, high category is 31.23%, middle procrastination was 35.53%, low procrastination was 21.37% and very low procrastination was 7.45%. So it can be concluded that academic procrastination in doing math assignments for male class XI students is in the moderate category with a frequency of 39 students with a percentage of 35.53%. This is because many male students choose the agree and disagree answers for both favorable and unfavorable statement items.

2. Analysis of Academic Procrastination in Doing Mathematics Tasks for Class XI Female Students

After we know about the percentage and frequency of the variable procrastination in the male gender, the researchers here will continue to calculate the percentage and frequency level of the variable procrastination in the female gender. For female gender data, the number of students is 130 students with a standard deviation of 76.62 with a standard deviation of 9.136. From the data we know above, we can create a guideline for converting values which will then be used for the conversion of women's scores.



Table 5 Guidelines for Conversion of Female 5 values		
<b>Conversion Guidelines</b>	Calculation	Result
Mean+(1,5x SD)	76,62 + (1,5 x 9,136)	90,324
Mean+(1,5  x SD)	76,62 + (0,5 x 9,136)	81,188
Mean-(1,5 xSD)	76,62 - (0,5 x 9,136)	72,052
Mean-(1,5 xSD)	76,62 - (1,5 x 9,136)	62,916

Table 5 Guidelines for Conversion of Female's Values

With the conversion guidelines at Table 5, it can be grouped into the following categories

Table 6 Interpretation of Female Procrastination Score Conversion
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Score	Category
X1≥90	Very High
$80 \le X_1 \le 89$	High
$71 \le X1 \le 80$	Middle
$62 \le X_1 \le 71$	Low
X1≤62	Very Low

From Table 6 we can use it to find out how many frequencies and percentages of each category are in female gender procrastination.

Table 7 Number of Respondents in Each	<b>Category of Female's Procrastination</b>
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Kategori	Frequency	Percentage
Very High	8	6,67 %
High	35	29,16 %
Middle	30	25 %
Low	40	33.33 %
Very Low	7	5,83 %
Total	120	100 %

Based on Table 7 it can be concluded that female students who have very high procrastination are 6.67%, high category is 29.16%, middle procrastination was 25%, low procrastination was 33.33% and very low procrastination was 5.83%. So it can be concluded that academic procrastination in doing math assignments for female class XI students is in the low category with a frequency of 40 students with a percentage of 33.33%. This is because many female students chose the agree and disagree answers for both favorable and unfavorable statement items.



3. Analysis of Are There Differences Between Academic Procrastination of Male and Female Students

After the data is tested for normality and homogeneity, the data will be analyzed by using the t test. This t test is assisted by SPSS 16.0. Based on the calculation results of the independent sample t test with a significance level of 5%, it was obtained Sig (2-tailed) 0.033. Because Sig (2-tailed) < 0.05, there is a significant difference. Then Ha is accepted. It can be concluded that there is a significant difference in academic procrastination in doing math tasks between men and women.

## Interpretation of Data Analysis Results

Based on the results of testing the analysis data, it can be interpreted as follows. A comparative study of academic procrastination in doing math assignments in terms of gender, it was found that based on the average score of male and female students, male students got a higher average score than female students. Judging from the results of data analysis answering the formulation of problems 1 and 2 that the procrastination of male students is at a moderate level with a total frequency of 43 male students with a percentage of 35.53%, while for female students as many as 40 students with a percentage of 33.33%. Based on the results of the t test analysis, Sig. (2-tailed) 0.033, therefore 0.033 < 0.05 so Ha is accepted. It can be concluded that there is a significant difference in academic procrastination in doing math tasks between boys and girls.

## Hypothesis test

a. Submission of Hypothesis 1

The hypothesis is that academic procrastination in doing math assignments for male class XI students can be categorized as very high, high, medium, low, very low. From the results of data analysis conducted by researchers on procrastination, it was stated that academic procrastination in doing math assignments for male class XI students was in the moderate category with a frequency of 43 students with a percentage of 35.53%.

b. Submission of Hypothesis 2

The hypothesis is that academic procrastination in doing math assignments for female class XI students can be categorized as very high, high, medium, low, very low. From the results of data analysis conducted by researchers on procrastination, it is stated that academic procrastination in doing math assignments for female class XI students is in the moderate category with a frequency of 40 students with a percentage of 33.33%.

## c. Submission of Hypothesis 3

The hypothesis, "There is a difference in academic procrastination in doing math assignments between male and female" was accepted. Based on the results of the Independent



Sample t-test, it is known that tcount is 5.358. The t distribution table is searched at = 5% : 2 = 2.5% (2-sided test) with degrees of freedom (df) n-2 or 244 - 2 = 242. With 2-sided test (t = 0.025) the results obtained for ttable of 1,971. It is explained that tcount 2.148 > ttable 1.971, so Ha is accepted. then compare tcount with ttable and the probability obtained by the value of tcount < ttable and on Sig. (2-tailed) that is 0.033 <0.05 then Ha is accepted. It can be concluded that from the results of the 2-sided test (t = 0.025) compared to the 5% significant level, it is stated the same, which means Ha is accepted.

#### Discussion

Academic procrastination in doing math assignments for male class XI students is classified as moderate when viewed from the number of respondents. The number of respondents was 43 with a percentage of 35.53%. This is supported by research conducted by Akmal (2013: 11) which states that based on academic procrastination scores, the majority of subjects are in the medium category, namely 76.786%. Judging from the level of trust, men have a lower level of trust than women in completing their learning tasks.

Then for academic procrastination in doing math assignments for female class XI students, it is relatively low when viewed from the number of respondents. The number of respondents was 40 with a percentage of 33.33%. This is supported by research conducted by Akmal (2013: 28) which states that female students are superior in communication skills (verbal), mathematical, more motivated, organized in learning. It can be concluded that the main cause of student ability in completing school assignments is higher for female students compared to male students because female students are organized in studying or doing assignments compared to male students who are not necessarily organized like female students.

From the explanation above, the researcher will discuss about the differences in academic procrastination in doing math tasks between men and women. From the results of hypothesis testing using an independent sample t test, the significance value or probability value is 0.033 < 0.05. So it can be concluded that there are differences in academic procrastination in doing math assignments between male and female students. By using a gender differentiation scale, researchers can see that there are differences in procrastination between the two.

The results of this study are supported by research conducted by Akmal (2013) which concludes that there are differences in procrastination between female students and male students by controlling time management. Female students have lower procrastination than male students. However, when compared with the research conducted by Handaru (2014), this research is not appropriate, as seen from the results of Handaru's research which states that female students have the same tendency and there is no difference in the level of procrastination between the two. Based on the results of research supported by expert opinions and also strengthened by the consistency of the results of this study with the results of previous relevant studies, it is increasingly clear that there are differences in the level of academic procrastination in doing math tasks between men and women.



## CONCLUSION

The conclusions of this study are academic procrastination in doing math assignments for male class XI students is classified as moderate in terms of the number of respondents. The number of respondents was 43 with a percentage of 35.53%. Academic procrastination in doing math assignments for female class XI students is low in terms of the number of respondents. The number of respondents was 40 with a percentage of 33.33%. After analyzing using the independent sample t test, the significance value or probability value was 0.033 < 0.05, so Ha was accepted. So it can be concluded that there are differences in academic procrastination in doing math assignments between male and female students. This statement has also been proven by the calculation of the average male student having a higher level of procrastination than female.

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