

# Academic procrastination in high school juniors learning Mathematics

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## Abstract

*Academic procrastination is a big problem having noticeable effects on both student's mental health and academic development. Mathematics is really hard and is confusing to a big portion of high school students, along with other factors that are responsible for academic procrastination while learning the subject. These factors are either personal or are caused by the person like mood, unlike external factors which are mainly caused by the surrounding learning environment. Studying these causes can help us find a solution to prevent the consequences.*

## I. Introduction

Mathematics is a relatively difficult subject to learn or study for a lot of students especially in high school years. Problem-solving, reasoning and proof, communication, connections, and representation are five standards used in the process of studying as described by the National Council of Teachers of Mathematics [1], it is not that easy to understand some concepts of Mathematics more than 95% of junior high school students in Indonesia are having trouble reaching mid-levels of Math according to the results of the 2011 Trends in International Mathematics and Science Study (TIMSS) research in the fields of mathematics and science for the second graders of junior high schools. This low level can result from various factors, including the behavior of delaying tasks which are also known as “academic procrastination”, procrastination is the act of delaying or postponing any type of work (i.e., school tasks) in favor of doing an activity (i.e., going out with friends). These students procrastinating do not understand the importance of given tasks as some may find it not useful or not worth the hassle, some others see that these tasks are difficult or that they need a huge amount of time and power to finish.

## II. Personality and Emotion

Academic procrastination has some impacts as well as causes. Perfectionism and a negative self-image are personally related factors while lack of knowledge and study skills and regulation of low self-esteem are competence-related, and there are many other factors like anxiety, boredom, lack of motivation, physical and mental health, and poor management skills. Factors like the quality of teachers, culture, and conditions of the school, and peer influences are external factors.

A study was done to conclude a reason for the act of procrastination focusing on Mathematics as a subject for junior high school students [2]. This study tested the previous factors related to procrastinating by surveying six schools in Indonesia involving 154 students.

The questionnaire asking students about their habits doing tasks resulted in 72 (46.8%) saying that they never delay or postpone a task, 58 (37.7%) had put off tasks before, and 24 (15.5%) always put off or postpone tasks. This means that about 53.2% of these students have experienced academic procrastination while studying mathematics, fewer than half of the students complete tasks on time, it is proven that some cheats tasks doing it in class before the session starts.

The most noticeable problem was that most students were unaware of the importance of these tasks, complaining that it is time and power-consuming with no real benefit besides the fact that they are boring and confusing, and saying that they delayed it due to personal reasons like bad mood or stress from these tasks, this results in them to look for other activities to entertain them and try to escape from the reality and to reduce their stress, this is also caused by emotional discomfort from feelings like fear of failure and learning stress. These students often experience some form of depression or being overwhelmed doing school assignments.

Surprisingly, academic procrastination is not only experienced by lower-performing pupils higher performers start to gain a feeling of perfectionism while doing tasks resulting in a perfectly answered assignment but turned in late blaming the time to finish the task. While this may seem better than other procrastinators who do not submit their tasks, it is still considered a form of academic procrastination. this indicates that some students may have bad time-management skills and low self-regulating.

### **III. Learning Environment and external factors**

Not only that academic procrastination is caused and affected by personal factors, but it can also be affected by external factors like lack of social support or social networks, and the quality of teachers and the learning environment and culture. For example, inconducive studying or learning from home can cause academic procrastination as parents aren't usually strict or discipline of learning at home and not paying enough attention to whether the child is doing his school tasks or not, they only see the child's learning improvement and level from exam grades. This is not always the case as some families pay great attention to their child's education.

Parents can be a great factor while students are at home, the same goes for teachers at school. A good teacher controlling the class and paying attention to tasks can prevent some procrastinating, this discipline act is supported by the teacher encouraging students to complete their work and

giving advice about time-management. On the other hand, teachers that do not discipline along with no motivation or competence can be troublesome causing students to go lazy finishing tasks.

From the six schools included in the survey, two schools were not disciplined enough, these two had the highest levels of procrastination as they were not able to create a culture of achievement. Forty-seven (57.3%) of the eighty-two that did procrastinate were from these two schools. This level of academic procrastination results in noticeably lower grades, students procrastinating had an average of 7.40 in mathematics while students who never postpone their work averaged at 8.10.

### **IV. Conclusion**

Academic procrastination is caused by many factors like the students' unawareness considering the importance of given tasks, complaining about the difficulty of the work, or the time offered to finish. Perfectionism, lack of self-regulation, self-esteem, ineffective learning environment, and indiscipline teachers are also main causes.

Knowing these factors can help find a solution for each of them and take action, inventing new learning strategies is a great solution and can cover many factors as it isn't always the same. For example, since mathematics is really hard and confusing, it can be implemented into activities to make its learning process more fun exterminating boredom. Other effective strategies can be used to prevent procrastination like coordinating with students' schools. Also, parents' contribution is as important, students spend most of the time finishing tasks at home. If these solutions were to be implemented, it will mostly result in lower academic procrastination.

### **V. References**

- [1] C. V. Bell and S. J. Pape, "Scaffolding the Development of Self-Regulated Learning in Mathematics Classrooms," *Middle School Journal*, vol. 45, no. 4, pp. 23–32, 2014.
- [2] D. N. Asri, P. Setyosari, I. Hitipeuw, and T. Chusniyah, "The Academic Procrastination in Junior High School Students' Mathematics Learning: A Qualitative Study," *International Education Studies*, vol. 10, no. 9, p. 70, 2017.