

# **Academic Procrastination: Outcomes and Interventions**

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Abstract. Procrastination is a prevalent topic among researchers and students. It has been investigated from different theoretical perspectives, and various impacts on academic performance have been proposed. This review analyzed recent research collected from Google Scholars and journals and summarizes the impact of procrastination on academic achievement and its necessary interventions. Two different categories of procrastination are identified: active and negative procrastination and their impacts on academic performance. For intervention, examples of three types of interventions are discussed: therapeutic treatment, therapeutic prevention, and teacher intervention. As a result, academic procrastination is generally negatively correlated to academic outcomes. This review supports the needs for additional research on procrastination treatments and the establishment of an adequate understanding of the classroom interventions required to reduce procrastinatory behaviours.

**Keywords:** Procrastination · Academic Performance · Therapeutic Intervention · Teacher Intervention

#### 1 Introduction

In the current educational climate, it is common for students to spend hours on social media platforms before beginning their schoolwork. A student can delay studying for an exam by performing irrelevant tasks, such as cleaning their room, organising their desk, or baking snacks. A student could potentially delay several days when they need to work on their thesis. These behaviours of unduly postponing academic work to the time point of causing subjective discomfort or delaying what is essential to achieve have been defined as "academic procrastination" [1]. Academic procrastination has been prevalent among students. 30 to 60% of undergraduates often postpone educational assignments, such as preparing for final examinations, finishing academic papers, and reading weekly academic resources, to the extent where optimum achievement is very improbable [2]. Steel argued that people would postpone a task in the following situations: when they see a poor possibility of being successful at the activity; they do not anticipate deriving value or delight from executing the activity; there is a significant timely between doing the action and feeling any relevant gain or "payback" [1]. However, these postponed activities will result in psychological distress, anxiety, and unhealthy habits, but they will also affect academic performance [3].

#### 2 Methods

The database of Google Scholar was utilized to carry out an exhaustive search of the published literature. In connection to procrastination, the following search phrases were entered: "academic procrastination", "academic performance", "interventions", and "procrastinating behaviour". The studies were chosen based on the total amount of citations, their relevance, and the date the research was conducted. The research was guaranteed to be of high quality in terms of their writing as well as their reliability and precision.

# 3 The Outcomes of Academic Procrastination

Based on different processes and results of academic procrastination, two distinct categories of procrastinators are proposed: passive and active [4]. Researchers regard passive procrastinators as people who are immobilized by indecision and unable to finish assignments punctually. Active procrastinators, in contrast, are "decent" types of a procrastinator. They make rational choices to postpone because they like to work under pressure, which triggers them to concentrate and perform better. In particular, active procrastinators defer work to the level of passive procrastinators. However, they are more comparable to non-procrastinated peers than passive procrastinators considering intentional use of time, time management, and academic success.

#### 3.1 Passive Procrastination

The negative effects of procrastination are initially focused on undergraduate students, who revealed modest negative correlations between their procrastination behaviour and GPA [1]. An earlier study that studied the connection between academic performance and not putting things off until the last minute found that this phenomenon was also validated by its findings. Undergraduate students who self-reported having high levels of procrastination performed poorly in this study. On the other hand, individuals whose academic achievement was above average had lower levels of procrastination than those who claimed to have average or below average academic achievement. Researchers from Singapore conducted an experiment with 226 undergraduate students to investigate the correlation between academic procrastination and students' performance on grade [6]. The results of the experiment indicated that the procrastination has overall and negative impacts on the academic performance of undergraduate students. As a result, procrastination was found to have a significant relationship with both students' expectations and their ability to self-regulate their learning. Students who lack both a healthy sense of self-efficacy and the ability to self-regulate their learning tend to engage in passive procrastination more frequently and, as a result, receive grades that are below average.

#### 3.2 Active Procrastination

Researchers have considered procrastination a self-defeating, dysfunctional, and impeding habit in the context of completing academic work for decades. Even though Chu

and Choi claimed that not all forms of procrastination are harmful or result in adverse outcomes, this form of putting things off could be considered an example of active procrastination [4]. This concept of active procrastination is further explained by indicating that not all forms of academic postponement or delay have negative repercussions for the student. Previous research found that there is a condition in which periods of delay could potentially enable a person to acquire more comprehensive data and that assist in organizing the school work with more utility-oriented and specific information, which improves the quality of assignments [7]. In addition, one study found that academic procrastination effects are positively and moderately associated with course achievement [8]. This study found this to be the case when the engagement rate in coursework was significant. Students who choose to participate in extra-difficult coursework and materials (the primary reason that students procrastinate is because of the difficulty of the work) are especially likely to see how their participation positively impacts their course marks.

#### 3.3 Limitations

However, previous studies frequently relied on self-reported measures of academic procrastination, which have a limited relationship with real procrastination. This is because self-reporting measures of procrastination are easier to manipulate. Within a given population, the relationship between academic procrastination and performance may be both positive and negative simultaneously. There is the possibility of a positive correlation between academic procrastination and performance in a given sample. On the other hand, there is also the possibility of a negative correlation associated between academic procrastination and performance. Correspondingly, the positive effects of active procrastination can contradict the adverse effects of passive procrastination, leading to incorrect conclusions from various studies.

To provide a comprehensive summary of the effects of academic procrastination, additional research should be carried out to investigate the connection between procrastination and students' performance. This new research should have a larger sample size than the research that has been carried out in the past, and it should also regulate student quality by removing any irrelevant variables that could affect the accuracy of the data. In the end, after controlling for the quality of the students, task procrastination was found to be generally associated with poorer task performance, and the passive procrastination was found to be more prevalent in today's students [9].

#### 4 Interventions for Academic Procrastination

With the detrimental effect of passive academic procrastination, academic procrastination is needed to be well handled and avoided on campus as a severe personal and situational issue occurring among students that need to be addressed [8]. However, research on academic procrastination prevention and treatment is still limited [9]. Current interventions toward academic procrastination have fallen into three categories: therapeutic treatment, therapeutic prevention and teacher intervention [10]. Therapeutic treatment and therapeutic prevention to eliminate procrastination are comparable [10].

However, they differ from the time of the intervention. Therapeutic treatment techniques aim to help after a student has shown procrastinatory behaviour, while therapeutic prevention attempts to minimize the negative consequences of procrastination from the start. Therapeutic interventions can serve as a form of treatment for students who already engage in procrastination behaviours. In comparison, students who do not engage in procrastination behaviours can look at these therapeutic interventions as a form of prevention.

### 4.1 Therapeutic Intervention

Therapeutic treatment in current studies is an effective method to reduce the negative impacts of procrastination [11]. An example of therapeutic treatment is a short-term rehabilitation program with five sessions for procrastination using cognitive approaches. At the start of the treatment program, standardized instructions are given, and each session starts with a recap of the prior session and finishes with a conclusion and elucidation. Students were offered activities to expose their beliefs and practice procrastination between sessions. During sessions, emotional, cognitive, and behavioural aspects were evoked from the group's postponement experiences, which offered instances of activating events and consequences. At the end of the program, the academic procrastination score is reduced significantly, further emphasizing that participants' procrastination habits may be altered by therapeutic treatment by acknowledging erroneous thoughts and inadequate emotions and replacing them with thinking and proper emotions [11].

Intervening treatment for procrastination using acceptance and commitment therapy (ACT) becomes more common and indicates effective usage of reducing procrastination [12]. The ACT program focuses on assisting clients in building skills in non-judgmental acceptance of current feelings and ideas in order to pursue cherished life objectives, which nudges students to focus on schoolwork and eliminate procrastination. In addition, the effectiveness of this strategy in developing participants' psychological flexibility and the relationship between psychological flexibility and procrastination are also shown. The ACT approach might, therefore, decrease not only academic procrastination but also prevent future procrastination via the development of positive psychological flexibility, which is thought to be effective in preventing procrastination and help students to deal with task aversion and fear of failure before they start to procrastinate [12].

Therapeutic interventions are significant in reducing academic procrastination; however, there are two main drawbacks to conducting these strategies [10]. Firstly, expensive therapeutic procedures need the implementation and maintenance of the intervention by skilled therapists. For the average academic institution with limited financial resources, employing such qualified professionals may not be possible, hence delivering the courses may not be practical. Second, the aforementioned intervention strategies are taught in group sessions as part of a separate curriculum, which is time-consuming due to the fact that concurrent courses require extra instructional hours. This strategy may be impractical for both students and academic institutions. For example, students may already be attending classes that fulfilled their schedule. Having extra sessions to help students deal with academic procrastination may actually make procrastination behaviour more acute because there is less time to accomplish schoolwork.

#### 4.2 Teacher Intervention

Teacher intervention is regarded as a more suitable way to help students, especially, overcome procrastination. It is generally more successful and easier to put into practice because it is not necessary for the teacher of the course to have any prior experience or training in the particular forms of treatment covered in the course [10]. When designing classes and assignments meant to assist students in overcoming academic procrastination, teachers should take into account the situational aspects of academic procrastination, according to the findings of the research [8]. This will allow for more effective implementation of teacher interventions. In addition, teachers should give students assignments that will boost their learning processes and engagement with the topics covered in the lessons, and students should be encouraged to choose these assignments.

Furthermore, considering the effectiveness of teacher assistance in reducing procrastination, teaching approaches are more important. Two teaching strategies for improving memory and comprehension of knowledge are introduced, as well as the usefulness of each strategy for students with varying procrastinating habits. The first method was to change teaching approaches by administering tests on each chapter of the content. The second method was to provide a learning strategy by assigning each chapter's outline as homework. Ultimately, students in the method condition received somewhat higher points on a final accomplishment test than those in the outline condition, but both programs functioned well. Due to less procrastination, they created better educational excellence than previously.

Teacher intervention via technology is also used to reduce procrastination. In 2007, students were introduced to the possibility of implementing a text message reminder system to prevent procrastination and motivate them to study the assigned chapter of the textbook and be prepared for the weekly test [14]. The method was created using the principles of free operant avoidance. This means that avoidance behaviour can occur at any time in order to postpone the presentation of unpleasant stimuli.

Therefore, more students completed these assignments without delay in order to avoid receiving messages containing unpleasant stimuli [15]. As a result, procrastination is decreased by this approach, but significant positive effects on academic performance are not obvious because this implementation also minimizes the favourable consequences of active procrastination and nudges students to finish work earlier with poor quality.

# 5 Implications

Because academic procrastination has a negative impact on students' lives over the long term, the purpose of this review is to provide support for teachers working in higher education to understand procrastination and its effects on children. This is because procrastination in the classroom has a negative impact on children. If teachers are aware of the primary determinants and consequences of this occurrence, as well as how to address them in in-class through the application of specific teaching strategies, then their students will be in a position to perform better, and they may experience a reduction in the amount of academic procrastination that they engage in. If teachers are aware of the primary determinants and consequences of this occurrence, as well as how to address them in in-class through the application of specific teaching strategies, then their students

will be If teachers are also aware of how to address these issues with their students in the classroom, then this will be the case. It is essential for learning environments to discuss methods to stop students from putting off their schoolwork, particularly for students in younger grades. The researchers Kim and Seo found that the demographic characteristic had an effect on the apparent relationship between procrastination and academic performance [16]. Their findings can be found here. They carried out a meta-analysis in order to investigate the key demographics that are negatively impacted by procrastination. As a direct consequence of this, the strongest correlation was found among students in secondary schools. This ties in with other research that found younger individuals postpone more than older people and suggested that younger people were influenced negatively more than older [1]. Also related to this is research that found younger individuals postpone more than older people. Therefore, teachers need to place a particular emphasis on the challenges that academic procrastination poses for students of a younger age.

## 6 Conclusion

Procrastination is a common phenomenon; most students are passive procrastinators who put off work until the last minute and perform poorly. Nonetheless, some students are active procrastinators, and their procrastination behaviour positively influences their academic achievement. Overall, procrastination is still negatively associated with academic performance, but its impact depends on the students' purposes for procrastinating. As a consequence of this, therapeutic treatment, therapeutic prevention, and teacher intervention are utilized in order to lessen and resolve the negative effects that are caused by procrastination. Although each of these approaches has its own set of advantages and benefits in terms of cutting down on procrastination, they also each come with a set of disadvantages and lost opportunities. As a result of this, it is recommended that a variety of intervention strategies be utilized in order to address issues related to procrastination. In conclusion, there is a significant need for additional research on this topic to develop comprehensive, practical, and productive teaching strategies that will assist teachers in designing a learning environment that will benefit students by reducing their procrastination tendencies and create a better society for education as a preliminary effort to discuss the impacts of academic procrastination and relevant interventions that are significant to conduct. These teaching strategies will assist teachers in developing a learning environment that will benefit students by reducing their procrastination tendencies.

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