

# Procrastination of College Students: The Relationship Between Self-Efficacy and Academic Procrastination

By Boyu Wen1

<sup>1</sup> College of Liberal Arts, University of Minnesota

Abstract: Procrastination has been a subject of interest and concern in academic settings for many years, capturing the widespread attention of people due to its impact on student performance and mental health. The purpose of this study is to evaluate the relationship between procrastination and self-efficacy among psychology students. The survey was taken by 39 participants in a Research Methods Course at the University of Minnesota. The study utilized data through the Procrastination Assessment Scale-Student (PASS) and the General Self-Efficacy Scale (GSE). Correlation methods were used for analysis which sought to find relationships between variables. The study did not find a significant relationship between academic procrastination and self-efficacy. While the findings were not significant, future research should consider gathering a larger sample size to aid students across various majors in effectively addressing academic challenges.

#### INTRODUCTION

Procrastination is defined as deliberately delaying what is set in motion, putting off until tomorrow what people intend to do today (Ferrari et al., 1995). While always present in life, procrastination sometimes evolves into a pattern of living.

Procrastination is a behavior that people of all age groups engage in, which can sometimes evolve into a pattern of behavior. It is especially prevalent among college students, with 46% of students reporting procrastination when facing term papers, 27.6% when revising for exams, and 30.1%

when reading weekly assignments (Solomon & Rothblum,

1984). Moreover, procrastination often causes adverse mental health effects including stress, anxiety, and depression (Klibert et al., 2011), in addition to affecting the efficiency and quality of learning (Kim & Seo, 2015). Individuals who experience severe procrastination often attribute it to factors such as laziness, anxiety, and failed time management. Nevertheless, an important factor behind procrastination is self-regulatory variables, such as the ability to manage behavior and perception, which





can account for 25% of instances of procrastination (Senécal et al., 1995). Steel (2007) also indicates that procrastination is a manifestation of a general failure of self-regulation.

Self-regulation involves controlling one's behavior, emotions, and thoughts to achieve long-term goals. This process is intricately intertwined with the concept of self-efficacy. Individuals with strong self-regulation and high self-efficacy are more capable of setting and achieving personal goals, which in turn helps to overcome procrastination (Zimmerman, 2000). They are likelier to engage in the self-regulatory behaviors necessary for goal attainment. They approach complex tasks as challenges to be mastered rather than as threats to be avoided, fostering a mindset conducive to self-regulation.

Self-efficacy refers to a person confident in their abilities taking the necessary actions to produce a specific performance achievement (Bandura, 1982; Bandura et al., 1999). The self-efficacy theory suggests that one's perception of themselves strongly influences one's level of effort, perseverance, and subsequent performance (Bandura et al., 1999). This factor has been found to be essential in predicting performance in different areas, such as work motivation, physical activity, and health behaviors. Individuals with a strong sense of selfefficacy have the confidence to navigate obstacles effectively and are more likely to engage in the self-regulatory behaviors necessary for goal attainment. The synergy between self-efficacy and self-regulation is, therefore, critical to understanding procrastination, particularly within the academic realm. Those with low self-efficacy may doubt their ability to control their behavior and emotions, leading to avoidance strategies and procrastination. Zimmerman's (2000) self-regulatory cycle illustrates how

self-efficacy influences an individual's ability to set personal goals, strategize, and reflect upon their performance, which is essential for academic success. For instance, Liu et al. (2020) explored the relationship between academic self-efficacy and procrastination among postgraduate students, examining how self-efficacy influences procrastination behaviors by using a questionnaire-based approach. The results indicated that higher levels of self-efficacy are associated with lower levels of procrastination, revealing a negative correlation between these two variables.

Wäschle et al. (2014) tracked forest and environmental science majors' procrastination frequency and self-efficacy during a college semester. The study used the Self-Efficacy scale and the Procrastination Behavior Questionnaire to measure their perceived self-efficacy and procrastination, using a five-point rating Scale to assess procrastination (Lay & Silverman, 1996). The study conducted by Wäschle et al. (2014) revealed that students with high levels of procrastination rated their goal achievement as low, while those with low levels of procrastination tended to have higher levels of self-efficacy. Regarding dental hygiene majors, Uma et al. (2020) found that individuals with higher self-efficacy tend to procrastinate less. In addition to students in the STEM major, procrastination can also have an impact on students in other majors. However, there is no direct research on the relationship between procrastination and self-efficacy in undergraduate psychology students.

According to previous literature, it can be concluded that self-efficacy and procrastination are correlated. Moreover, based on the studies regarding procrastination in STEM major students, it can be hypothesized that this habit has a



similar negative impact on self-efficacy for students across disciplines. Drawing on this theory, the purpose of this study is to explore more clearly the effect of self-efficacy on procrastination in students studying psychology. The goal is to move one step closer to Wäschle et al. (2014) to examine the influence of self-efficacy on procrastination in a specific psychology major.

In conjunction with the methodology of the above study, to measure self-efficacy, the General Self-Efficacy Measurement Scale (Schwarzer & Jerusalem, 1995) will be used. It quantifies individuals' belief in their ability to exert control over their academics, the higher the score, the greater the confidence. For academic procrastination, the Academic Procrastination Scale (Fischer et al., 2013) will be used to measure the tendency to delay academic tasks. It is hypothesized that similar to students in the sciences, selfefficacy will be negatively related to academic procrastination among psychology major students, with those exhibiting lower self-efficacy scores expected to demonstrate higher procrastination scores.

#### **METHODS**

## **Participants**

All 39 participants were University of Minnesota undergraduate students, ranging from sophomores to seniors. Students were from two different lab sections for the University of Minnesota's Introduction to Research Methods class. The student's academic year ranged from sophomore to senior. Thirty-two participants were female, five were male, and two were non-binary/third gender. Participants in this study were not compensated for their participation.

Materials

In this study, data was collected through an online survey constructed on Qualtrics which is a cloud platform used by researchers or businesses. All participants were required to answer every question in the survey, which consisted of three sections: Demographics, Procrastination, and Self-efficacy. The first section collected information about the gender and academic year of the participants.

The second section asked students a series of questions about academic procrastination. These included situations such as preparing for a final exam, writing a paper, or completing a homework assignment. Participants were asked to assess their level of procrastination in each of these scenarios and responded by indicating on a Likert scale whether they (like never, almost never, sometimes, nearly always, or always) procrastinate. The function of these questions is to measure the frequency and intensity of procrastination behaviors in academic settings. This scale includes items that prompt students to report how much they delay various academic tasks. An example question the participant was asked about involved academic administration: "Imagine you have academic administrative tasks (e.g., filling out forms, registering for classes, getting ID cards, etc.). To what degree would you procrastinate on these tasks?". (see Appendix C).

The third section used a General Self-efficacy Measurement Scale to measure the level of self-efficacy of participants (Schwarzer & Jerusalem, 1995). The measure asked questions about an individual's abilities and performance of self-efficacy, from which participants were asked to choose the option that best suits them. Participants indicated answers based on the Likert scale to what extent they match (exactly true, moderately true, hardly true, or not at all true). One example of the questions participants



responded to included "I can solve most problems if I invest the necessary effort". (See Appendix C)

#### Procedure

In this study, the survey was distributed to participants via email sent by the course teaching assistants. The first page of the survey informed participants that they were involved in a study of the correlation between academic procrastination and selfefficacy. Participants were required to read the informed consent (See Appendix A) before starting the questionnaire. If participants did not agree to participate in this survey, they automatically withdrew from the survey. After providing informed consent, participants began the survey by completing demographic questions, with the remaining questions presented in a set order. Once participants were completed for the procrastination section, they answered questions about self-efficacy, judging to what extent the description matched their true situation. After participants had answered all the questions, the survey ended with a debriefing paragraph. (See Appendix B)

#### **RESULTS**

There was a total of 19 questions on procrastination. For items with five response options, procrastination scores were assigned a value ranging from (1) to (5) for responses of "never procrastinate" to "always procrastinate" (items 1, 4, 7, 10, 13, and 16) and for responses of "not at all a problem" to "always a problem" (items 2, 5, 8, 11, 14, and 17). Based on the guidelines for the Procrastination Assessment Scale-Student (Fischer et al., 2013), each participant's procrastination score was totaled by adding scores from 12 specific questions (1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, and 17).

Self-efficacy scores were assigned to the responses to the GSE items, ranging from (1) for "exactly true" to (4) for "not at all true" (4). Self-efficacy scores for each participant were calculated by adding the value of each response for all 10 questions.

The data were analyzed using the correlation method, specifically employing Pearson's correlation coefficient, to assess the strength and direction of the relationship between procrastination and self-efficacy. Results indicated that procrastination scores and self-efficacy scores were not significantly correlated with each. From the scatterplot (see Figure 1), there was no relationship between the two variables.

## **DISCUSSION**

Previous research, like that of AlFaris et al. (2016), has shown that the level of academic stress, which can vary across disciplines, may affect procrastination behaviors. Our findings suggest that the relationship between self-efficacy and procrastination might be more complex. It is influenced by factors such as academic discipline, sample characteristics, and methodological approaches. Additionally, relying on self-reported data could introduce bias, as participants might not always accurately assess or report their procrastination and self-efficacy levels.

In combination with previous studies, it was found that in our questionnaire section, there may be inaccuracies in the structural efficacy of the survey since only part of the Academic Procrastination Scale (Fischer et al., 2013) was used to measure the level of procrastination. Our survey selected the first 12 items of the academic procrastination scale, such as administrative tasks and final exams. Using only a subset of the questionnaires may reduce the precision of the measures of academic procrastination



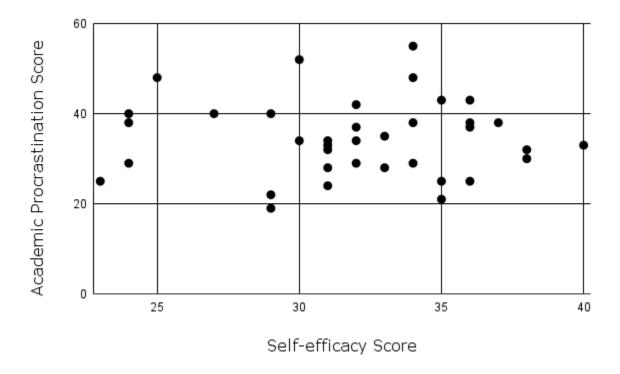
scores. Future research should utilize the complete set of questions from the Academic Procrastination Scale (Fischer et al., 2013) to measure academic procrastination more effectively. Researchers can achieve more accurate procrastination scores by incorporating diverse scenario-based questions covering basic academic activities, such as speech and completing lab assignments. This comprehensive approach would enhance the structural integrity of the survey and provide a more precise assessment of procrastination levels across a broader range of academic tasks.

Suppose the negative relationship between academic procrastination and self-efficacy is confirmed in psychology students. In that

case, this insight can be instrumental in developing targeted interventions to assist particularly psychology students struggling with procrastination. By bolstering students' self-efficacy, educators could develop and implement strategies such as goal-setting workshops, time management skills sessions, and cognitive-behavioral coaching to mitigate procrastination. These interventions can be tailored to the specific needs of psychology students, who may face unique challenges related to their field of study. The key takeaway is that by understanding and addressing the underlying factors of procrastination, educational institutions can enhance students' academic journey in grappling with this pervasive issue.

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*Figure 1.* Correlation between academic procrastination and self-efficacy



# Appendix A

#### Form A: Informed Consent

You are being asked to complete a questionnaire as a class project of PSY3001W at the University of Minnesota, Twin Cities. The survey consisted of 30 questions, and it will take about 10 minutes to finish. Your level of self-efficacy and procrastination will be examined through the survey. Please exit the study if you choose not to participate. If you choose to participate, we will not collect any identifying information from you and will keep the data confidential. If you change your mind while taking the survey, you may stop or exit the survey at any time if you have questions. You may ask questions before and after completing the survey. Click the "next page" to start the survey if you consent to participate.

## Appendix B

#### **Debriefing Statement**

Thank you for the completion! The survey consisted of two pre-existing surveys: the Procrastination Assessment Scale-Student (PASS) and the General Self-Efficacy Scale (GSE). Your degree of academic procrastination was examined with questions 3 – 21 from the first part of the PASS, and your degree of self-efficacy was examined with questions 22-30 from the GSE. The relationship between participants' self-efficacy and academic procrastination will be tested with the scores from the PASS and the GSE. If you have any questions, please reach out to the course instructor or the research team with any questions or concerns.

## Appendix C

### **Procrastination Assessment Scale-Student (PASS)**

- 1. Imagine you are assigned with a 5,000 words final research paper, to what degree you procrastinate on a task.
- Never procrastinate; Almost never; Sometimes; Nearly always; Always procrastinate
- 2. To what degree is procrastinating on this task a problem for you?
- Not at all a problem; Almost never; Sometimes; Nearly always; Always a problem
- 3. To what extent do you want to decrease your tendency to procrastinate on this task? Don't want to decrease; Somewhat; Definitely want to decrease
- 4. Imagine you are preparing for a final exam, to what degree do you procrastinate on a task?
- Never procrastinate; Almost never; Sometimes; Nearly always; Always procrastinate
- 5. To what degree is procrastinating on this task a problem for you?
- Not at all a problem; Almost never; Sometimes; Nearly always; Always a problem
- 6. To what extent do you want to decrease your tendency to procrastinate on this task? Don't want to decrease; Somewhat; Definitely want to decrease

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7. Imagine you have to keep up with a weekly reading assignment, to what degree you procrastinate on a task?

Never procrastinate; Almost never; Sometimes; Nearly Always; Always procrastinate

8. To what degree is procrastinating on this task a problem for you?

Not at all a problem; Almost never; Sometimes; Nearly always; Always a problem

- 9. To what extent do you want to decrease your tendency to procrastinate on this task? Don't want to decrease; Somewhat; Definitely want to decrease
- 10. Imagine you are having academic administrative tasks (e.g., filling out forms, registering for classes, Getting ID cards, etc.), to what degree do you procrastinate on a task?

Never procrastinate; Almost never; Sometimes; Nearly Always; Always procrastinate

11. To what degree is procrastinating on this task a problem for you?

Not at all a problem; Almost never; Sometimes; Nearly always; Always a problem

12. To what extent do you want to decrease your tendency to procrastinate on this task?

Don't want to decrease: Somewhat: Definitely want to decrease

13. Imagine you are having attendance tasks (e.g., meeting with your advisor, making an appointment with a professor, etc.), to what degree do you procrastinate on a task? Never procrastinate; Almost never; Sometimes; Nearly Always; Always procrastinate

14. To what degree is procrastinating on this task a problem for you?

Not at all a problem; Almost never; Sometimes; Nearly always; Always a problem

15. To what extent do you want to decrease your tendency to procrastinate on this task? Don't want to decrease; Somewhat; Definitely want to decrease

16. Imagine you are having school activities in general, to what degree you procrastinate on a task?

Never procrastinate; Almost never; Sometimes; Nearly Always; Always procrastinate

17. To what degree is procrastinating on this task a problem for you?

Not at all a problem; Almost never; Sometimes; Nearly always; Always a problem

18. To what extent do you want to decrease your tendency to procrastinate on this task? Don't want to decrease; Somewhat; Definitely want to decrease

19. To what extent do you want to decrease your tendency to procrastinate on all the activities above?

Don't want to decrease; Somewhat; Definitely want to decrease

# **General Self-Efficacy Scale (GSE)**

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1. I can always manage to solve difficult problems if I try hard enough Not at all true Hardly true Moderately true Exactly true 2. If someone opposes me, I can find the means and ways to get what I want

Not at all true Hardly true Moderately true Exactly true 3.It is easy for me to stick to my aims and accomplish my goals Not at all true Hardly true Moderately true Exactly true 4.I am confident that I could deal efficiently with unexpected events. Not at all true Hardly true Moderately true Exactly true 5.Thanks to my resourcefulness, I know how to handle unforeseen situations.

Not at all true Hardly true Moderately true Exactly true



6.I can solve most problems if I invest the necessary effort.

Not at all true Hardly true Moderately true Exactly true

7.I can remain calm when facing difficulties because I can rely on my coping abilities.

Not at all true Hardly true Moderately true Exactly true 8. When I am confronted with a problem, I can usually find several solutions.

Not at all true Hardly true Moderately true Exactly true 9.If I am in trouble, I can usually find several solutions. Not at all true Hardly true Moderately true Exactly true 10.I can usually handle whatever comes my way. Not at all true Hardly true Moderately true Exactly true

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