Academic Procrastination

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I. Abstract

As current high school and or college students, our experience with procrastination in the academic environment has given us a firsthand perspective to the environmental and social stressors that cause students to procrastinate. It is evident that while researching and conducting surveys on current college and high school students, there is a direct correlation between perfectionism, social/environmental stressors, a students mental health and academic procrastination. With student workload increasing over the years, this has resulted in students procrastinating more and more on assignments. Through surveys conducted, as well as extensive research done, we have found this to be true in adolescent students and have found that there are misconceptions on why students procrastinate. In order to combat this issue we have created an app that intends on helping students better manage their time.

II. Introduction

Stress is a normal part of life, stemming from school life or personal life. Specifically in college students, as they face much more problems than high school students. The problems faced by college students is unprecedented, as they enter college or university with high hopes. These problems can range from simple social stressors, such as social situations brought upon them in school, overscheduling, sleep deprivation, homework problems, test anxiety, and other stressors. Sleep deprivation - a major contributor to the heightened risk for anxiety among college students. For example, this is caused by drinking excess caffeine and pulling all-nighters is associated with increased anxiety among college students. Social stressors such as loneliness also predict mental health problems, including anxiety. A little stress is actually good, as it motivates students to overcome challenges. However, too much stress can negatively impact a student's mind and body, which can result in a variety of issues.

In an article written by stress.org - *The American Institute of Stress*, "Many types of anxiety disorders can afflict college students. According to the Mayo Clinic, symptoms of anxiety include nervousness, unease, a sense of impending danger or doom, sweating and trembling, inability to maintain focus, uncontrollable worry, and insomnia. Generalized anxiety disorder is characterized by feelings of restlessness, fatigue, and difficulty maintaining focus, according to the U.S. National Institute of Mental Health (NIMH). Anxiety is present in such specialized disorders as phobia-related illnesses caused by an inordinate fear of certain items or situations, such as germs or confined spaces."

III. Literature Review

"Multidimensional Perfectionism and Academic Procrastination: Relationships with

Depression in University Students1 - C. Douglas Saddler, Laurie A. Sacks, 1993", this article is

written about a study conducted on 200 students (98 of which were male and 102 females) that

were selected from universities in the city of Tehran through multistage cluster-random

sampling. These students were asked to complete multiple questionnaires - Multidimensional

Perfectionism Scale and Procrastination Assessment Scale-Students. The results from the

questionnaires yielded three dimensions and total scores of perfectionism (concern over

mistakes, parental criticism, and doubts about actions) which were found to be positively and

significantly correlated with academic procrastination and organization dimension negatively and

significantly correlated with it.

Multidimensional Perfectionism and Academic Procrastination: Relationships with Depression in University Students, is an article going over depression and how depression in college students directly correlates to unidimensional perfectionism and academic procrastination. "Multidimensional perfectionism, consisting of self and social dimensions, and academic procrastination have not been simultaneously examined for their interrelationships with one another and with depression."

"Do adaptive perfectionism and self-determined motivation reduce academic procrastination?", in this article, contrary to the other articles that are used in this annotated bibliography, goes over how adaptive perfectionism and self-determined motivation may actually reduce academic procrastination. In the study conducted, a collective amount of college students were presented with a survey. The survey included "a 35-item Multidimensional Perfectionism Scale, a 28-item Academic Motivation Scale, and a 35-item Procrastination Assessment Scale.".

The survey concluded that - using hierarchical regression analyses - multiple facets of perfectionism correlated and or predicted multiple forms of procrastination, which include "exam preparation, writing papers, and completing reading assignments".

Dynamic interplay of depression, perfectionism and self-regulation on procrastination, an article which strives to understand the psychological intercorrelation "affective, cognitive and behavioral components on procrastination.". In the study conducted, a total of 402 undergrad students participated, 115 of which were males, 286 of which were females, and 1 which was not indicated. "A constructed hypothesised model was tested by utilising path analysis. Overall, the analysis indicated that the model sufficiently explained the data."

Perfectionism, procrastination, and psychological distress, similarly to the other articles, examined the stability of "maladaptive perfectionism, procrastination, and psychological distress across 3 time points within a college semester". Each study conducted was substantially stable over time, "with procrastination being especially stable".

IV. Research Question

Academic procrastination is a major issue amongst college and high school students. In recent years, there has been studies conducted to determine where academic procrastination may stem from. In the studies performed, it was found that procrastination stemmed from issues pertaining to the students mental and or physical well-being (some of these include a students mental illness and physical and or mental exhaustion). To be more specific, procrastination stemmed from the students academic stress, their inability to hit perfectionism and or lack of motivation. What my project wishes to achieve is a way to decrease procrastination in students which raises the question, *How could I help decrease academic procrastination in students?*

V. Research Method

A. Participants

The participants for this study are students. The students' ages would range from highschool pre-adolescents, to college aged adolescents.

B. Instrumentation

The instruments that will be used for this study are interviews, questionnaires, research, and observations. During an interview, I will be asking a select group of students, about what may be the cause of their procrastination, as well as multiple other questions pertaining to academic procrastination. Although some students may not know the exact cause of their procrastination, they should have a rough understanding of where it may stem from. While it may not be listed above, asking teachers would also be a great idea as it would shed some light on procrastination. The questions that I would ask teachers would be somewhere along the lines of, if they know what may be a cause for a students procrastination. This is one of the methods in which I chose to conduct my research. Other methods that I have chosen include extensive research on the subject at hand - academic procrastination. This would be a much more valuable source of information as there are more studies online conducted by multiple research officials (i.e. scientists, psychologists, other researchers, etc.)

C. Procedures

The procedures for this study are not very difficult. The procedures would include searching the internet for other similar studies conducted as well as doing my own 'field' research by interviewing both students and teachers.

VI. Results

Figure 1.1.

SCHRAW, WADKINS, AND OLAFSON

Table 2 Initial Categories and Codes in Phase 1

Category	Code
Antecedents of procrastination	Lack of personal interest Lack of task-relevant knowledge
	3. Aversive task
	Better use of resources to delay work Competing interests
	6. Lack of focus
	7. Laziness
	8. Low motivation
	9. Poor instruction
Definitions of procrastination	10. Putting things off that need to be done
	11. Deferring necessary work
	12. Postponing important tasks
Contexts and conditions that affect procrastination	13. Busy with other activities
	14. Grades
	15. Belief that effort doesn't help
	16. Help from others
	17. Low study self-efficacy
	18. Poor study strategies
	Teacher doesn't hold students accountable
	20. Poor teaching
	21. Stress
Coping strategies	22. Make a schedule
	23. Manage time
	24. Plan and prioritize
	25. Work with other students
	26. Monitor negative self-talk
	27. Use a variety of study strategies
Consequences	28. Guilt
	29. Less effort put into schoolwork
	30. Greater productivity
	31. Increased stress 32. Progressing does not affect quality of work
	 Procrastination does not affect quality of work Increased confidence
	55. Increased confidence

Figure 1.1. - Table 2 questions

- 1. How would you describe academic procrastination?
- 2. What do you do when you procrastinate?
- 3. Are there situations where you are most likely to procrastinate?
- 4. How do you cope when you do procrastinate?
- 5. What are some of the positive and negative consequences of procrastination?

Figure 1.2.

Table 3
Macrothemes and Themes in Phase 3

Category	Macrotheme	Theme
Antecedents of procrastination	1. Task	Low background knowledge
		2. Task difficulty
	2. Self	3. Interest
		4. Organizational skills
	3. Teacher	Clear expectations for course
		Well-organized course materials
		Tests and graded assignments
Definitions of procrastination phenomenon	 Adaptive aspects of procrastination 	8. Cognitive efficiency
		Peak work experience
	Maladaptive aspects of procrastination	Laziness
		11. Fear of failure
		12. Postponement of work
Contexts and conditions that affect procrastination	Unclear directions	III-defined course content
		Unclear criteria for grading
	7. Deadlines	Lack of due dates for assignments
	Lack of incentives	Low intrinsic motivation; high self-efficacy
		Low impact of procrastination on grades
Coping strategies	9. Cognitive	18. Identifying clear learning goals
		Planning and organizing future work
		Budgeting resources (time and effort)
	10. Affective	21. Reframing
		22. Protective self-talk
		23. Stress reduction (physical and psychological)
Consequences of procrastination	11. Quality of life	24. Cognitive efficiency
		25. Improved quality of work
	12.0 17. 5. 1	26. Peak work experience
	12. Quality of work	27. Increased efficiency
		28. Cognitive incubation
		29. Less revision of work

Figure 1.2. - *Table 3 questions*

- Describe a typical situation in which you might procrastinate.
- What causes you or other students to procrastinate? Probes: self, teacher, and task characteristics.
- Please list as many reasons as you can why you procrastinate. Probes: adaptive (e.g., increased efficiency) and maladaptive (e.g., laziness).
- What do you do to cope with procrastination? Probes: affective (e.g., positive self-talk) and cognitive (e.g., plan ahead) strategies.
- Can you identify conditions or situations where you are most likely to procrastinate? Probes: directions, deadlines, and incentives.
- What are the positive and negative consequences of procrastination? Probes: quality of life and quality of work.

Figure 1.3. A paradigm model for academic procrastination

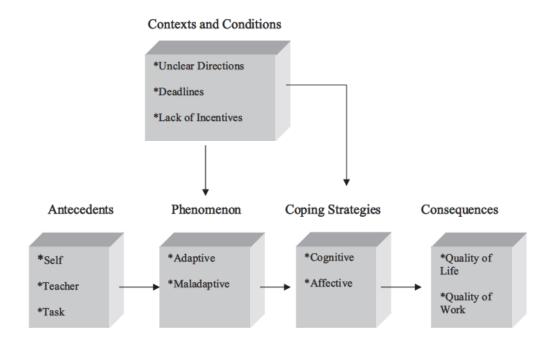


Figure 1.1 - 1.3; Tables 2 and 3 (*Initial Categories and Codes in Phase 1* and *Macrothemes and Themes in Phase 3*) Schraw, G., Wadkins, T. and Olafson, L., 2007. Doing the things we do: A grounded theory of academic procrastination. Journal of Educational *Psychology*, 99(1), pp.12-25.

The results from the student surveys as well as other studies conducted by research scientists have yielded expected results. The results showed that students were aware of their procrastination as well as to why and how they would procrastinate. In Figures 1.1 - 1.2, in a study conducted by the authors (*Schraw, G., Wadkins, T., & Olafson, L. (2007).*) of *Doing the things we do: A grounded theory of academic procrastination. Journal of Educational Psychology)*, the studies and interviews' results were based on open-ended questions. The students who were selected/participated in this study were between the ages of 20 and 33 years

old (college leveled students; 40 women and 27 men). The form in which this data was collected was by using what is known as *grounded theory*. Grounded theory is a systematic methodology that has been largely, but not exclusively, applied to qualitative research conducted by social scientists. The methodology involves the construction of hypotheses and theories through the collecting and analysis of data. (*Chun Tie, Y., Birks, M. and Francis, K., 2019. Grounded theory research: A design framework for novice researchers. SAGE Open Medicine, 7, p.205031211882292.*). This research paper (*Doing the things we do: A grounded theory of academic procrastination*) yielded more concrete and conclusive results than my survey did, although my survey asked similar questions, the study conducted by these authors had a much more broad range of students. "*Participants attributed procrastination to three types of antecedents, including the characteristics of the self, teacher, and task (see Table 3*)." (*Schraw, G., Wadkins, T., & Olafson, L. (2007).*) of *Doing the things we do: A grounded theory of academic procrastination. Journal of Educational Psychology*).

VII. Product Solution

Many students often struggle with stress and anxiety which often factor into procrastination. The product I intend to create is an application that would be used to combat academic procrastination in students. This application would have multiple functionalities that would help prevent procrastination. The functionalities include a section for notes (for task management), book search, calendar (for time management), and a fitness tracker (for health management).

VIII. Conclusion

Through the insight and experience gained whilst completing this capstone project as well as the extensive research and studies conducted or obtained, I have concluded that there is a direct correlation between social/personal stressors and academic procrastination in high school and college students. Procrastination is widespread, with over 86 percent of high school students saying that they procrastinate when it comes to completing assignments and between 80 - 95 percent of college students saying that they procrastinate, particularly when it comes to course work. (*Psychological Bulletin, Vol. 133, No. 1*). Social, personal and environmental stressors are a major contributor to why students tend to procrastinate on course work.

Throughout the completion of my capstone, I have been able to apply skills attained through past computer science courses as well as some minor psychology courses, in a more creative and professional manner. A majority of the steps taken in creating and completing my product derived from countless amounts of research into psychology and application development.

During the completion of this Capstone project, I was able to experience the level of problem solving and critical thinking needed for application development. My perspective on the field of psychology and computer science has been greatly widened and gone past the surface of basic psychology articles and mobile applications. With extensive research, analyzing psychological articles and existing mobile applications, understanding building and creating websites and mobile applications, user interface design and user experience, seeking functionality, all while meeting the needs of both high school and college students has opened my eyes to the complexity of both careers (computer science and psychology).

IX. References

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