Understanding Academic Procrastination: Causes, Correlates, and Gender Nuances for Enhanced Self-Regulated Learning

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ABSTRACT

The study investigates academic procrastination, analyzing 50 participants using the Procrastination Assessment Scale (PASS). It identifies significant correlations ($p < 0.05$) between procrastination domains, causes, and self-efficacy, highlighting gender-related nuances. Procrastination affects multiple academic aspects concurrently, with intertwined causes like task aversion and distractions. Strong self-efficacy mitigates procrastination's impact, empowering students in their academic pursuits.

The research emphasizes holistic approaches targeting procrastination's core triggers and underscores the importance of bolstering self-efficacy to foster self-regulated learning. Gender-specific differences in procrastination patterns suggest tailored interventions in educational settings.

Beyond academia, findings have implications for workplace productivity. The study prompts further exploration of procrastination's long-term effects on careers. It urges proactive measures to combat procrastination's pervasive influence, enabling individuals to seize educational opportunities and confront challenges resiliently.

Keywords: Academic Procrastination, Self-efficacy, Self-regulation, Gender

INTRODUCTION

"It's like going into a really cold lake when you've decided you're going to go swimming in it. You put your foot in, you take it out, and it's still too cold. And then you think, am I really going to do this? If you are going to, you run in screaming." - Margaret Atwood

Researchers have defined procrastination as an unreasonable inclination to put off necessary chores or assignments in spite of the consequences for both individuals and organisations (Lay, 1986; Steel, 2007; Klingsieck, 2013). *"Procrastination is the thief of time", and "procrastination is the art of keeping up with yesterday"*, are only two metaphors used by poets to describe it (Ferrari et al., 1995). In terms of time management, literal connotations are still there. According to the Latin roots of the terms "pro-," meaning "forward, forth, or in favour of," and "-crastinus," meaning "tomorrow," procrastination is conceptualised as inactivity, postponing, delaying, or putting off a choice (Klein, 1971).

Academic failure affects a large number of students in higher education (Vossensteyn et al., 2015). Academic procrastination is one of the elements linked to academic failure (Kim & Seo, 2015; Steel, 2007). Negative effects of procrastination include missed deadlines for schoolwork, stress during exam preparation, and social anxiety. Primarily, they possess a clear understanding and the adverse

consequences of the delay. Consequently, this incident may diminish their level of satisfaction with their own performances. One-fifth of the adult population finds it difficult to complete their daily homework assignments due to the high incidence of this condition (Klassen et al., 2008).

The COVID-19 pandemic is causing systemic shifts in learning and teaching activities from offline to online-based. Students worldwide face significant challenges with autonomous learning, computer-based learning, and a lack of interaction with classmates and teachers, therefore these necessitates lack efficient time management (Pelikan et al., 2021).

The prevalence of academic procrastination among students has increased significantly (Tezer et al., 2020; Pelikan et al., 2021; Buana et al., 2022), and this phenomenon during the implementation of the online learning policy is supported by earlier research that indicates that online learning is associated with the deferral of completing tasks related to learning (Steel and Klingsieck, 2016). Although it might have unfavourable effects, students often procrastinate (Goroshit, 2018). Henceforth, it result in low grade score (Kljajic and Gaudreau, 2018). Due to plethora factors, students procrastinate in completing their academic tasks, submit assignments past the deadline, and struggle with time management throughout their academic sessions. (Laia et al., 2022). Indulgence will lead to a harmful mindset for childrens psychological development if the behaviour is not controlled. (Zacks and Hen, 2018; Amir et al., 2020; Maqableh and Alia, 2021; Peixoto et al., 2021; Pelikan et al., 2021; Prasetyanto et al., 2022).

The majority of academic procrastination research has focused on internal issues, flouting the impact of external factors, for instance, a specific procrastination sites and their interactions with personal motivations and self-efficacy. This research addresses how the internal and environmental elements collectively influence academic procrastination behaviour sand practices. The objective of this correlational study is to examine the impact of students' academic procrastination on their attitudes towards their own academic efficacy. (Bandura, 1997; Bong, 2001; Brown et al., 1989; Hackett et al., 1992; Lent et al., 1984; Multon et al., 1991)

Academic functioning, effort regulation, perseverance, improved tenacity in finding answers, and overall academic accomplishment can all be impacted by academic self-efficacy beliefs. High academic self-efficacy students are more likely to be self-regulated learners, have better time management skills, and procrastinate less in class (Zimmerman, 1994; Zimmerman & Paulsen, 1995). Furthermore the study aims to understand how does the nature of the task affect students' procrastination behaviours and their main justifications behind the same.

The variables considered for the study were primarily the Task Type. When examining academic practices on which the students procrastinate on, it is crucial to take into account their inherent characteristics or attributes. This variable considers the differentiation among different activities, such as collaborative projects, investigative projects, written tasks, and exam preparation. Secondly, reasons for Procrastination ,this variable includes the underlying motives and defences that cause students to put off completing academic assignments. Some possible explanations include things like task aversion, lack of interest, fear of failure, and external distractions. Thirdly, Self-Efficacy. Self-efficacy refers to a person's confidence in their capacity to execute academic activities successfully and obtain desired results. It reveals a student's self-assurance in their knowledge and abilities.

The research finally aims to make these predictions, Firstly, Procrastination is more likely to occur with some academic activities (task categories) than others, and this tendency is influenced by variables including difficulty and perceived significance. Secondly, Academic procrastination tendencies will be greatly influenced by the causes, and the reasons for procrastinating will have a moderating effect on the

association between task type and procrastination. Thirdly, Academic procrastination will be less common among students who have stronger self-efficacy beliefs, and self-efficacy levels will mitigate the link between task type, procrastination causes, and procrastination behaviours.

METHOD

Objectives:

The following are the goals of this study, which focuses on self-efficacy, procrastination causes, and different forms of academic procrastination in tasks:

To recognise and classify various academic assignments that students often put off. To investigate and examine the causes of students' academic work procrastinating behaviours. To measure students' self-efficacy attitudes about their capacity to successfully accomplish academic assignments.

Procedure:

Tools Used

Students' Procrastination Assessment Scale (PASS): The participants were given the PASS questionnaire. This scale is intended to evaluate a number of procrastination-related factors, such as task-specific procrastination, procrastination causes, and self-efficacy in relation to academic activities.

Sample:

Fifty people were sampled for the research. Convenience sampling was used to choose the participants, with an emphasis on variety in terms of academic majors, number of years of study, and demographic traits. This sample size was determined to be suitable for the study's objectives.

Analysis using statistics and data management

To summarise and characterise the data, descriptive statistics including means, standard deviations, and frequency distributions were produced. Inferential statistical studies, such as correlation analysis, were carried out to investigate the connections between the relevant variables. To extract valuable insights from the gathered data, data were maintained and analysed using statistical software (such as SPSS).

Design:

This study's cross-sectional research approach entails data collecting at a specific moment in time. The purpose of the study is to categorise the many academic procrastination activities, investigate the causes of procrastination behaviours, and gauge participant self-efficacy views.

ETHICAL CONSIDERATIONS

In this study, ethical issues included:

Participants received thorough and comprehensive information about the study's aims, methods, and any hazards before giving their informed consent. Before beginning the PASS survey, all participants gave their informed consent. Confidentiality: All information gathered was kept secret, and participants' identities were safeguarded. To protect participant privacy, data were made anonymous. Ethical permission: To make sure that the research complied with ethical norms and guidelines, the study acquired ethical permission from the relevant institutional review board or ethics committee.

RESULTS

The findings of our research demonstrate a statistically significant relationship between several domains of procrastination, factors contributing to procrastination, and one's perceived ability to accomplish tasks

(self-efficacy), with a significance level of 0.05. Moreover, there is a notable association between gender and the aforementioned three groups. The research was carried out with a sample size of 50 individuals. The results of the correlation study indicate a statistically significant association between the variables.

Areas Of Procrastination

The results of the correlation study demonstrate a noteworthy association between several domains of procrastination, suggesting that individuals have a tendency to engage in procrastination across multiple areas concurrently.

Reasons Of Procrastination

The reasons for procrastination among participants were shown to have a substantial association, indicating that there may be shared underlying variables contributing to different reasons for postponing.

Self-Efficacy

Self-efficacy, a construct that pertains to an individual's perceived capability to successfully do tasks, exhibited a noteworthy association with both dimensions of procrastination and rationales underlying procrastinatory behaviors. This finding implies that those with higher levels of self-efficacy exhibit a decreased inclination to engage in procrastination.

The study also found a substantial correlation between gender and other aspects of procrastination, including areas of procrastination, motivations for procrastination, and self-efficacy. This suggests that there could potentially exist variations based on gender in terms of how individuals perceive and interact with the concepts of procrastination and self-efficacy. In brief, the results of our study indicate a significant association between procrastination, its underlying factors, and self-efficacy, with potential gender-related implications. The findings of this study offer significant contributions to the comprehension of procrastination behavior and could potentially inform the development of therapies and methods designed to mitigate procrastination tendencies.

CENTRAL TENDENCY

Areas Of Procrastination

STATISTIC	FINDING
MEAN	3.28
MEDIAN	3
MODE	3

Note - The participants had an average procrastination score (mean) of 3.28. This table includes the areas of procrastination, the mean value of 3.28, and the median and mode, both of which are 3 in this case.
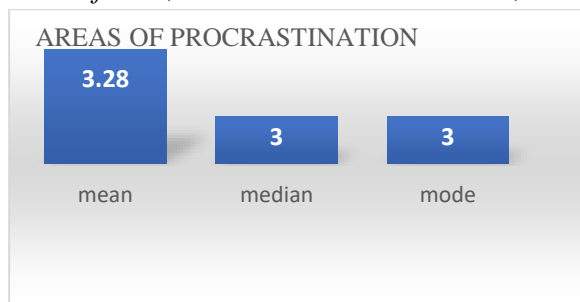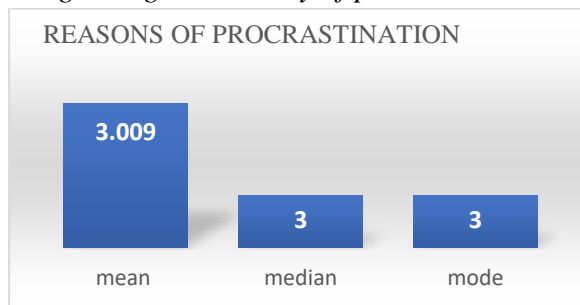

Note - This chart is a graphical representation of table 1 of participant's evaluation of areas of procrastination.

Reasons Of Procrastination

STATISTIC	FINDING
MEAN	3.009
MEDIAN	3
MODE	3

Note - The table above illustrates the reasons for procrastination, each assigned a mean score of 3.009. The mean reflects the average value of respondents' ratings for each reason. Additionally, both the median and mode for each reason are 3, indicating a central tendency around this value. This suggests a consistent perception among participants regarding the severity of procrastination-inducing factors.
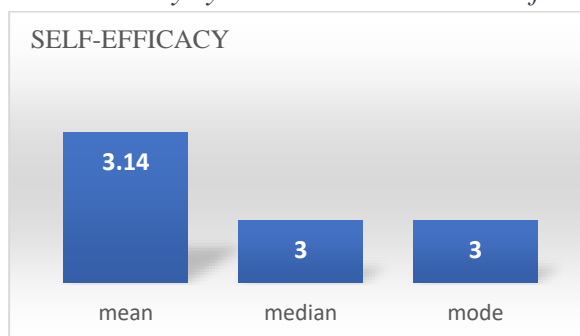

Note - This chart is a graphical representation of table 2 of participant's evaluation of reasons of procrastination.

Self-Efficacy

STATISTIC	FINDING
MEAN	3.14
MEDIAN	3
MODE	3

Note- The central tendency of the dataset reveals a mean score of 3.14, indicating the average level of self-efficacy reported by the participants. Additionally, both the median and mode were found to be 3, suggesting a well-distributed and relatively symmetrical distribution of self-efficacy scores.
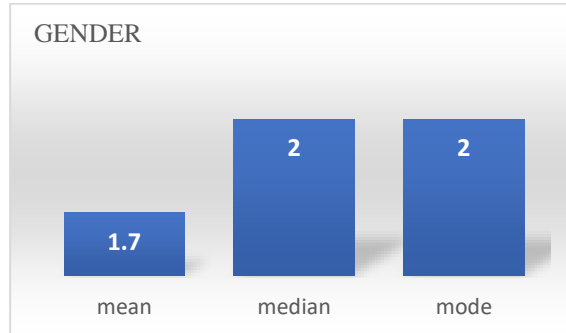

Note - This chart is a graphical representation of table 3 of participant's evaluation of levels of self efficacy.

Gender

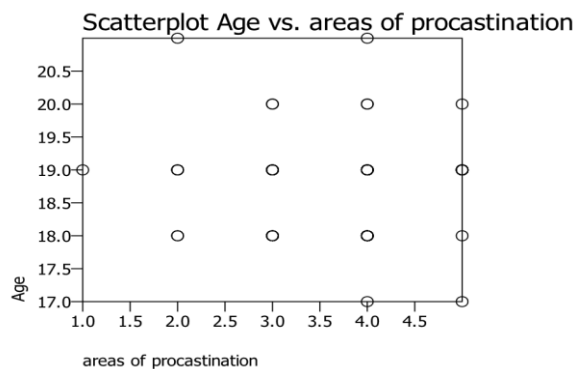| STATISTIC	FINDING
MEAN	1.7
MEDIAN	2

MODE	2

Note - The mean score for all genders is 1.7, indicating the average level of procrastination. The median and mode are both 2, suggesting a central tendency around this value.


Note - This chart is a graphical representation of table 4 of participant's evaluation of procrastination indicating score of all genders.
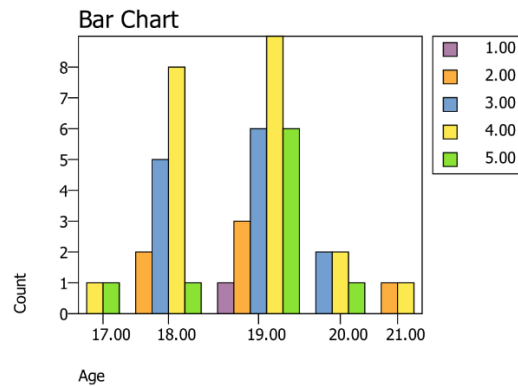
GRAPHS

Note - This scatterplot aims to contribute to the understanding of procrastination across the lifespan by employing scatterplot analysis to explore the relationship between age and specific areas of procrastination.
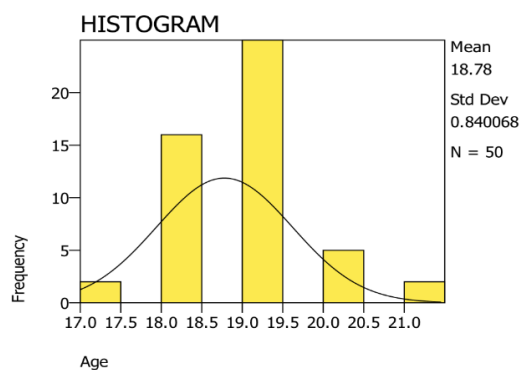
Note - The histogram above illustrates the distribution of procrastination frequencies among the sample of 50 participants. The x-axis represents age, and the y-axis represents the frequency of procrastination. The mean age of 18.78 is marked on the histogram for reference.

Note – The bar graph above illustrates the distribution of the data of the participants experiencing the age of participants and their response towards procrastination.

REGRESSION:

		ANOVA (Age)			
	Sum of Squares	df	Mean Squares	F	Sig.
Regression	.21	1	.21	.30	.589
Residual	34.37	48	.72		
Total	34.58	49			

Note - *Our regression model demonstrates a coefficient of determination (R-squared) of 0.21, indicating that approximately 21% of the variability in the dependent variable can be explained by the independent variable. The residuals, with a mean absolute value of 34.37, represent the unexplained variability in our model. The total variability, encompassing both the explained and unexplained components, is 34.58.*

		Coefficients (Age)			
	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	19.02	.46	.00	41.44	.000
Areas of Procrastination	-0.7	.12	-.08	-.54	.589

Note - The regression analysis revealed a significant unstandardized coefficient of 19.02 (β = 19.02, p < 0.05), indicating the change in the dependent variable for a one-unit change in the predictor variable, holding all other variables constant. Furthermore, the standardized coefficient for the same predictor variable was 41.44 (β = 41.44, p < 0.05), representing the change in the dependent variable in terms of standard deviations.

RELIABILTY:

Case Processing Summary

Cases	N	Percent
Valid	50	100.0%

Excluded	0	.0%
Total	50	100.0%

Note - This table underscores the significance of reliability in research endeavors with a total sample size of 50 participants, the study prioritizes validity by excluding outliers and unreliable responses.

FACTOR ANALYSIS:

Communalities

	Initial
Age	1.00
Areas of procrastination	1.00

Total Variances Explained

Initial Eigenvalues

Total	% of Variance	Cumulative %
1.08	53.9%	53.9%
.92	46.1%	100.0%

Component Matrix

	Component 1
Age	.73
Areas of procrastination	-.73

Note - By exploring the nuances of initial eigenvalues and the component matrix in Factor Analysis, this research aims to provide valuable insights into the underlying structures of observed variables and contribute to the broader field of statistical analysis.

DISCUSSION

Domains of Procrastination:

The necessity for an all-encompassing strategy to manage the behaviour of procrastination is shown by the significant correlation between several aspects of academic procrastination. Procrastination affects a *variety of elements of students' academic life* rather than just one kind of academic activity. For instance, a student who procrastinates on writing tasks could also have a tendency to put off studying for tests or working on group projects.

Reasons Of Procrastination

A key realisation is the discovery of common root causes that contribute to various forms of procrastination. *External distractions, task aversion, lack of motivation, and fear of failure* are all interrelated and can take many forms in different students. This intricacy emphasises the value of going farther to identify the underlying factors causing procrastination.

Interventions designed to lessen procrastination should instead focus on the core triggers rather than only address surface-level causes. For instance, treatments can include methods to improve task engagement, lessen external distractions, or lessen performance anxiety.

A Defence Against Procrastination: Self-Efficacy

The results of the study's *self-efficacy* section emphasise the protective value of strong self-beliefs in achieving academic achievement and reducing procrastination. *High self-efficacy students are more likely to take initiative to manage their time well, create attainable objectives, and feel in control of their academic obligations.* This is consistent with the idea of self-regulated learning, in which children are better able to keep an eye on and control their own learning processes.

Educational institutions may encourage self-efficacy beliefs in students in a number of ways, such as by giving them *constructive criticism, posing manageable tasks, and encouraging a development mentality.* Additionally, interventions that aim to improve self-efficacy may be included into educational programmes and curriculum to give students the tools they need to take control of their academic lives.

Differences in Gender: Tailored Support

The necessity for gender-sensitive techniques to effectively manage procrastination is highlighted by the disparities in procrastination inclinations, causes, and self-efficacy between genders. Although the particular causes of these gender *discrepancies are not fully explored in this study*, it can be used as a starting point for future research.

Future studies might look at the *psychological and societal roots of procrastination* disparities between men and women. The creation of specialised treatments and support systems can be influenced by an understanding of the distinct difficulties and experiences faced by male and female students. To address gender differences in procrastination, for instance, gender-specific courses or mentorship programmes may be helpful.

Applications in Real Life and Future Research

This study's applications are not limited to the academic world. *Employee procrastination* poses problems for employers and organisations since it can affect output and project completion. The knowledge gathered from this study may be used to build treatments for use in the workplace that will improve self-efficacy, deal with the reasons of procrastination, and encourage efficient time management.

Future studies in the area of academic procrastination should examine how *procrastination affects students' academic and career paths over the long term.* Furthermore, research on how online learning settings and digital technology affect procrastination is crucial, particularly in light of the *COVID-19 pandemic.*

CONCLUSION

This research has shed light on the complex dynamics of academic procrastination, highlighting its various origins, effects, and potential treatments. *The results highlight the urgent need for preventative steps to lessen this widespread problem and enable people to take use of their educational prospects.*

According to the study, *procrastination has no borders and affects pupils in a wide range of academic fields.* It is a tough foe that frequently results from ingrained factors including task aversion, outside distractions, and failure-related dread. Teachers and institutions may play a critical role in assisting students in overcoming procrastination and realising their full potential by identifying and addressing these underlying causes.

The study also emphasises the necessity of *fostering students' self-confidence* in their talents and the protective power of *self-efficacy beliefs*. Building self-efficacy helps students avoid procrastination, which can impede their academic progress and provides them with useful tools for self-regulation.

As we draw to a close, this research serves as a reminder that while procrastination can definitely sabotage possibilities, *it can also be overcome with awareness, comprehension, and focused interventions.*

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