Exploring the Relationship between Academic Procrastination and Academic Self-Regulation: Unveiling the Dynamics of Students' Performance

Dr.Parveen Khan[1], Uzma Dayan [2], Uzma Tajammal[3], Naeem Ullah[4]

1. Assistant Professor, Institute of Education &Research, University of Peshawar, Pakistan.

Email: drparveen@uop.edu.pk Cell Number: +92-332-9237060

2.Lecturer, Institute of Education & Research, University of Peshawar, Pakistan.

3. MPhil Scholar, Institute of Education & Research, University of Peshawar, Pakistan.

4. MPhil Scholar, Institute of Education & Research, University of Peshawar, Pakistan.

ABSTRACT

The aim of the current study wasto explore the relationship between academic procrastination and academicself-regulation in relation to students' performance. Based on a quantitative survey research design, two types of scales were developed for data collection: one, self-structured scale; two, self-regulation standardized scale.The total population of the study comprised 6090Bachlor of Studies (BS) students ofMalakandUniversity out of which 100 students,50 male and 50 female were selected randomly.For academic procrastination, self-structured scale was developed and for academic self-regulation standardized scale (Javed Hassan, 2012) was utilized. The collected data was put into Satistical Package for Social Sciences (SPSS). Descriptive statistics such as mean, frequency, and correlation wereapplied. The findingsof the study revealed that the correlation between academic procrastination and self-regulation is minimal among students and there is no significant difference between academic procrastination and academic self-regulation between male and female students. Based on the findings of the study, it is

recommended that in order to make students more self-reliant in academic work and reduce academic

procrastination, guidance and counseling services, seminars and workshopsmay be arranged.

Keywords: *Academic Procrastination, Academic self-regulation, University Students.*

Introduction

Academic procrastination is defined as the state in which a person wishes to participate in academic activities but lacks the drive to do so (Sepehrian, 2012). It is characterized by delays in starting or finishing work. Procrastination has been shown in numerous studies to be a barrier to academic performance (Hen &Goroshit, 2012).

Procrastinators frequently put pleasure or other activities ahead of doing tasks (Akinsola & Telly, 2007). A study conductedby Abbasi and Alghamdi (2015),found that more than 20% of individuals believed that their procrastination was due to worries about not meeting expectations or getting a good result. As aresult, fear of failureproved to be the reason of procrastination (Haghbin et al., 2012).

Academic procrastination is a contributing factor in the academic failure of many higher education students (Kim & Seo, 2015; Steel, 2007). When something is unduly put off, people engage in procrastination, which makes them extremely agitated when they think about it.Negative consequences of procrastination include late assignment submission, anxiety during exam preparation, and social anxiety. Despite awareness of these detrimental outcomes, individuals may experience decreased satisfaction with their performance (Motie et al., 2012).

According to Klassen et al., (2008), one-fifth of adults struggle to keep up with daily homework obligations demonstrating the significant prevalence of this condition. According to Rosental and Carlbring (2014), academic procrastination is a common self-regulation problem that affects

roughly 50% of students. It is a ubiquitous self-regulatory failure that affects approximately half of the students population.

Procrastination has detrimental effects on one's ability to complete tasks on time, feel anxious before an exam, and experience social anxiety. Even in the face of these negative consequences, people could feel less satisfied with their work. One-fifth of adults struggle to keep up with daily homework tasks, indicating a significant frequency of this condition (Klassen et al., 2008).

According to the findings from a study conducted by Chehrzad et al. (2017), gender, age, and academic standing were the primary indicators of moderate procrastination exhibited by 14% of university students and moderate procrastination by 70% of school students.Indications of academic procrastination include inadequate sleep, high levels of stress, work postponment due to time constraints, incomplete assignments, confusion, emotions of inferiority and shame, poor self-worth, anxiety, and depression (Custer, 2018).

Steel (2007) found that between 80% and 95% of students experienced difficulties at work as a result of procrastinating.Procrastinators' fear of failure is widely acknowledged as a contributing element for their behavior. Research suggests that they use this fear to protect their sense of self-worth (Balkis&Duru, 2012).

Related Literature Review

According to Klingsieck (2013), procrastination is the deliberate postponement of an intended or necessary task, even when one expects that the benefits will outweigh the drawbacks. It is marked by subjective discomfort and irrationality which have unfavorable outcomes.

Sirois et al., (2003) stated that procrastination has been linked to a range of detrimental effects, including worse academic attainment and greater stress. Reducing procrastination necessitates an understanding of its sources and contributing elements. Procrastination research is difficult to

comprehend and advance due to the lack of a well-organized theoretical framework in this field of study, as observed by Glick *et al*., (2014).

The fundamental mechanisms of procrastination remain unclear as declared by Visser *et al*., (2018) & Katz *et al*.,(2014). The intention-action gap, which shows that people who delay often have good intentions but struggle to follow through, is a crucial aspect of procrastination. According to recent research conducted by Wolters *et al*., (2017), procrastination is influenced by psychological factors such as low self-esteem and difficulty regulating unpleasant emotions.

Bolivaret al., (2016) cited that theoretically, deliberate and unjustifiable delays in behavioral, cognitive, and emotional domains can be explained by procrastination. It entails delaying a task or engaging in cocurricular activities that interfere with finishing the primary task.

Muñoz-Olano & Hurtado-Parrado (2017) stated that up to 95% of teenagers and 80–95% of university students demonstrate procrastinating habits, making them vulnerable to experience guilt and suffering. (Moreta*et al*., 2018).

Kim and Seo (2015) transpired that procrastination affects well-being, resulting in stress, trouble following directions, tardiness, poor academic performance, and personality disorders, even though it doesn't always lead to task failure.In-depth research on academic procrastination's causality is still lacking, despite a wealth of literature on the condition's prevalence and effects as stated by Farran, 2004; Fritzsche et al., 2003; Kandemir, 2010).

According to Faber (2004), students who use productive tactics tend to procrastinate less in their academic work. Furthermore, a crucial factor influencing academic procrastination is life satisfaction (Binder, 2000; Savithri, 2014). It is essential to comprehend academic procrastination's function as a mediator in learning processes and how it affects both positive and negative aspects of students' learning processes.

Objective of the Study

➢ To find out relationship between academic procrastination and academic self-regulation among university students.

Hypotheses of the Study

H_{o1}: There is no significant difference in the levels of academic procrastination and academic self-regulation between male and female students

H_{o2}: There is no significant relationship between academic procrastination and academic self-regulation among university students.

Significance of the Study

This research holds significance beyond theoretical implications, as findings can inform practical strategies for educators, counselors, and policymakers to mitigate academic procrastination and promote effective self-regulatory practices among students. By fostering a deeper understanding of the interplay between these constructs, interventions can be tailored to target specific underlying mechanisms, thereby facilitating the cultivation of a conducive learning environment that nurtures students' engagement, persistence, and academic achievement.

In sum, this study endeavors to contribute to the existing literature by unraveling the complex dynamics between academic procrastination and academic self-regulation, offering insights that can inform evidence-based interventions aimed at optimizing students' learning experiences and outcomes.

Research Methodology

The research design of the study is co-relational. The population of the study constituted all students enrollerd in Bachelor of Stucies(BS)program in the academic year (2022) of Malakand University. There were approximately 6,090 students. Total number of departments in Malakand

University is 15.Five departments were selected for the current study throughrandom sampling technique. 100 students in all five departmentswere taken as a sample (20 students per department).

For data collection, two scales were utilized: one,an academic procrastination scale; two, a standardized academic self-regulation scale. The first scale was developed by the researcher after a thorough review of the literature keeping in view the objectives of the study. The scale was then validated by two Education Professors. Their opinionwere incorporated and the scale was modified accordingly. The second scale was adapted one. It was based on the work of Dr. AkhtarJaved Hassan (January,2012). Written permission was taken from the author.

Reliability

Scales	Cronbach's Alpha	Number of Items
Academic Procrastination	.656	18
Academic self-Regulation	.715	10

The value for Academic procrastinationof Cronbach's alpha is .65, While The value for Academic self-regulationof Cronbach's alpha is .71.

Data analysis

Data were analyzed by using descriptive statistics and Pearson-r was used for data analysis of academic procrastination and academic self-regulation.

Data Analysis Regarding Academic Procrastination

Table-1 Studying for Exam

S#	Statements	Always (%)	Sometime (%)	Never (%)
1.	How often do you put off completing (delay) this task?	14 (14%)	33 (33%)	53 (53%)
2.	To what extent do you find it problematic when you put off completing this task?	18 (18%)	21 (21%)	61 (61%)
3.	How often do your educed our procrastination (delay) on the above task?	40 (40%)	30 (30%)	30 (30%)

Table1 shows that 53% of respondents never finish their exam tasks, 33% occasionally complete them, and 14% consistently finish their exam study assignments. Despite this, 2nd item indicates that 61% of students never experienced exam-related problems, 21% experienced problems occasionally, and 18% experienced problems consistently. Furthermore, 3rd item shows that 30% of respondents never procrastinated, 30% did so occasionally, and 40% did so consistently when it came to studying for exams.

Table2 Keeping up weekly reading assignment

S#	Statements	Always (%)	Sometime (%)	Never (%)
1.	How often do you put off completing (delay)this task?	11 (11%)	33 (33%)	56 (56%)
2.	To what extent do you find it problematic when you putoff completing this task?	04 (04%)	29 (29%)	67 (67%)
3.	How often do your educed our procrastination (delay) on the above task?	22 (22%)	25 (25%)	53 (53%)

As seen in Item -1 of the above table, 56% of students never finish their weekly reading assignments, while 33% occasionally complete them and 01% always do. However, item 2 indicates that 67% of students never had trouble keeping up with their weekly reading assignments, 21% occasionally had trouble, and 18% always had trouble. Furthermore, the results of item number three show that 53% of respondents never put off doing their weekly reading assignment, 30% did so occasionally, and 40% did so always.

Table-3. Work on Research Theses or Projects.

S#	Statements	Always (%)	Sometime (%)	Never (%)
1.	How often do you put off completing (delay)this task?	10 (10%)	30 (30%)	60 (60%)
2.	To what extent do you find it problematic when you putoff completing this task?	08 (8%)	24 (24%)	68 (68%)
3.	How often do your educed our procrastination (delay) on the above task?	34 (34%)	20 (20%)	46 (46%)

In the aforementioned task, item1 shows that 60% of participants never finish their work on research theses or projects, 30% occasionally complete it, and 10% consistently finish the study portion of the task. Although item 2 indicates that 60% of students never experienced difficulties when working on research theses or projects, 24% occasionally encountered difficulties, and 08% consistently encountered difficulties. Furthermore, item number three shows that 46% of respondents never procrastinate, 24% do so occasionally, and 08% do so often when working on research theses or project tasks

Table-4. Academic Administrative task filling out forms, registering for classes, getting id card, etc.

S#	Statements	Always (%)	Some time (%)	Never (%)
1.	How often do you put off completing (delay)this task?	33 (33%)	10 (10%)	57 (57%)
2.	To what extent do you find it problematic when you put off completing this task?	21 (21%)	8 (8%)	71 (71%)
3.	How often do your educed our procrastination (delay) on the above task?	30 (30%)	34 (34%)	36 (36%)

The first item shows that 57% of respondents never finish their academic administrative tasks, such as filling out forms, registering for classes, getting ID cards, etc., while 10% occasionally complete these tasks and 33% always complete them. While item 2 indicates that 71% of students never experienced difficulties with academic administrative tasks such as completing paperwork, registering for classes, getting ID cards, etc., 08% of students occasionally encountered difficulties, and 21% of students always encountered difficulties. Furthermore, the third item shows that 36% of respondents never procrastinate, 34% do so occasionally, and 30% do so often when it comes to academic administrative tasks like completing forms, registering for classes, getting ID cards, etc.

Table-5 Attendance tasks: Meeting with your supervisor, making an appointment with a professor,etc.

S#	Statements	Always (%)	Sometime (%)	Never (%)
1.	How often do you put off completing (delay) this task?	14 (14%)	30 (30%)	56 (56%)
2.	To what extent do you find it problematic when you putoff completing this task?	40 (40%)	21 (21%)	39 (39%)
3.	How often do your educed our procrastination (delay) on the above task?	37 (37%)	33 (33%)	30 (30%)

Item- 1 shows that 56% of respondents never complete their attendance tasks, which include scheduling meetings with supervisors, advisors, and professors; 30% of respondents complete these chores occasionally, and 14% consistently complete them. While item- 2 indicates that 56% of students never experienced difficulties with attending activities such as scheduling meetings with professors, advisors, or supervisors, 21% of students occasionally experienced difficulties, and 14% of students always experienced difficulties. Furthermore, item number 3 shows that 39% of respondents never put off doing chores related to attendance, 21% did so occasionally, and 40% did so constantly. These responsibilities include scheduling meetings with professors, advisors, and supervisors.

Table-6.University or School activities in general

S#	Statements	Always (%)	Sometime (%)	Never (%)
1.	How often do you put off completing (delay)this task?	11 (11%)	32 (32%)	57 (57%)
2.	To what extent do you find it problematic when you put off completing this task?	19 (19%)	31 (31%)	50 (50%)
3.	How often do your educed our procrastination (delay) on the above task?	10 (10%)	20 (20%)	70 (70%)

1st item shows that 57% of students never finish their general school or university assignments, compared to 32% who occasionally finish them and 1% who always finish them. Item 2nd indicates that 50% of students never experienced difficulties with university or school-related activities, 31% occasionally encountered difficulties, and 19% consistently encountered difficulties. Furthermore, the 3rd item shows that 70% of respondents never delay, 20% do so occasionally, and 10% do so constantly when it comes to assignments or school-related activities in general.

Table 7 Data Analysis Regarding Academic Self-Regulation

S#	Statements	SD	M	SD
1	I always come five minutes before class time.	10 (10%)	33 (33%)	57 (57%)
2	I am well aware of assessment criteria used to evaluate my performance.	08 (08%)	22 (22%)	70 (70%)

3	I know about the methods through which my assessment will be made in semester system.	40 (40%)	25 (25%)	35 (35%)
4	I set goals for attaining grades in the class.	29 (29%)	12 (12%)	59 (59%)
5	I consciously make sure that my class attendance does not go below80%.	13 (13%)	43 (43%)	34 (34%)
6	I can perform well all activities in the class assigned by the teacher.	14 (14%)	30 (30%)	56 (56%)
7	I am not satisfied with my performance in the class,	19 (19%)	35 (35%)	46 (46%)
8	I keep record of all class notes provided by the teachers.	07 (07%)	36 (36%0	57 (57%)
9	I always submit my written assignment to my teachers well ahead of allotted time.	31 (31%)	0 8 (08%)	61 (61%)
10	I work just to pass this course	51 (51%)	32 (32%)	17 (17%)

The above table shows that item -1 indicates that 57% strongly agree that they come before the class, while 33% moderately agree where as 10% strongly disagree. Although item -2 shows that 70% of students strongly agree, 22% moderately disagree, and 08% strongly disagree, they are well aware of the assessment criteria used to evaluate their performance. Moreover, item-3 indicates that 35% strongly agree that they know about the methods through which their assessment will be conducted in the semester system, while 25% moderately agree and 40% strongly disagree. While item- 4shows that item- 4 indicates that 59% strongly agree, 12%

moderately agree, and 29% strongly disagree that they set goals for attaining grades in the class, although item -5 shows that 34% of students strongly agree, 43% moderately disagree that they consciously make sure that their class attendance does not go below 80%, and 13% strongly disagree. However, item- 6 indicates that 56% strongly agree that they can perform well in all activities in the class assigned by the teacher, while 30% moderately agree and 14% strongly disagree that they are not satisfied with their performance in the class. Item- 7 shows that 46% of students strongly agree, 35% moderately disagree and 19% strongly disagree with the given statement. Similarly, item- 8 states that 57% of respondents strongly agree, 36% moderately agree, and 7% strongly disagree with the available statement. In addition, item- 9 shows that 61% strongly agree that they always submit written assignments to their teachers within the allotted time, while 88% moderately agree and 31% strongly disagree. Moreover, item -10 shows that 17% of students strongly agree, 32% moderately disagree, and 51% strongly disagree that they just work to pass this course.

Hypotheses Testing

Ho$_1$: There is no significant difference in the levels of academic procrastination and academic self-regulation between male and female students.

Gender	N	Mean	SD	t	df	Sig.
Male	50	111.20	18.66			
				-.54	99	.58
Female	50	112.26	15.14			

To find out the differencein the levels of academic procrastination and academic self-regulation between male and female students, independent sample t-test was used. A total of 50male and 50 female students were selected, the mean of male respondents is 111.2, S.D is 18.66 and the mean

of female respondents is 112.26, S.D is 15.14. as both mean show no difference in mean. The overall p-value is 0.58 which is greater than the level i.e. 0.05 hence the result shows there is no significant difference in the levels of academic procrastination and self- regulation between male and female students, hence based on p-value we *accept* our null hypothesis.

Ho$_2$: There is no significant relationship between academic procrastination and academic self-regulation among students.

Table 2.*Co-relation of academic procrastination and academic self-regulation.*

		Academic Procrastination	Academic Self-regulation
Academic Procrastination	Pearson Correlation	1	.69
	Sig. (2-tailed)		.006
	N	100	100
Academic Self-regulation	Pearson Correlation	.69	1
	Sig. (2-tailed)	.006	
	N	100	100

This table shows the correlation between academic procrastination and academic self-regulation. The Pearson correlation coefficient is 0.69, indicating a positive correlation. The significance level (Sig.) for both correlations is 0.006, suggesting that the correlation is statistically significant. Overall, this suggests that there is a significant positive correlation between academic procrastination and academic self-regulation, meaning that as one increases, the other tends to increase as well.Hence, we *reject* our null hypothesis.

Discussion

Gender Differences in academic procrastination and academic Self-Regulation

The study found no significant difference in academic procrastination and academic self-regulation levels between male and female university students. This suggests that students' levels of academic procrastination and academic self-regulation are comparable for male and female students. Although previous research has occasionally revealed differences between genders in academic behaviors such as time management and study habits. Findings of the present study show that gender is not a significant factor influencing academic self-regulation within this sample cohort. This means without supposing any innate distinctions based on gender, efforts to improve academicprocrastination and academic self-regulation should be directed equally towards male and female students. The study's findings supported the findings of (Motie, Heidari& Sadeghi, 2012).

Academic procrastination and academic self-regulation correlation

The result shows that academic self-regulation rises along with procrastinating tendencies. This result is consistent with earlier studies which found that procrastination-affected people may also have trouble controlling their academic conduct and managing time. The validity of this association within the sample set of 100 university students is further strengthened by the statistically significant correlation.Result of the study shows similar results (Akinsola& Tella, 2007).

Conclusion

Results of the study indicate that although academic procrastination and self-regulation are significantly correlated, there may not be a significant difference in academic self-regulation between male and female university students. This suggests that without assuming innate

differences, efforts to improve academic self-regulation should be made equally for both genders. Furthermore, the positive relationship between academic procrastination and self-regulation validates earlier that people who experience procrastination may also have trouble controlling their academic activities. These results show how crucial it is to deal with procrastinating tendencies to enhance overall academic performance. More investigation into other variables influencing self-control and procrastination may lead to a more thorough knowledge of these phenomena.

Recommendations

Based on the findings, the study offers the following recommendations:

1. Initiate Educational Interventions: Develop and introduce educational programs that focus on instilling effective self-regulation strategies among students. These initiatives should concentrate on teaching skills such as time management, goal setting, task prioritization and self-monitoring to help students overcome procrastination habits and elevate their academic performance.

2. Cultivate a Supportive Learning Environment: Foster a nurturing learning atmosphere that encourages students to seek assistance and utilize available resources. Offer academic support services, including tutoring, counseling, and academic advising to aid students in cultivating effective study techniques and time management practices.

3. Enhance Awareness and Education: Increase awareness among students, educators, and parents about the adverse impacts of academic procrastination and the significance of academic self-regulation. Conduct workshops, seminars, and informational sessions to educate stakeholders on effective strategies for addressing procrastination and fostering self-regulatory skills

Recommendations for Future Researchers

1. Examine the effects of personality attributes or academic stress on self-regulation and academic procrastination. Gaining a better understanding of these variables may help us to better understand the dynamics of self-control and procrastination in different educational environment.

2. To carry out longitudinal research to monitor the evolution of self-control and academic procrastination over time. This could assist in identifying trends and possible courses of action for students at various points in their academic careers.

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