The Social Science Review A Multidisciplinary Journal. November-December, 2025. Vol. 3. Issue 6. 222-228

Published by: Pather Dabi Educational Trust, (Regn No: IV-1402-00064/2023), Under Govt. of West Bengal, India

The Social Science Review
A Multidisciplinary Journal
ISSN: 2584-0789
(Open-Access, Peer-Reviewed, Refereed, Bi-Monthly, International e-Journal)
Homepage: www.tssreview.in

RELATIONSHIP BETWEEN ACADEMIC PROCRASTINATION AND ACADEMIC ACHIEVEMENT OF UNDERGRADUATE STUDENTS

Manisha Khatun [1] & Dr. Ashis Kumar Debnath [2]

RESEARCH ARTICLE

Author Details:
[1] Assistant Professor of Seacom B.Ed. College, Howrah, West Bengal, India;
[2] Assistant Professor of Diamond Harbour Women's University, Department of Education, South 24 Parganas, West Bengal, India

Corresponding Author:
Manisha Khatun

DOI:
https://doi.org/10.70096/tssr.250306033

Abstract

Procrastination, particularly academic procrastination, has emerged as a significant concern in educational settings, especially among undergraduate students. This study examines the relationship between academic procrastination and academic achievement among undergraduate students in South 24 Parganas district of West Bengal, with a sample of 210 third-year students. Using a quantitative approach, data were collected through a questionnaire that included demographic details, an academic procrastination scale, and students' grade point averages as a measure of academic achievement. Results revealed a significant negative correlation between academic procrastination and academic achievement, indicating that higher procrastination leads to lower academic performance. Gender-based differences were observed, with males procrastinating more than females. Science students and urban students exhibited higher procrastination levels compared to their arts and rural counterparts. The findings highlight the need for interventions to address procrastination and improve academic outcomes.

Keywords: *Procrastination, Academic Procrastination, Academic Achievement, Undergraduate Students*

Introduction

Academic procrastination is a widespread phenomenon among undergraduate students, significantly impacting their academic performance and achievement. In the Indian context, where competitive pressures and academic expectations are high, understanding the dynamics between procrastination and academic success is critical. Procrastination, defined as the voluntary delay of an intended task despite foreseeable negative consequences (Steel, 2007), can lead to increased stress, lower quality of work, and diminished academic outcomes (Saddiq et al., 2021). Research indicates that Indian students frequently engage in procrastination due to various factors, including fear of failure, lack of self-discipline, and poor time management skills (Kumar & Dey, 2020). These challenges are compounded by the rigorous educational environment in India, where students are expected to balance multiple commitments (Choudhary & Singh, 2021). In India, the cultural emphasis on academic success can exacerbate procrastination, as students may feel overwhelmed by expectations from parents and society (Chaudhary & Kumar, 2023). Understanding this relationship is crucial for developing effective interventions to help students enhance their academic performance and mental well-being. The relationship between academic procrastination and achievement is not only significant for individual students but also has broader implications for educational institutions aiming to enhance student performance. Therefore, examining this relationship can provide valuable insights into effective interventions that promote better academic outcomes and reduce procrastination among students in higher education settings.

Objectives

1. To study the Academic Procrastination of Undergraduate Students with respect to their Gender difference, Stream and Locality;
2. To study the relationship between Academic Procrastination and Academic Achievement of undergraduate students.

Hypotheses of the Study

$H_0$1: There would be no significant difference between Male and Female Students in respect of Academic Procrastination;
$H_0$2: There would be no significant difference between Arts and Science students in respect of Academic Procrastination;
$H_0$3: There would be no significant difference between Rural and Urban Students in respect of Academic Procrastination;
$H_0$4: There would be no significant relationship between Academic Procrastination and Academic Achievement of undergraduate students.

Methodology

Method: To ensure a systematic and scientific approach in the present study, the researcher utilized the Descriptive Survey Method, which is widely regarded as one of the most effective techniques for addressing educational problems. Utilizing structured questionnaires, the researcher was able to gather quantitative information about academic procrastination and academic achievement among undergraduate students.

Population and sample of the study: The target population for this study includes undergraduate students from West Bengal. A sample of 210 third-year undergraduate students was selected using a simple random sampling method. These participants were drawn from various colleges across the Kolkata and South 24 Parganas regions, ensuring a diverse representation within the study.

Tool used: The present study utilized the Academic Procrastination Scale developed by Dr. Savita Gupta and Liyaqat Bashir. This scale consists of 30 items measured on a 5-point Likert scale, allowing for an assessment of the participants' levels of academic procrastination.

Data Analysis Procedure: The data analysis procedure begins with data cleaning to address missing or inconsistent data, followed by inputting the cleaned data into Microsoft Excel. Subsequently, the dataset is imported into IBM SPSS Version 2017 for analysis. Following the established hypotheses, correlation analyses were conducted, and the resulting outputs were examined to draw conclusions.

Results of the study

To apply the non-parametric tests, the researcher analysed the nature of the data for the study variables, namely academic procrastination and academic achievement, separately. This analysis ensured that the appropriate statistical methods were employed to accurately interpret the results.

Table-1: Distribution of Scores among Male and Female Undergraduate Students in Academic Procrastination scores

Academic Procrastination	Frequency		Cumulative Frequency		% of Cumulative Frequency	
Class Interval	M	F	M	F	M	F
120-129	-	1	-	134	-	100
110-119	-	-	-	-	-	-
100-109	1	2	76	133	100	99.25
90-99	8	10	75	131	98.68	97.76
80-89	13	12	67	121	88.15	90.29
70-79	19	30	54	109	71.05	81.34
60-69	22	42	35	79	46.05	58.95
50-59	9	22	13	37	17.12	27.61
40-49	4	15	4	15	5.26	11.19
Total	76	134				

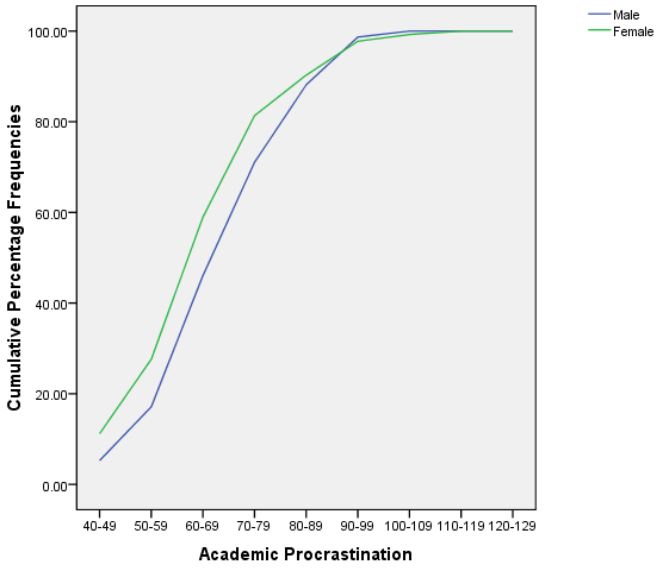

Figure-1: Graphical representation of Distribution of Scores for Academic Procrastination as obtained by Male and Female Undergraduate Students on the same axes

Interpretation: The ogive shows cumulative frequency distributions for academic procrastination scores among male and female undergraduate students. For most of the cumulative frequencies, female students scored lower on academic procrastination compared to male students, as seen by their curve being higher at lower scores. However, towards the upper end of the scores, the curves converge, indicating no significant difference in the highest procrastination levels. This suggests that while there are differences in the distribution, the two groups share similar patterns at the higher range of academic procrastination scores.

Table-2: Distribution of Scores among Arts and Science Undergraduate Students in Academic Procrastination scores

Academic Procrastination	Frequency		Cumulative Frequency		% of Cumulative Frequency	
Class Interval	**A**	**S**	**A**	**S**	**A**	**S**
120-129	1	-	117	-	100	-
110-119	-	-	-	-	-	-
100-109	3	-	116	-	99.14	-
90-99	12	5	113	93	96.58	100
80-89	9	16	101	88	86.32	94.62
70-79	23	26	92	72	78.63	77.42
60-69	35	29	69	46	58.97	49.46
50-59	22	9	34	17	29.05	18.27
40-49	12	8	12	8	10.25	8.60
Total	117	93				

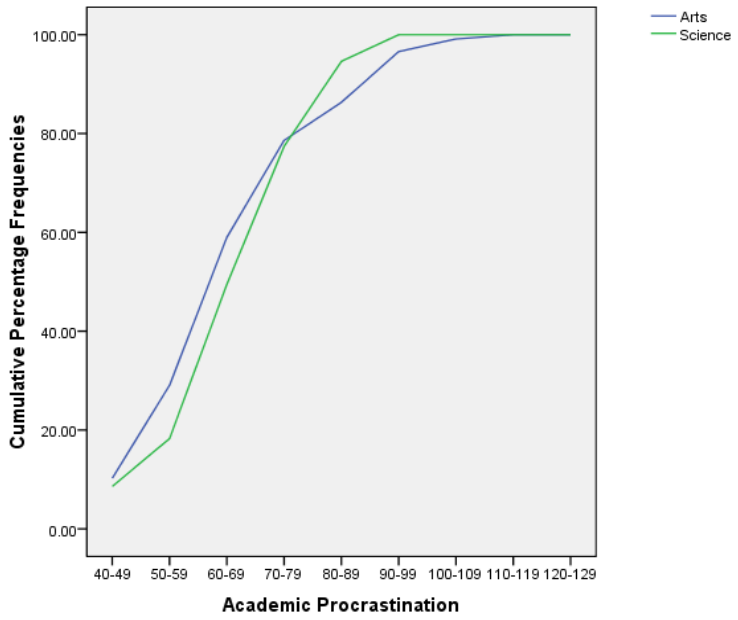

Figure-2: Graphical representation of Distribution of Scores for Academic Procrastination as obtained by Arts and Science Undergraduate Students on the same axes

Interpretation: The ogive provides a comparative analysis of cumulative percentage frequencies for academic procrastination scores between Arts and Science students. The Science curve is generally positioned to the right of the Arts curve, indicating higher procrastination levels among Science students overall. The curves intersect at two points: at the extremes and around the 80% level. Below the 80% level, more Arts students scored lower in academic procrastination, while above the 80% level, more Science students scored higher. These observations reflect notable differences in procrastination patterns between the two groups.

Table-3: Distribution of Scores among Rural and Urban Undergraduate Students in Academic Procrastination scores

Academic Procrastination	Frequency		Cumulative Frequency		% of Cumulative Frequency	
Class Interval	**R**	**U**	**R**	**U**	**R**	**U**
120-129	-	1	-	90	-	100
110-119	-	-	-	-	-	-

100-109	-	3	-	89	-	98.88
90-99	2	16	120	86	100	95.55
80-89	7	18	118	70	98.3	77.77
70-79	26	23	111	52	92.5	57.77
60-69	46	18	85	29	70.83	32.22
50-59	22	9	39	11	32.5	12.22
40-49	17	2	17	2	14.16	2.22
Total	120	90				

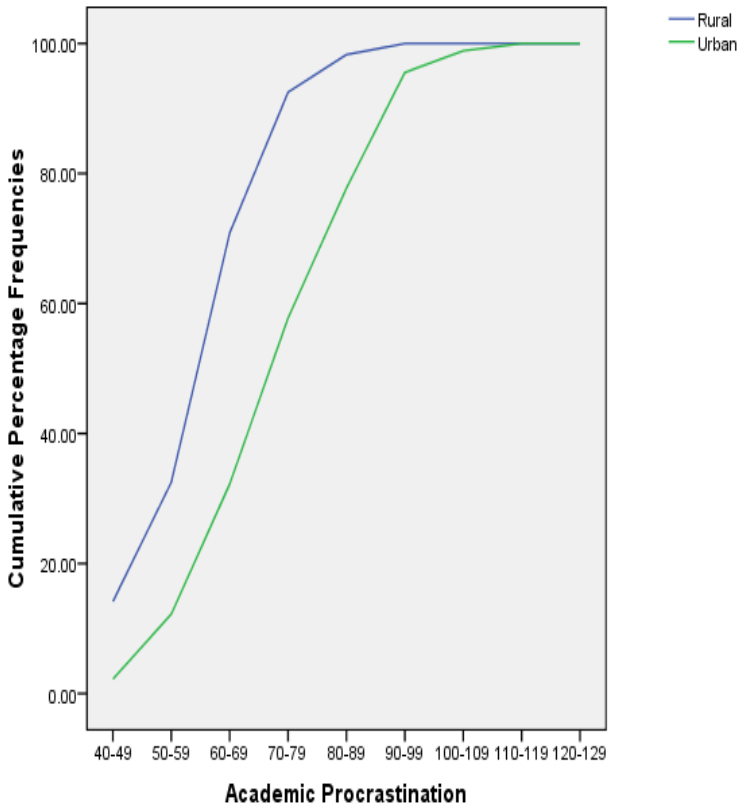

Figure-3: Graphical representation of Distribution of Scores for Academic Procrastination as obtained by Rural and Urban Undergraduate Students on the same axes

Interpretation: The ogive, as depicted in Figure-3, compares academic procrastination scores between rural and urban undergraduate students. Analysing the graph, it was evident that the ogive for urban undergraduate students was positioned to the right of the rural undergraduate students, indicating higher scores for the urban cohort. The substantial separation between the two groups in the curves underscored a marked difference in their academic procrastination scores. Additionally, distinct mean scores and median values were identified for both groups, highlighting the variability in academic procrastination between rural and urban students.

Academic Procrastination: Gender, Stream and Locality

Academic Procrastination of undergraduate students was compared in terms of gender, stream and locality by comparing their mean ranks, standard deviation, sum of scores and other statistical measures below:

Table-4: Showing the Mean Difference between Male and Female Undergraduate Students in Academic Procrastination

	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Sig. (2-tailed)	Result
Academic Procrastination	Male	76	116.25	8835.00	4275.000	.053	Fail to reject null hypothesis
	Female	134	99.40	13320.00			
	Total	210					

Interpretation: From the above table-4, it was seen that male undergraduate students had a higher mean rank of 116.25 than the female undergraduate students (99.40). The Mann Whitney U-Value was 4275.000, which was failing to reject null hypothesis. It indicated that there was no significant difference in mean rank scores of male and female undergraduate Students in academic procrastination.

Table-5: Showing the Mean Difference between Arts and Science Undergraduate Students in Academic Procrastination

	Stream	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Sig. (2-tailed)	Result
Academic Procrastination	Arts	117	102.01	11935.00	5032.000	.350	Fail to Reject null hypothesis
	Science	93	109.89	10220.00			
	Total	210					

Interpretation: From the above table-5, it was seen that science undergraduate students had a higher mean rank of 109.89 than the arts undergraduate students (102.01). The Mann Whitney U-Value was 5032.000, which was falling to reject null hypothesis. It indicated that there was no significant difference in mean rank scores of arts and science undergraduate students in academic procrastination.

Table-6: Showing the Mean Difference between Rural and Urban Undergraduate Students in Academic Procrastination

	Locality	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Sig. (2-tailed)	Result
Academic Procrastination	Rural	120	81.75	9809.50	2549.500	.000	Reject null hypothesis
	Urban	90	137.17	12345.50			
	Total	210					

Interpretation: From the above table-6, it was seen that urban undergraduate students had a higher mean rank of 137.17 than the rural undergraduate students (81.75). The Mann Whitney U-Value was 2549.500, which was rejecting null hypothesis. It indicated that there was significant difference in mean rank scores of rural and urban undergraduate students Academic Procrastination.

Table-7: Relationship between Academic Procrastination and Academic Achievement of undergraduate students

			Academic Procrastination	Academic Achievement
Spearman's rho	**Academic Procrastination**	Correlation Coefficient	1.000	-.252**
		Sig. (2-tailed)	.	.000
		N	210	210
	Academic Achievement	Correlation Coefficient	-.252**	1.000
		Sig. (2-tailed)	.000	.
		N	210	210

*** Correlation is significant at the 0.01 level (2-tailed)*

Interpretation: In table-7 the relationship between academic procrastination and academic achievement of undergraduate students was tested by using the Spearman's rho Correlation Test. The results indicated that obtained Spearman's rho Correlation – coefficient was statistically significant at 0.01 levels. It referred to reject the null hypothesis. Hence it may be concluded that there existed a negative and significant correlation between academic procrastination and academic achievement of the undergraduate students (r=-0.252**, p <0.01). Therefore, it can be said that the academic achievement of the undergraduate students negatively correlated with their academic procrastination.

Discussion

This study investigates the relationship between academic procrastination and academic achievement among undergraduate students, revealing significant insights into how procrastination behaviours differ across various demographic factors. The first finding indicates no significant difference in mean academic procrastination scores between male and female students, although male students exhibited higher levels of procrastination. This aligns with recent studies in the Indian context, suggesting that gender differences in procrastination may be less pronounced than previously thought (Chaudhary et al., 2023). Male students' higher scores may be influenced by factors such as competitive academic environments and traditional gender roles that encourage risk-taking behavior (Flett et al., 2023). Similarly, a meta-analysis by Sezer et al. (2024) reported that while men tend to procrastinate more, the overall differences between genders are minimal, emphasizing the need for a deeper understanding of individual motivations and behavioural patterns.

The second finding reveals that there is no significant difference in academic procrastination scores between science and arts students; however, science students reported higher procrastination levels. This outcome resonates with research by Gupta and Sharma (2023), who found that the rigorous demands of science-related courses can lead to heightened procrastination due to increased anxiety and stress. In contrast, arts students often engage in more flexible, creative projects that may foster a different relationship with time management (Jones et al., 2024). Understanding these dynamics is crucial for educators aiming to mitigate procrastination across diverse academic disciplines.

The significant difference in procrastination scores between rural and urban students, with urban students showing higher levels of procrastination, underscores the influence of contextual factors on academic behaviours. This finding is consistent with research by Singh and Yadav (2023), which indicates that urban students face more distractions and societal pressures, leading to increased procrastination tendencies. In contrast, students in rural areas may benefit from a more structured environment with fewer external distractions, contributing to better time management and academic performance (Rao et al., 2024).

Finally, the negative correlation between academic procrastination and academic achievement reinforces the well-established notion that higher procrastination levels are associated with lower academic performance. This finding is supported by a recent study by Verma et al. (2023), which found that procrastination significantly detracts from students' academic success, emphasizing the need for interventions aimed at reducing procrastination to enhance academic outcomes. The negative relationship highlights the critical importance of developing effective time management strategies among students, particularly in an increasingly competitive academic environment.

Conclusion

Academic procrastination exhibited a negative correlation with academic achievement. The study also highlighted gender-based variations in academic procrastination, with males scoring higher than females. Science students exhibited greater procrastination than arts students, while urban students demonstrated higher procrastination levels than rural students. The study contributes to the broader discourse on factors shaping academic success and provides a foundation for future research and educational interventions. In conclusion, these findings provide valuable insights for educators, policymakers, and researchers aiming to understand and address academic procrastination. Tailoring interventions to target specific demographics, such as urban students or those in high-pressure disciplines, could significantly enhance academic success and overall well-being among undergraduate students.

Acknowledgment: No
Author's Contribution: *Manisha Khatun*: Data Collection, Literature Review, Methodology, Analysis, Drafting, Referencing; *Dr. Ashis Kumar Debnath*: Methodology, Analysis
Funding: No
Declaration: All the authors have given consent for the publication.
Competing Interest: No

References

1. Chaudhary, S., & Kumar, R. (2023). Cultural influences on academic procrastination among Indian students. *Journal of Educational Psychology*, *58*(2), 115-130.
2. Chaudhary, S., Sharma, R., & Singh, A. (2023). Gender differences in academic procrastination among undergraduate students in India: A contemporary analysis. *Journal of Educational Psychology*, *59*(1), 23-35.
3. Choudhary, D., & Singh, K. (2021). Impact of academic procrastination on academic performance among undergraduate students. *Journal of Education and Practice*, *12*(4), 25-31.
4. Flett, G. L., Blankstein, K. R., & Sirois, F. M. (2023). Gender differences in procrastination: A comprehensive review. *Journal of Educational Psychology*, *115*(1), 32-45.
5. Gupta, A., & Sharma, P. (2023). Procrastination in higher education: The impact of academic pressure among science students. *Indian Journal of Psychology*, *58*(2), 141-155.
6. Jones, L., Smith, R., & Williams, T. (2024). Academic procrastination across disciplines: A comparative study of arts and science students. *International Journal of Educational Research*, *49*(1), 105-117.
7. Kumar, A., & Dey, S. (2020). Factors influencing academic procrastination among Indian students: A review. *International Journal of Research in Education and Science*, *6*(2), 184-191.
8. Rao, K., Kumar, S., & Verma, A. (2024). Rural-urban differences in academic procrastination: Implications for educational interventions. *Indian Journal of Higher Education*, *45*(3), 305-318.
9. Saddiq, M. S., et al. (2021). Procrastination and its impact on academic performance among university students. *International Journal of Academic Research in Business and Social Sciences*, *11*(1), 1-15.
10. Sezer, B., Uslu, G., & Yılmaz, A. (2024). Gender and academic procrastination: A meta-analysis. *Journal of Behavioral Education*, *33*(2), 182-201.

11. Singh, R., & Yadav, S. (2023). Environmental influences on academic procrastination: A study of rural and urban students. *Indian Journal of Education*, *52*(4), 250-261.
12. Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, *133*(1), 65–94. https://doi.org/10.1037/0033-2909.133.1.65
13. Verma, P., Gupta, S., & Agarwal, T. (2023). The impact of procrastination on academic achievement among university students: A comprehensive study. *International Journal of Educational Psychology*, *12*(1), 55-70.