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ORIGINAL RESEARCH PAPER

Assessment of the relationship between academic procrastination and stress among first-year nursing students

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ABSTRACT

***Background**: Procrastination, the intentional delay of significant tasks, is prevalent among university students, particularly nursing students.* ***Material and methods**: This study explored the relationship between academic procrastination and stress in 200 first-year nursing students in Bangalore, utilising Lay's General Procrastination Scale and the Perceived Stress Scale.* ***Results**: Results indicated an average procrastination score of 55.17, with 44.5% of participants showing low procrastination. Stress scores averaged 19.72, with 82% experiencing moderate stress.* ***Conclusion**: A weak correlation between procrastination (r = 0.258) and stress was identified, highlighting the necessity for educators to implement coping strategies and awareness programmes addressing academic procrastination and its associated stress, thereby supporting students' mental health and academic progress.*

***Keywords**: Academic procrastination, stress, nursing students, mental health.*

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INTRODUCTION

Postponement, often known as procrastination, is a common practice that many individuals exhibit and one of our innate human impulses.[1] Procrastination is the intentional delay of important tasks or decisions, often despite knowing the potential negative consequences. It is prevalent among university students and is characterised by poor self-control. This behaviour is associated with stress, anxiety, and depressive symptoms, leading to lower academic performance and negative effects on overall health and wellbeing.[2]

Academic procrastination is arguably the most prevalent kind. It is a postponement of assignments or other activities that are learning- and study-related.[3] The propensity to postpone or delay learning tasks and behaviours is known as academic procrastination.[4] The phrases "academic procrastination" and "student procrastination" are synonymous. Academic and student procrastination, according to Steele, is the intentional postponement of a practical course of study or learning notwithstanding the predicted decline.[5]

Procrastination in academic matters is a common issue among university students. It is

associated with worse academic achievement, a rise in college dropout intentions, and several mental health issues like stress, anxiety, and depression.[6] According to Martincekova and Enright, students who put off their academic work are more likely to experience negative emotional responses such as stress, frustration, embarrassment, or guilt.[7]

14.1% of students report that procrastination is influenced by stress.[8] Additionally, stress is a contributing factor to one of the disorders associated with procrastinators.[9] The most prevalent type of stress that students encounter is academic stress, which is defined as the state in which they are unable to complete academic assignments and are therefore accompanied by behavioural, emotional, and physical changes. Freshmen appear to be under more stress than other groups.[10] As newcomers, they must quickly adjust to new situations and pick up a lot of knowledge, which might make it difficult for them to study.[11]

First-year nursing students face increased stress due to the demanding nature of their academic environment, which includes complex lectures and substantial coursework. They encounter unique challenges in clinical courses and higher expectations than peers in other fields, potentially affecting their memory, focus, problem-solving abilities, and academic performance.[12] Adjusting from high school to university also adds to the stress as they acclimatise to campus life.[13]

It is anticipated that they will be capable of completing tasks like studying efficiently and having good time management skills. Discipline-challenged first-year students will have time management challenges in finishing their homework. Many tasks related to learning and assignment completion will thus be postponed. Academic procrastination is defined as lack of discipline and tardiness in completing tasks.[14]

Students will have physical and psychological problems if they are unable to manage their stress. Physically, they will experience headaches and digestive problems, while psychologically, they will face various challenges, such as cognitive, emotional, and behavioural issues. These affect them psychologically and have a detrimental impact on memory, sorrow, and procrastination.[15]

Academic procrastination happens when students postpone completing activities, projects, and assignments that are unnecessary. Such procrastination may cause people to experience unneeded tension and worry as they race to complete their tasks before the deadline. Leaving or postponing chores can have an impact not only on the individual's well-being, but also on his communication with others. Procrastination may have a good result, allowing students to make better use of their allotted study time.[16]

Research shows a link between procrastination and reduced success, especially among nursing students. Addressing procrastination is crucial to lower stress and improve academic performance. The study aims to evaluate procrastination and stress levels in first-year nursing students and explore the relationship between these factors.

MATERIALS AND METHOD

The study employed a quantitative research approach with a descriptive correlational design, conducted at Ramaiah Institute of Nursing Education and Research and Sapthagiri College of Nursing in Bangalore. The accessible population comprised first-year nursing students, with a sample size of 164 selected using non-probability convenience sampling. Inclusion criteria included availability and willingness to participate, while those who did not present during data collection were excluded.

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DESCRIPTION OF THE TOOLS

The research tool included three sections:

Section A: **Socio-demographic profile**: age, gender, program of study, reason for joining college, clinical duty attendance, parent's marital status, number of siblings, place of residence, religion, monthly family income, type of family.

Section B: **Lay's General Procrastination Scale**: The Lay's General Procrastination Scale (L-GPS)[17] is a 5-point Likert scale assessing procrastination through 20 items, rated from "Extremely Uncharacteristic" (scored as 1) to "Extremely Characteristic" (scored as 5). Ten items are reverse-scored for accuracy. Scores below 55 indicate low procrastination, 56-61 moderate procrastination, and 62 or higher high procrastination. The scale's reliability is supported by a Cronbach's alpha of 0.70 - 0.85, and it shows strong construct and convergent validity with correlations of 0.60 - 0.80 with other measures.[18] The L-GPS gives insight into individual procrastination behaviours.

Section C: **Perceived Stress Scale** (PSS-10): The Perceived Stress Scale (PSS-10)[19] is a 10-item questionnaire created by Cohen et al. in 1983 to measure perceived stress levels over the past month. Responses are rated on a five-point scale, and items 4, 5, 7, and 8 are reverse-scored before calculating the total. Scores range from 0 to 40, with 0-13 indicating low stress, 14-26 moderate stress, and 27-40 high stress. The PSS-10 shows strong internal consistency (Cronbach's alpha 0.78 - 0.91) and high reliability compared to other stress measures,[20] making it a valuable tool for assessing stress perception in individuals.

DATA COLLECTION PROCEDURE

The data collection occurred over 4 weeks at Ramaiah Institute of Nursing Education and Research and Sapthagiri College of Nursing, involving 200 subjects. Formal permission was obtained, and online consent was collected via Google Form. The student researcher assured the confidentiality of the information. Socio-demographic data and standardised tools, namely Lay's General Procrastination Scale and Perceived Stress Scale, were administered, taking subjects an average of 20-25 minutes to complete. Data was coded and entered into a master sheet.

DATA ANALYSIS

Data from the sample was analysed using descriptive and inferential statistics via IBM SPSS (version 20.0). Socio-demographic variables were described through frequency and percentage distribution, while mean and standard deviation were calculated for academic procrastination and stress scores. Inferential statistics, including the Chi-square test, Fisher's exact test, and Karl Pearson's coefficient correlation, were employed to examine relationships between academic procrastination, stress, and socio-demographic variables, facilitating a comprehensive analysis of the data.

RESULTS

In this study, two hundred first-year nursing students were assessed based on various sociodemographic characteristics, including age, gender, program of study, reasons for college enrolment, clinical duty attendance, parental marital status, number of siblings, place of residence, religion, monthly family income, and family type (**Table 1**).

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Table 1 Frequency and percentage distribution of sociodemographic variables (n = 200)

Sl No	Sociodemographic variables	Frequency	Percentage (%)
1.	**Age**		
	18 – 20	**187**	**93.5**
	21 – 23	11	5.5
	24 – 26	2	1.0
2.	**Gender**		
	Female	**158**	**79.0**
	Male	42	21.0
3.	**Course and year of study**		
	1st Year BSc.	**192**	**96.0**
	1st Year GNM	8	4.0
4.	**Reason for joining college**		
	Desire of the student	**87**	**43.5**
	Suggested by parents	30	15.0
	Influenced by friends/relatives	37	18.5
	Social media influence	46	23.0
5.	**Have you attended your clinical duty?**		
	Yes	**120**	**60.0**
	No	80	40.0
6.	**Parent's marital status**		
	Married	**184**	**92.0**
	Divorced	3	1.5
	Widowed	13	6.5
7.	**Number of siblings**		
	0	14	7.0
	1 - 2	**161**	**80.5**
	3 - 4	24	12.0
	>4	1	0.5
8.	**Type of residence**		
	Hostel	**180**	**90.0**
	Day scholar	20	10.0
9.	**Religion**		
	Hindu	**125**	**62.5**
	Muslim	13	6.5
	Christian	61	30.5
	Others	1	0.5

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Sl No	Sociodemographic variables	Frequency	Percentage (%)
10.	**Monthly family income**		
	<15000	**86**	**43.0**
	15001 – 25000	47	8.0
	25001 – 35000	27	13.5
	35001 – 45000	24	12.0
	>45000	16	8.0
11.	**Type of family**		
	Joint	39	19.5
	Nuclear	**161**	**80.5**

Most participants (93.5%) were aged 18-20, predominantly female (79%), and mainly 1st-year BSc students (96%). About 43.5% chose to attend college, while 60% had clinical exposure and 90% lived in hostels. The majority identified as Hindu (62.5%), with 92% of parents married and 80.5% from nuclear families. Most participants had 1-2 siblings (80.5%), and 51% reported a family income of less than 15,000. Regarding academic procrastination, 43.5% showed moderate levels, 44.5% low, and 12% high, with a mean level of 55.17 (±7.080 standard deviation), as shown in Tables 2 and 3.

Table 2 Frequency and percentage distribution of level of academic procrastination among first-year nursing students (n = 200)

Sl No	Level of academic procrastination	Frequency	Percentage (%)
1.	Low	**89**	**44.5**
2.	Moderate	87	43.5
3.	High	24	12.0

Table 3 Mean and standard deviation of level of academic procrastination (n = 200)

Level of academic procrastination	Minimum score	Maximum score	Mean	SD
	31	75	55.17	±7.080

In terms of stress, the majority (82%) experienced a moderate level of stress, 10% had low stress, and 8% reported high stress. The mean stress level was 19.72, with a standard deviation of ±5.166 (Tables 4 and 5).

Table 4 Frequency and percentage distribution of level of stress among first-year nursing students (n = 200)

Sl No	Level of stress	Frequency	Percentage (%)
1.	Low	20	10.0
2.	Moderate	**164**	**82.0**
3.	High	16	8.0

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Table 5 Mean and standard deviation of level of stress (n = 200)

Level of stress	Minimum score	Maximum score	Mean	SD
	6	36	19.72	± 5.166

There is a weak positive correlation between academic procrastination and stress (r = 0.258, p = 0.057), as shown in **Table 6**, meaning that as academic procrastination increases, stress tends to increase slightly as well.

Table 6 Correlation between level of academic procrastination and stress among first-year nursing students (n = 200)

Variables	Correlation	p-value
Academic procrastination	r = 0.258	0.057
Stress		

However, the correlation is not strong, and the p-value (0.057) is slightly above the typical threshold of 0.05 for statistical significance. This suggests that procrastination and stress may not be significantly related, and the observed correlation could be random. Further investigation or a larger sample size may be needed to confirm the relationship. There was a partially significant association between number of siblings (χ^2 = 0.118, p = 0.051) and level of academic procrastination, and there was no significant association between the other selected sociodemographic variables and level of academic procrastination (**Table 7**). However, there was no significant association between the selected sociodemographic variables and level of stress, as shown in **Table 8**.

Table 7 Association between level of academic procrastination and selected sociodemographic variables (n = 200)

Sl. No.	Sociodemographic variables	Level of academic procrastination			Chi-square test/ Fisher's exact test	p value
		Low (≤55)	Moderate (56–61)	High (≥62)		
1.	**Age**					
	18 – 20	82	84	21	0.483 df = 1	0.569
	21 – 23	5	3	3		
	24 – 26	2	0	0		
2.	**Gender**					
	Female	76	67	15	0.047 df = 1	0.055
	Male	13	20	9		
3.	**Reason for student joining the college**					
	Desire of the student	40	37	10	0.712 df = 1	0.775
	Suggested by parents	19	22	5		
	Influenced by friends and relatives	15	11	4		
	Media influence	15	17	5		

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Sl. No.	Sociodemographic variables	Level of academic procrastination			Chi-square test/ Fisher's exact test	p value
		Low (≤55)	Moderate (56–61)	High (≥62)		
4.	**Course and year of study**					
	1st Year BSc (N)	87	82	23	Fisher's exact test 0.303 df = 1	0.303
	1st Year GNM	2	5	1		
5.	**Have you attended your clinical duty?**					
	Yes	57	48	15	0.296 df = 1	0.313
	No	32	39	9		
6.	**Parent's marital status**					
	Married	81	80	23	0.644 df = 1	0.794
	Divorced	3	0	0		
	Widowed	5	7	1		
7.	**Type of family**					
	Joint	14	18	7	0.228 df = 1	0.282
	Nuclear	75	69	17		
8.	**Monthly family income**					
	< 15000	39	41	6	0.304 df = 1	0.322
	15000 – 25000	20	21	6		
	25001 – 35000	8	12	7		
	35001 – 45000	12	9	3		
	> 45000	10	4	2		
9.	**Number of siblings**					
	0	8	5	1	0.118 df = 1	0.051*
	1 – 2	76	68	17		
	3 – 4	4	14	6		
	>4	1	0	0		
10.	**Resident in dormitory**					
	Yes (Hosteller)	81	77	22	0.669 df = 1	0.814
	No (Day scholar)	8	10	2		

** =Significant at p < 0.05, df = degree of freedom.*

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Table 8 Association between level of stress and selected sociodemographic variables (n = 200)

Sl. No.	Sociodemographic variables	Level of stress			Chi-square test/ Fisher's exact test	p value
		Low stress (0-13)	Moderate stress (14-26)	High perceived stress (27-40)		
1.	**Age**					
	18 – 20	17	156	14	Fisher's exact test 0.062 df = 1	0.062
	21 – 23	1	8	2		
	24 – 26	2	0	0		
2.	**Gender**					
	Female	17	127	14	0.247 df = 1	0.365
	Male	3	37	2		
3.	**Reason for student joining the college**					
	Desire of the student	10	72	5	0.806 df = 1	0.854
	Suggested by parents	2	40	4		
	Influenced by friends/ relatives	5	21	4		
	Media influence	3	31	3		
4.	**Course and year of study**					
	1st Year BSc. (N)	18	159	15	Fisher's exact test 0.157 df = 1	0.157
	1st Year GNM	2	5	1		
5.	**Have you attended clinical duty?**					
	Yes	9	102	9	0.176 df = 1	0.192
	No	11	62	7		
6.	**Parent's marital status**					
	Married	20	150	14	Fisher's exact test 0.742 df = 1	0.742
	Divorced	0	3	0		
	Widowed	0	11	2		
7.	**Type of family**					
	Joint	5	34	0	0.348 df = 1	0.486
	Nuclear	15	130	16		

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Sl. No.	Sociodemographic variables	Level of stress			Chi-square test/ Fisher's exact test	p value
		Low stress (0-13)	Moderate stress (14-26)	High perceived stress (27-40)		
8.	**Monthly family income**					
	< 15000	7	74	5	0.895 df = 1	1.000
	15000 – 25000	4	39	4		
	25001 – 35000	3	21	3		
	35001 – 45000	1	20	3		
	> 45000	5	10	1		
9.	**Number of siblings**					
	0	0	14	0	0.161 df = 1	0.244
	1 – 2	19	129	13		
	3 – 4	1	21	2		
	>4	0	0	1		
10.	**Resident in dormitory**					
	Yes (Hosteller)	17	148	15	Fisher's exact test 0.763 df = 1	0.763
	No (Day scholar)	3	16	1		

**= Significant at p < 0.05, df = degree of freedom*

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DISCUSSION

The study found that among 200 first-year nursing students, 12% exhibited high academic procrastination, 43.5% had moderate levels, and 44.5% showed low levels. Additionally, stress levels were high in 8% of students, moderate in 82%, and low in 10%. A corroborating cross-sectional study with 145 students found 82.5% experienced moderate stress and 81.4% demonstrated academic procrastination. A significant correlation (p=0.000, rs=0.442) was identified between academic procrastination and stress levels.[21]

Current research shows a weakly positive correlation (r=0.258, p=0.057) between academic procrastination and stress levels. Studies with Indian college students found a strong direct relationship (p=0.000, t=3.621), indicating that those who struggle to manage stress or anxiety tend to procrastinate on assignments.[22]

This study highlights a significant correlation between academic procrastination and sociodemographic factors such as gender and number of siblings. The research, involving 628 college students from the University of Ioannina in Greece, identified five main causes of procrastination, which explained 48% of the total variation. These causes were notably linked to gender, year of study, grades, lifestyle, place of residence, age, and difficulties in time management and decision-making, with p-values indicating their statistical significance.[23]

Current findings indicate no significant correlation between sociodemographic characteristics and stress levels. Unlike a 2020 study in Nepal that noted a significant correlation between age and self-perceived stress ($p < 0.007$), factors such as gender ($p=0.184$), education ($p=0.148$), marital status ($p=0.057$), family type ($p=0.557$), and place of residence ($p=0.099$) showed no statistical association with self-perceived stress in the current study.[24]

CONCLUSION

Nursing is a profession with varying stress levels. Nursing students aim to develop critical thinking, competence, communication skills, time management, and self-confidence. However, academic procrastination negatively impacts their learning, particularly during challenging theoretical and practical phases. Addressing procrastination is crucial for ensuring their academic and professional success by identifying its characteristics and implementing interventions.

Acknowledgement: We thank all the students who participated in the study and the Nursing Colleges' authorities for their permission to conduct it.

Limitations: The study examines the relationship between academic procrastination and stress among participants from two nursing colleges in the same city, raising concerns about generalisability. While it highlights a connection between the variables, it does not establish a causal link. The authenticity of socio-demographic information is reliant on participant responses.

The University Ethics Committee for Human Trials at MS Ramaiah University of Applied Sciences granted ethical clearance (Reference no: EC-23/36-PG-RINER). Informed consent was obtained from participants, ensuring their anonymity and confidentiality while maintaining their privacy throughout the research.

REFERENCES

1. Moonaghi HK. Academic procrastination and its characteristics: a narrative [Internet]. Mums.ac.ir. [cited 2024 Sep 28]. Available from: https://fmej.mums.ac.ir/article_9049_7ec086345cc7e2d6699458fbb7e48c48.pdf
2. Åsberg K, Bendtsen M. Evaluating the effectiveness of a brief digital procrastination intervention targeting university students in Sweden: study protocol for the Focus randomized controlled trial. BMJ Open. 2023;13(7):e072506.
3. Steel P, Klingsieck KB. Procrastination. In: International encyclopedia of the social and behavioral sciences. Elsevier; 2015. p. 73–8.
4. Schraw G, Wadkins T, Olafson L. Doing the things we do: A grounded theory of academic procrastination. J Educ Psychol [Internet]. 2007;99(1):12–25.
5. Bashir L, Gupta S. A deeper look into the relationship between academic procrastination and academic performance among university students. Research Guru: Online Journal of Multidisciplinary Subjects. [online]. 2018;12(3):531-540.
6. Ozmen S, Amarnath A, Struijs S, de Wit L, Cuijpers P. A guided web-based intervention targeting procrastination in college students: Protocol for an open trial. JMIR Res Protoc. 2023;12:e44907.
7. Martinčeková L, Enright RD. The effects of self-forgiveness and shame-proneness on procrastination: exploring the mediating role of affect. Curr Psychol. 2020;39(2):428–37.
8. Hooda, M., and Devi, R. Procrastination: a serious problem prevalent among adolescent. ZENITH International Journal of Multidisciplinary Research. 2017;7(9):107-113.

IJHRMLP
ISSN 2394–806X (Print), ISSN 2454–5139 (Online)

9. M. Nur Ghufron [Internet]. Google.co.id. [cited 2024 Sep 28]. Available from: https://scholar.google.co.id/citations?user=Em0uU24AAAAJ&hl=id
10. Augesti G, Lisiswanti R, Saputra O, Nisa K. Differences in stress level between first year and last year medical students in medical faculty of Lampung University. 2015 [cited 2024 Sep 28]; Available from: https://www.semanticscholar.org/paper/6bf0175861062f459bd2e62a62118f0af58f2647
11. Friedlander LJ, Reid GJ, Shupak N, Cribbie R. Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. J Coll Stud Dev. 2007;48(3):259–74.
12. Muliani R, Imam H, Dendiawan E. Relationship between stress level and academic procrastination among new nursing students. Malays J Nurs. 2020;11(03):63–7.
13. Gan Y, Hu Y, Zhang Y. Proactive and preventive coping in adjustment to college. Psychol Rec. 2010;60(4):643–58.
14. Mortazavi, F. Prevalence of academic procrastination and its association with medical students' well being status. International Journal of Humanities and Cultural Studies. 2016;3(2):1256-69.
15. Edward P Sarafino, Timothy W. Smith. Sarafino-health-psychology-biopsychosocial-interactions-edition-7. 2011; Available from: https://archive.org/details/sarafino-health-psychology-biopsychosocial-interactions-edition-7
16. Schraw G, Wadkins T, Olafson L. Doing the things we do: A grounded theory of academic procrastination. J Educ Psychol. 2007;99(1):12–25.Yorku.ca. [cited 2024 Sep 29]. Available from: https://www.yorku.ca/rokada/psyctest/procrast.pdf
17. Yorku.ca. [cited 2024 Sep 29]. Available from: https://www.yorku.ca/rokada/psyctest/procrast.pdf
18. Hasanagic A. The validity exploration of general procrastination scale (lay, 1986). Epiphany. 2019;11(1):55.
19. Holstein M. Website. Hydrological Processes [Internet]. 2019 [cited 2024 Sep 29];15. Available from: https://eprovide.mapi-trust.org/instruments/perceived-stress-scale-10-items
20. Mozumder MK. Reliability and validity of the Perceived Stress Scale in Bangladesh. PLoS One. 2022;17(10):e0276837.
21. Muliani R, Imam H, Dendiawan E. Relationship between stress level and academic procrastination among new nursing students. Malays J Nurs. 2020;11(03):63–7.
22. Nayak SG. Impact of procrastination and time-management on academic stress among undergraduate nursing students: A cross sectional study [Internet]. Internationaljournalofcaringsciences.org. [cited 2024 Sep 29]. Available from: https://www.internationaljournalofcaringsciences.org/docs/18_nayak_original_12_3.pdf
23. Vlachopanou P, Tsiampalis T, Karagiannopoulou E. The relationship between causes of procrastination and sociodemographic factors. Eur J Public Health. 2019;29(Supplement_4).
24. Samadarshi SCA, Sharma S, Bhatta J. An online survey of factors associated with self-perceived stress during the initial stage of the COVID-19 outbreak in Nepal [Internet]. Ajol.info. [cited 2024 Sep 28]. Available from: https://www.ajol.info/index.php/ejhd/article/view/201315/189835

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