

Original Research**Procrastination and Parental Support as Determinants of Academic Stress in Nursing Students****Hanif Furqon Mustofa^{1*}, Dwi Ariani Sulistyowati², Endang Caturini³**¹ D-IV Nursing Student, Poltekkes Kemenkes Surakarta, Indonesia^{2,3} Department of Nursing, Poltekkes Kemenkes Surakarta, Indonesia**ABSTRACT**

Background: The Covid-19 pandemic has resulted in changes in learning methods from face-to-face to online, which has an impact on increasing the academic stress of nursing students. Academic stress is the pressure experienced in the academic environment and is influenced by internal and external factors. This study aims to identify factors associated with nursing students' academic stress levels during online lectures in the Covid-19 pandemic.

Methods: The research approach was quantitative with correlational analytic design and cross-sectional method. The research sample was selected by random sampling, involving 256 respondents. Data were collected using a Likert scale-based questionnaire and analysed with Chi-Square and Kendall's Tau statistical tests.

Results: Gender has no relationship to the level of academic stress of nursing students ($p = 0.164$); while procrastination is related to the level of academic stress with a moderate correlation and positive relationship direction ($p = <0.001$; $r = 0.285$). In addition, parental social support also affects the level of academic stress with a moderate correlation and negative relationship direction ($p = <0.001$; $r = 0.329$).

Conclusion: Factors associated with academic stress levels of nursing students are procrastination and parental social support. It is recommended that educational institutions implement targeted interventions to minimize academic procrastination and strengthen parental support systems as strategic efforts to manage academic stress among nursing students.

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academic stress, nursing students, parental support, procrastination;

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INTRODUCTION

The COVID-19 pandemic that occurred at the end of 2019 resulted in major changes in various aspects of life, including nursing education. The government implemented an online learning policy as a substitute for face-to-face methods to reduce the spread of the virus. This policy is based on the Circular Letter of the Minister of Education and Culture No. 36962/MPK.A/HK/2020, which requires students to study

from home (Kementerian Kesehatan Republik Indonesia, 2020). Online learning provides flexibility for nursing students, but also poses significant challenges for students, such as difficulty understanding the material, increased task load, limited social interaction, and dependence on a stable internet connection (Park & Seo, 2022).

Various studies have shown that system changes lead to increased academic stress in nursing students. Academic stress is pressure caused by excessive academic demands, changes in the learning environment, and limited available resources (Oducado & Estoque, 2021). Academic stress that is not managed properly can have a negative impact on psychological well-being, learning motivation, and student academic achievement (Berdida & Grande, 2023).

Several factors are known to be associated with students' academic stress levels, one of which is gender. Studies show that women are more prone to academic stress than men due to the tendency to overthink and be more emotional in the face of academic pressure (Elashry et al., 2021). Another factor is academic procrastination or the habit of postponing tasks is also a factor that increases stress. Nursing students who often postpone academic tasks are at risk of experiencing accumulated workload, thus increasing psychological pressure (Murdhiono et al., 2021).

Parental social support also plays an important role in reducing academic stress. Students who receive emotional and motivational support from parents tend to be better able to cope with academic challenges and have better psychological well-being. Understanding the factors that influence academic stress is very important to help nursing students in facing academic challenges during online learning (Berdida & Grande, 2023).

This study aims to analyse the factors associated with academic stress of nursing students during the COVID-19 pandemic. The results of the study are expected to provide insights for educational institutions in developing effective strategies to reduce academic stress and improve the quality of learning, both online and offline.

MATERIALS AND METHODS

This study is a quantitative study with a correlational analytic design and a cross-sectional study approach. This design allows observation of independent and dependent variables at the same time to determine the relationship between factors associated with academic stress of nursing students during online learning in the COVID-19 pandemic (Dahlan, 2021)

$$n = \frac{N}{1 + N(d)^2}$$

The population in this study were all students majoring in nursing at one of the Health Polytechnics in Surakarta, Central Java. The population of D3 Nursing and Bachelor of Applied Nursing study programmes with a total of 712 students. The sampling technique used a *simple random sampling* method, which is part of the *probability sampling* technique, where each member of the population has the same chance of being selected. The sample size was calculated using the Slovin formula, so that a sample size of 256 was obtained as follows (Dahlan, 2020):

Description:

n = sample size

N = population size = 712

D = margin of error = 5% (0.05)

Data collection was conducted online using a Google Form-based questionnaire. The stages of data collection included: (1) Socialisation of study online to explain the purpose and procedures of the study; (2) Providing informed consent before filling out the questionnaire; (3) Distribution of questionnaires via Google Form links shared through class WhatsApp groups and official emails; (4) Monitoring questionnaire completion two weeks with periodic reminders to fill out the questionnaire completely and honestly; and (5) Data checking to ensure completeness and validity before further analysis

The dependent variable of the study was academic stress of nursing students. Independent variables include gender, academic procrastination, and parental social support. This research instrument consists of three questionnaires. The academic procrastination questionnaire consists of 32 Likert scale items that measure students' tendency to postpone academic tasks. The results of validity and reliability tests showed item correlation values between 0.382-0.759 and reliability of 0.954. The parental social support questionnaire consists of 24 Likert scale items that measure student perceptions of parental attention, appreciation, emotional assistance, and instrumental.

The results of validity and reliability tests show the correlation value of items between 0.364 to 0.760 with a reliability of 0.937. The Perceived Stress Scale (PSS-10) questionnaire consists of 10 Likert scale items to measure students' academic stress level. The instrument has an Alpha Cronbach value of 0.81 (Muttaqin et al., 2021). Data analysis in this study was Kendall's Tau correlation for each ordinal scale variable. This research has passed the ethical feasibility of the Poltekkes Kemenkes Surakarta No. LB.02.02/1.1/693.8/2022 dated 14 March 2022.

RESULTS

Table 1. Characteristics of Nursing Students Based on Gender, Procrastination, Parental Support, and Academic Stress (n = 256 students)

Student Characteristics	n	%
Gender		
Male	45	17.6
Women	211	82.4
Total	256	100
Procrastination		
High	96	19.1
Medium	133	63.3
Low	27	17.6
Total	256	100
Parental Support		
Low	39	15.2
Medium	171	66.8
Low	46	18.0
Total	256	100
Academic Stress		
High	29	11.3

Student Characteristics	n	%
Medium	186	72.7
Low	41	16.0
Total	256	100

Description: n = number; % = percentage

This study was conducted on 256 nursing students consisting of 211 women (82.4%) and 45 men (17.6%). The majority of students have a moderate level of academic procrastination (63.3%), followed by high (19.1%) and low (17.6%) procrastination. Parental social support is also most dominant at a moderate level (66.8%), followed by high (18.0%) and low (15.2%). Meanwhile, students' academic stress level was dominated by the moderate category (72.7%), followed by low stress (16.0%) and high stress (11.3%).

Table 2. Relationship between Gender, Procrastination, and Parental Social Support with Academic Stress Level in Nursing Students (n = 256 students)

Academic Stress Level in Nursing Students (n = 250 students)								
Variables	Academic Stress Level						p value	r***
	High		Medium		Low			
	n	%	n	%	n	%		
Gender								
Female	23	10.9	150	71.1	38	18.0	0.167*	-
Male	6	13.3	36	80.0	3	6.7		
Total	29	11.3	186	72.7	41	16.0		
Procrastination								
High	12	24.5	37	75.5	0	0.0	<0.001**	0.285
Medium	12	7.4	126	77.8	24	14.8		
Low	5	11.1	23	51.1	17	37.8		
Total	29	11.3	186	72.7	41	16.0		
Parental Social Support								
Low	12	30.8	25	64.1	2	5.1	<0.001**	0.329
Medium	16	9.4	134	78.4	21	12.3		
High	1	2.2	27	58.7	18	39.1		
Total	29	11.3	186	72.7	41	16.0		

Note: n = number; % = percentage; *Chi-Square test; **Kendall's tau-b test; ***Correlation Coefficient

Bivariate analysis showed that there was no significant relationship between gender and students' stress level (p 0.167) indicating that both male and female students have similar stress levels. This study found a significant relationship between academic procrastination and stress levels (p<0.001; r 0.285), namely the higher the level of procrastination, the higher the level of academic stress of students. The results showed that there is a significant relationship between parental social support and academic stress level (p <0.001; r=0.329), indicating that students with higher social support tend to experience lower stress levels.

DISCUSSION

The results of univariate analysis show that the majority of students experience academic stress at a moderate level, which means that academic pressure is quite high

but still manageable. Academic procrastination is also at a moderate level, which shows the tendency of students to postpone tasks at moderate levels. Parental social support is mostly at a moderate level, indicating that students receive sufficient support even though it is not optimal. Social support has an important role in students' psychological well-being and can help reduce academic stress (Cengiz et al., 2022; Delfriani et al., 2023).

The results of bivariate analysis showed that there was no significant relationship between gender and students' academic stress levels. This shows that both men and women have similar levels of academic stress. This result is in line with which found that gender differences do not significantly affect academic stress. Factors that play a greater role are the conditions of the academic environment and individual strategies in managing stress (Li et al., 2021; Sukdee et al., 2021).

The results further show that there is a significant relationship between academic procrastination and academic stress. Students with high levels of procrastination tend to experience greater academic stress than those with low levels of procrastination. This happens because tasks that are postponed will accumulate, causing a heavier workload and increasing anxiety about task completion (Kufiyak, 2022; Rozental et al., 2022). Parental social support has also been shown to have a significant relationship with academic stress.

Students who get high social support from parents tend to have lower stress levels, because students feel more motivated and get enough emotional and financial assistance (Chen et al., 2022). Social support provided in the form of moral encouragement and material assistance can help students face academic challenges better. Furthermore, low social support has the risk of increasing academic stress because students feel they have less places to share and get solutions to their academic problems. Previous research stated that students who have high levels of social support are better able to cope with academic stress than those who get low social support (Cengiz et al., 2022; Park et al., 2023).

This study employed a sufficiently large sample, allowing the findings to be representative of the nursing student population in Surakarta. Valid analytical methods were used to examine the relationships between academic procrastination, parental social support, and academic stress levels. However, several limitations should be acknowledged. First, the study was conducted at a single educational institution, which may limit the generalizability of the results to students from other institutions.

Second, the study did not account for other potential factors that may influence academic stress levels, such as the social environment, academic workload, and individual psychological characteristics. Third, the use of a cross-sectional design limits the ability to infer causality among the studied variables. As data were collected at a single point in time, the temporal sequence of the observed relationships remains unclear.

CONCLUSION

The results of this study confirm that academic procrastination and social support from parents play a significant role in influencing the levels of academic stress among students. Students who frequently delay tasks experience higher levels of stress. Conversely, emotional and academic support from parents has been shown to reduce those stress levels. The findings of this research emphasize the importance of

interventions to reduce procrastination behavior among students. Additionally, parental involvement needs to be enhanced as a form of positive social support.

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