

## The Relationship between Academic Stress and Help-Seeking Behavior with Depression in Students

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### Abstract

*Purpose:* To conduct an analysis of the relationship between academic stress and awareness in the pre-help-seeking behavior stage with the level of depression in students.

*Methodology:* This study utilized an analytical observational study design with a cross-sectional approach. The technique used was purposive sampling and 50 respondents were obtained, and three types of questionnaires were used to measure academic stress, help-seeking behavior and depression. The data analysis methods used in the research are univariate, bivariate (Chi-Square test), and multivariate (logistic regression test).

*Results:* According to the findings of the univariate analysis, the majority respondents were female (74.0%), moderate academic stress (52.0%), moderate help-seeking behavior (54.0%), and moderate depression (46.0%). Meanwhile, bivariate analysis found that academic stress had a significant relationship with depression levels ( $P < 0.001$ ), while the awareness in the pre-help-seeking behavior stage was not related to depression levels ( $P = 0.726$ ).

*Applications/Originality/Value:* To provide a new perspective on the relationship relationship between academic stress and awareness in the pre-help-seeking behavior stage with the level of depression in students.

### Introduction

Depression is defined as a state of the heart that causes sadness, a feeling of emptiness, or a constant feeling of being easily hurt, accompanied by certain psychological and physical signs (Donohue and Luby, 2020; American Psychiatric Association, 2022). In 2017, WHO stated that Southeast Asia had the highest rate of depression at 86.94 billion (27%) of the 322 billion population. Indonesia is in fifth place with a prevalence of (3.7%) (Djohan et al., 2022). As stated in "The Report on National Mental Health Development in China" (2021–2022), 24.1% of individuals aged 18 to 24 were found to be at risk of depression, which is much higher than the prevalence in other age groups (Chen et al., 2024). Based on 2018 Riskesdas data, the percentage of depression cases aged  $\geq 15$  years was 6.1% (Djohan et al., 2022).

Academic stress is a contributing factor to depression among students. American College Health Association stated that the majority of students who suffer from depression are closely related to academic stress. Previous research revealed that over 90% of students experienced academic stress with high level (Azizah et al., 2023; Nisa et al., 2023; Sari and Marsisno, 2023).

To encourage individuals to have a good awareness of mental health disorders, appropriate interventions are needed, such as help-seeking behavior (Nurfadilah et al., 2021; Iswanto and Ayubi, 2023; Natalie et al., 2023). However, not all students who suffer from depression have the desire or courage to seek help, which can increase the state of depression (Rasyida, 2019; Kizito and Martha, 2022; Yamaguchi et al., 2023).

Given the context of the problem described above, conducting this research is crucial due to the significant increase in depression rates among college students. Understanding the factors that contribute to student depression can help create a healthier academic environment.

## Method

### Research design

This study utilized an analytical observational study design using a cross-sectional approach.

### Research setting

The implementation will take place at the Faculty of Medicine at Muhammadiyah University of Surakarta, Central Java, Indonesia. Research will start from October to November 2024.

### Data collection

The sampling method applied was purposive sampling, resulting in a final sample size of 50 respondents. The inclusion criteria used were active students in the undergraduate program at the Faculty of Medicine at Muhammadiyah University of Surakarta, class of 2021 and 2023, and aged 18-24 years. Individuals who fulfilled these requirements and consented to take part were required to fill out the informed consent and questionnaire given.

Data collection in this study was conducted using three questionnaires, "The Perception of Academic Stress Scale (PASS)", "Attitude Toward Seeking Professional Psychological Help (ATSPPH-SF)", and "Patient Health Questionnaire-9 (PHQ-9)". Respondent characteristics such as age and gender will also be included in the width of the agreement.

The PASS questionnaire used to assess the level of academic stress, and a validity test has been carried out with results ranging from 0.41 to 0.79 with a reliability value of 0.7. The instrument have 18 questions with the score categories "Very High" (score > 78), "High" (score 63-77), "Moderate" (score 48-62), "Low" (score 33-47), and " Very Low" (score <32) (Dewi et al., 2022).

The ATSPPH-SF questionnaire used to assess awareness regarding the importance of seeking professional help, the validity test findings indicating the calculated r coefficient which is greater than the r table value (0.278), with the reliability test obtained Cronbach's alpha 0.626. The instrument consists of 10 questions with the score categories "Low" (score 10-20), "Moderate" (score 21-30), and "High" (score 31-40) (Rayan et al., 2020).

The PHQ-9 questionnaire was used to assess the level of depression, with validity tests obtained item-item correlation 0.508 to 0.907 and r table 0.361, so the whole has a calculated r greater than the r table, as well as the reliability test with the results Cronbach's alpha 0.936. The questionnaire consists of 9 questions with the score categories "Mild" (score ≥ 5), "Moderate" (score ≥ 10), "Moderate-Severe" (score ≥ 15), and "Severe" (score ≥ 20) (Cook et al., 2021; Fried et al., 2022).

### Data analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Three steps were taken in the data analysis process for this study, the first one is univariate analysis which was used to display the frequency distribution and proportion of each variable, the Chi-Square test was utilized for bivariate analysis, while logistic regression analysis was utilized for multivariate analysis.

### Ethical Research

This research obtained ethical approval from the Medical Research Ethics Committee of the Faculty of Medicine, Muhammadiyah University of Surakarta (No. 5390/B.1/KEPK-FKUMS/XI/2024). To take part in this study, each respondents signed an informed consent form.

## Results and Discussion

### Univariate Analysis

Table 1. Characteristics of Respondents

Characteristics	Frequency (n)	Percentage (%)
<b>Age (years)</b>		
– 18	2	4,0
– 19	11	22,0
– 20	11	22,0
– 21	19	38,0
– 22	6	12,0
– 23	1	2,0
<b>Gender</b>		
– Man	13	26,0
– Woman	37	74,0

Characteristics	Frequency (n)	Percentage (%)
<b>Academic Stress</b>		
– Low	21	42,0
– Moderate	26	52,0
– High	3	6,0
<b>Help-Seeking Behavior</b>		
– Low	3	6,0
– Moderate	27	54,0
– High	20	40,0
<b>Depression</b>		
– Mild	21	42,0
– Moderate	23	46,0
– Moderate-Severe	4	8,0
– Severe	2	4,0

The frequency of respondents in this study as depicted in Table 1. **Characteristics of Respondents** shows that the majority aged between 19-21 years (82.0%), the majority gender is female (74.0%), the majority respondents have moderate academic stress (52.0%), moderate level of awareness in help-seeking behavior (54.0%), also mild and moderate depression categories with (42.0%) and (46.0%) respectively.

#### Bivariate Analysis

The correlation test Chi-Square used in the bivariate analysis of this study, are as follows:

#### The Relationship between Academic Stress and the Level of Depression

From the results of the correlation test Chi-Square, the findings is:

**Table 2. Relationship between Academic Stress and the Level of Depression**

Academic Stress	Depression						P-value
	Mild		Moderate-Severe		Total		
	F	%	F	%	F	%	
Low	20	95,2	1	4,8	21	100,0	< 0,001
Moderate-High	2	6,9	27	93,1	29	100,0	
<b>Amount</b>	<b>22</b>	<b>44,0</b>	<b>28</b>	<b>56,0</b>	<b>50</b>	<b>100,0</b>	

From the findings as depicted in Table 2. **Relationship between Academic Stress and the Level of Depression** the majority of respondents with low academic stress had mild levels of depression (95.2%). Meanwhile, the majority of respondents with moderate-high academic stress had moderate-severe levels of depression (93.1%). When the analysis was carried out, the sig. on Chi-Square test was  $P < 0.05$ . These findings indicate a significant relationship between academic stress and depression levels.

This aligns with the findings of the study conducted by (Azizah et al., 2023), the results of the correlation test analysis show a correlation coefficient (r) of 0.597 with a significance value of 0.000 which means that there is a significant relationship between academic stress and depression levels. Apart from that, in research (Chen et al., 2024) where the analysis results obtained  $P < 0.01$ , it indicates a significant relationship between academic stress and depression levels. Stress that is not handled properly can trigger depression by inducing an inflammatory response, then cytokines are released and cause dopamine production to decrease in brain cells, then triggers the depression (Lubis et al., 2021; Azizah et al., 2023; Khaira, 2023).

#### The Relationship Between Awareness in The Pre-Help-Seeking Behavior Stage and the Level of Depression

From the results of the correlation test Chi-Square indicate the relationship between awareness in the pre-help-seeking behavior stage with the level of depression in students is:

**Table 3. Relationship between Help-Seeking Behavior and the Level of Depression**

Help-Seeking Behavior	Depression						P-value
	Mild		Moderate-Severe		Total		
	F	%	F	%	F	%	
Low-Moderate	12	40,0	18	60,0	30	100,0	0,726
High	9	45,0	11	55,0	20	100,0	
<b>Amount</b>	<b>21</b>	<b>42,0</b>	<b>29</b>	<b>58,0</b>	<b>50</b>	<b>100,0</b>	

From the findings as depicted in Table 3. **Relationship between Help-Seeking Behavior and the Level of Depression** it is known that the majority of respondents with low-moderate and high awareness of help-seeking behavior had the same levels of depression results which are in the moderate-severe category, with (60.0%) and (55%) respectively. When the analysis was completed, the sig. on Chi-Square test was 0.726 ( $P > 0.05$ ). This shows that there is no relationship between awareness pre level help-seeking behavior with depression levels.

No relationship was found between awareness in the pre-help-seeking behavior stage with the level of depression in this study is possible because many individuals who experience depression may already have awareness of their mental condition and feel the need to seek help, but due to several other reasons such as negative stigma and access to mental health services can be an obstacle to seeking psychological help, so even though awareness about the importance of seeking help is high, at the same time the level of depression is still as high (Andriani et al., 2021; Nurfadilah et al., 2021; Siti et al., 2021; Shabrina et al., 2022). This aligns with the findings of the study conducted by (Desai et al., 2023) where the Chi-Square test resulted in a P-value  $> 0.05$ , indicating no significant relationship between awareness in the pre-help-seeking behavior stage and depression levels.

The limitation of this research is that because it used a cross-sectional study, which is the long-term impacts of academic stress on student's depression could not be determined, so it can cause bias which can lead to results that are too high or too low. Also this research need to explore the reasons why only a few of the respondents with high awareness of help-seeking behavior reached the planning and action stage. Apart from that, because data collection uses a questionnaire, it only aims to find out about the awareness of the respondents, but does not explore other causes that could influence respondents in seeking psychological help.

### Multivariate Analysis

Multivariate analysis was not continued because only one independent variable was shown to have a significant relationship with the dependent variable. Therefore, continuing the multivariate analysis by including irrelevant variables will result in invalid data

### Conclusions

The conclusion drawn from the researchers' analysis and discussion of the data, there is a significant relationship between academic stress and depression levels in students, and there is no relationship between awareness pre level help-seeking behavior with depression levels in students.

The author's suggestion is that future researchers can consider conducting longitudinal studies so they can observe in the long term and provide a more accurate picture. Apart from that, also consider to use qualitative study, so you can dig deeper into the reasons behind the low level of planning and action in help-seeking behavior, as well as the obstacles and motivations felt by respondents. Conduct analysis to identify factors that influence student's decisions to seek help, such as negative stigma, access to mental health services, or social support. Consider expanding the research sample to be more representative, including from various faculties and years of study to get better generalizable results.

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