

The relationship between religiosity and academic stress among university students in Yogyakarta

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Abstract: Students face various academic demands that can trigger academic stress. On the other hand, religiosity is believed to play a protective role in coping with such pressures. This study aims to determine the relationship between religiosity and academic stress among students in Yogyakarta. This study employs a quantitative correlational approach. The participants comprised 87 students from various universities in Yogyakarta, selected via accidental sampling. The measurement tools were a religiosity scale and an academic stress scale, both of which had been validated and shown to be reliable. Data analysis was conducted using Spearman's correlation test since the data were not normally distributed. The results of the study indicate that there is a positive and significant relationship between religiosity and academic stress ($r = 0.358$; $p < 0.05$), thus supporting the hypothesis. This study implies that religiosity plays a role in influencing academic stress levels; however, the direction of the relationship does not always reduce stress, so it needs to be understood contextually.

Kata Kunci:

Academic stress,
muslim university students,
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Students unavoidably deal with a variety of academic obligations as members of the academic community. Students frequently face a mountain of homework, demanding tests, social expectations, and pressure to perform well. Students often face challenges as a result of the ever-increasing academic expectations and the need to adjust to various social contexts. Academic stress is likely to occur when students feel overburdened (Radisti et al., 2023). Studying academic stress is crucial because improper management can have a negative impact on mental health, academic achievement, and general wellbeing. Stress is the fourth most common cause of sickness worldwide, affecting around 350 million individuals, according to the World Health Organization (2020) (Fukui, 2024).

For Indonesian students, academic stress is a major issue. Prevalence estimates vary from 36.7% to 71.6% (Antara et al., 2025). According to a recent meta-analysis, over 70% of students report moderate to severe stress, which is caused by demanding coursework, pressure from family and instructors, and fierce academic competition (Zega & Zega, 2025). Additional stress symptoms including anxiety, social disengagement, and physical ailments like headaches and palpitations are frequently experienced by students living away from home (Mutiarawati & Lestari, 2024). Nearly half of pupils had significant academic stress during the COVID-19 pandemic, which made this situation worse. As a result, learning motivation and academic performance declined (Lalin et al., 2024).

Students' academic stress is typically caused by two types of circumstances. Psychological elements like mindset, personality, belief systems, and adaptability are examples of internal factors (Amalia & Nashori, 2023), whereas social pressures like academic demands, peer competition, pressure from instructors and family, and the difficulty of the course material are examples of external factors (Radisti et al., 2023).

It is commonly suggested that religiosity is a protective factor that might lessen academic stress from both internal and external sources. Highly religious people typically have strong spiritual beliefs that help them cope with psychological stress; religious values strengthen positive coping through a sense of purpose, hope, and motivation, while the ideas of tawakkul and sabr, along with acceptance of destiny, are thought to promote calmness, patience, and optimism when facing academic challenges (Amalia & Nashori, 2021). Participating in religious study groups, congregational prayer, and religious lectures gives students access to emotional support, spiritual guidance, and a healthy social environment that helps them deal with academic pressure. Additionally, religious students typically have more supportive social networks due to their involvement in religious communities (Radisti et al., 2023).

However, there are still conflicting empirical results about this association. Religious coping was found to reduce academic burnout by 17.2% among PTAI students in Yogyakarta (Sipayung, 2016); religiosity was found to reduce academic

anxiety among students at MBS Prambanan Yogyakarta by 7.8% (Ramadani, 2023); spirituality and academic stress were found to be significantly correlated negatively among Islamic boarding school students in Yogyakarta Putra (2024) $r = -0.187$, $p = .047$); and both Radisti et al. (2023) and Siadari and Rosito (2023) similarly reported that higher religiosity was associated with lower academic stress. Not all findings, however, are consistent. For example, Mutiarawati and Lestari (2024) discovered a significant positive correlation between academic stress and religiosity among migrant students. This suggests that for some populations, higher religiosity may instead be associated with greater stress, possibly due to elevated internal moral standards, feelings of guilt over not consistently upholding religious values, and limited social support in unfamiliar environments. Notably, that study appeared to have used instruments frequently used to measure academic stress and religiosity, but it did not explicitly identify the theoretical framework or measurement tools used.

This study uses instruments that have been proven to be valid and reliable, namely the CRS-15 to measure religiosity and the academic stress scale from Solikhah and Prawita (2024). The differences in cultural background, population characteristics, and methodological approaches are expected to provide findings that are more appropriate and relevant to the conditions of students in Yogyakarta, as well as to broaden the perspective in the study of the relationship between religiosity and academic stress. Conceptually, Lazarus and Folkman's (1984) transactional stress and coping theory combined with Glock and Stark's (1965) multidimensional religiosity framework can be used to understand the relationship between religiosity and academic stress. According to this theory, religiosity serves as a vehicle for both emotional and cognitive evaluation. When students face academic obligations, their religious practices (ritualistic and consequential dimensions) and belief systems (ideological and intellectual dimensions) influence how they view these demands either as stressful but doable challenges. High religiosity can, on the one hand, promote adaptive coping, which reduces academic stress by minimizing primary threat evaluations through ideas like *sabr* (patience) and *tawakkul* (faith in God). However, a rigid internalization of religious ideals may instead produce a maladaptive cognitive appraisal, in which academic setbacks are interpreted as spiritual failure or divine retribution, generating intense guilt and internal moral pressure.

As a result, religion serves as a dual-edged cognitive lens that can either mitigate or exacerbate a student's psychological reaction to academic pressure. Previous research using these frameworks (Radisti et al., 2023) generally supports religiosity as a protective factor; however, the opposite pattern seen among migrant students (Mutiarawati & Lestari, 2024) suggests that, rather than reflecting a fixed relationship, whether religiosity serves as a protective factor or becomes an additional burden may depend significantly on population characteristics and contextual factors. This discrepancy suggests that the connection between scholastic stress and religiosity is probably context-dependent rather than universal. The post-pandemic

period, when students' study habits, social relationships, and anxiety levels have significantly changed, is one situation that has not received enough attention (Lalin et al., 2024). This gap serves as the foundation for the current study, which examines this link among post-pandemic university students in Yogyakarta using a combination of the CRS-15 and an academic stress scale modified from Solikhah and Prawita (2024). In light of this context, the research questions in this study are:

Is there a significant relationship between religiosity and academic stress among students?

What is the direction of the relationship between religiosity and academic stress among students?

This study aims to analyze the level of religiosity and academic stress experienced by students and to determine whether there is a significant relationship between religiosity and academic stress among students, as well as to understand the direction of this relationship. This study is expected to provide insights into the factors influencing academic stress among students, offer students an understanding of stress coping strategies based on religiosity, and provide references for educational institutions in designing policies and programs that support students' psychological well-being. Thus, this study not only contributes to the development of academic studies related to religiosity and academic stress but also provides practical benefits for students and educational institutions in creating a healthy academic environment that supports productivity.

METHOD

This study aims to determine the relationship between religiosity and academic stress among students in Yogyakarta. Using a quantitative approach via an online questionnaire, researchers can efficiently collect data from a large number of respondents. The selection of this method supports correlational analysis to determine the extent of the relationship between the variables under study.

This study uses a quantitative approach with a correlational research design. The quantitative approach is used in this study to analyze numerical data obtained from standardized instruments. This study uses a correlational research design to determine the existence and direction of the relationship between independent and dependent variables.

The population of this study was undergraduate students in Indonesia. This study used convenience sampling to obtain 87 respondents, whereby not all members of the population had an equal chance of being selected as respondents for this study. Respondents were selected based on ease of access.

The criteria that respondents must meet to qualify as samples in this study are:

1. Active undergraduate students
2. Aged 18-23 years
3. Muslim

This study has two main variables, namely religiosity as the independent variable and academic stress as the dependent variable. Two main measurement tools, namely the academic stress scale and the religiosity scale. The academic stress instrument was adapted from Solikhah and Prawita (2024) and consisted of 24 items. The scale development process involved seven stages, including expert validation and reliability testing. The scale uses a 5-point Likert scale and has been proven to have high reliability, with a Cronbach's Alpha value of 0.856.

The Centrality of Religiosity Scale (CRS-15) was utilized in this study, which was developed by Huber and Huber (2012) and adapted by Chairani et al. (2023). This scale consists of 15 items, reflecting five aspects of religiosity. The construct validity of this instrument has been tested using Confirmatory Factor Analysis (CFA), but its reliability value has not yet been reported.

The data for this study were collected through an online questionnaire. The questionnaire will be designed using a 5-point Likert scale to measure individuals' attitudes, opinions, and perceptions of a phenomenon, and there will be items on an 8-point Likert scale to measure the frequency of certain activities in the form of a closed-ended response scale. The questionnaire will be distributed over a certain period of time, and respondent participation is voluntary without any pressure or coercion.

The data obtained will be analyzed statistically using JAMOV software. The analysis technique in this study is correlational analysis, which is used to determine the relationship between religiosity as an independent variable and academic stress as a dependent variable. To test the validity of the instrument, a reliability test was also conducted. This was followed by a normality assumption test as a prerequisite for correlational analysis. After the normality assumption test was conducted, the data for the independent variable, religiosity, were found to be non-normally distributed, so the correlation analysis was performed using the non-parametric Spearman technique.

This study complies with research ethics principles by ensuring that participation is voluntary and respondent data is kept confidential. Before the study begins, participants will be provided with an explanation of the study's objectives. Participants will have the opportunity to ask questions and understand what will be done. Subsequently, participants will be asked to provide voluntary consent through informed consent, as evidence that they understand their rights and agree to participate in the study. The data collected in this research will be kept confidential

and will only be used for research purposes, and will not be used for other purposes without the consent of the participants. By applying the principles of research ethics, it can be ensured that this research is conducted ethically and is accountable in order to protect the rights of participants and maintain the integrity of the research.

RESULTS

A. Reliability Test

Reliability testing was conducted to determine the extent to which the research instrument (scale) provided consistent results. In this study, reliability was measured using Cronbach's Alpha (α) coefficient.

1. Religiousness Scale

Based on the analysis result, Cronbach's Alpha value for the religiousness scale is 0.722 which indicates that the religiosity scale has sufficient reliability and can be used for further research.

2. Academic Stress Scale

The reliability test results show that Cronbach's Alpha value for the academic stress scale is 0.815. Thus, this scale has good reliability.

B. Normality Test

Table 1

Normality test

	Religiosity	Academic Stress
N	87	87
Missing	0	0
Mean	71.2	133
Median	72	133
Standard deviation	6.18	11.6
Variance	38.2	135
Minimum	55	97
Maximum	82	169
Shapiro-Wilk W	0.968	0.983
Shapiro-Wilk p	0.030	0.310

Before analyzing the relationship between religiosity and academic stress, the data were tested for normality. Normality testing is a prerequisite for using parametric analysis methods such as Pearson's correlation. The purpose of normality testing is to determine whether the distribution of data for each variable meets the assumption of normality. Since the number of research subjects was 87, which still falls within the small to medium sample range, the Shapiro-Wilk normality test was used.

According to the findings of the Shapiro-Wilk test, the data on the religiosity variable were not statistically normally distributed, with a W value of 0.968 and a p value of 0.030. Then on the academic stress found the value of $W = 0.983$ and $p = 0.310$, whereas the p-value is greater than 0.05, indicating that the data is normally distributed.

Therefore, only one variable meets the normality assumption, and the others do not. Therefore, the assumption of normality is not fully met in parametric analysis. Thus, to analyze the relationship between religiosity and academic stress, a non-parametric analysis method, or Spearman's rho correlation, is used. This is because this method does not require a normal data distribution and is more suitable for ordinal data or data that does not meet parametric assumptions.

C. Hypothesis Analysis

Table 2

Correlation Matrix

		Academic Stress	Religiosity
Total Religiosity	Spearman's rho	0.358***	—
	df	85	—
	p-value	<.001	—
	N	87	—

Note. H_a is positive correlation

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, one-tailed

To test this research hypothesis, Spearman's rho correlation analysis was used because the normality test results showed that one of the variables, namely religiosity as an independent variable, was not normally distributed. The existence and direction of the relationship between two ordinal variables or data that are not normally distributed are identified using Spearman's correlation.

Based on the table above, it is known that the correlation coefficient (r) value = 0.358, indicating a positive relationship between religiosity and academic stress. The p -value < 0.001 , indicating a significant relationship at the 0.05 significance level (even 0.01 and < 0.001). These findings show that the first hypothesis is accepted, and the second hypothesis is rejected because the p -value is < 0.05 . The conclusion is that there is a significant correlation between religiosity and academic stress among students in Yogyakarta. The relationship between the two variables is unidirectional, as the correlation value is positive ($r = 0.358$). This means that the higher the level of religiosity among students, the higher the level of academic stress among students. Therefore, it can be stated that the second hypothesis is rejected.

Based on data analysis using Spearman's rho correlation technique, a correlation coefficient of 0.358 was obtained with a significance level of $p < 0.001$. This finding indicates a significant relationship between religiosity and academic stress among students in Yogyakarta, so the first hypothesis is accepted. This means that, statistically, there is a meaningful relationship between the two variables. However, the direction of the relationship found is positive, not negative, as assumed in the second hypothesis.

In other words, the second hypothesis cannot be accepted because the results show that the higher the religiosity of students, the higher the level of academic stress they experience. This finding suggests that religiosity does not always function as a protector against academic stress. In fact, at high levels of religiosity, individuals may experience greater internal pressure, such as feelings of guilt, heavy moral responsibility, or high spiritual demands, especially if not accompanied by adequate coping skills. This demonstrates that the relationship between religiosity and academic stress is complex and highly influenced by personal and social environmental factors.

DISCUSSION

This study aimed to examine the relationship between religiosity and academic stress levels among university students in Yogyakarta. Reliability tests were carried out on both scales to guarantee data robustness. The Academic Stress Scale had strong reliability ($\alpha = 0.815$), although the Religiousness Scale had adequate reliability ($\alpha = 0.722$). Additionally, a Shapiro-Wilk normality test showed that while the academic stress variable was normally distributed ($W = 0.310$, $p > 0.05$), the

religiosity variable was not ($W = 0.030$, $p < 0.05$). A non-parametric method utilizing Spearman's rho correlation was used to test the hypotheses because the normality requirement for parametric analysis was not entirely satisfied ($N = 87$).

According to the empirical findings, there is a statistically significant positive correlation between academic stress and religiosity ($r = 0.358$, $p < 0.001$). As a result, the first hypothesis which anticipated a substantial correlation between the two variables is validated and approved. Nevertheless, the second hypothesis which predicted a negative correlation is disproved. Higher levels of religiosity among students are positively correlated with higher levels of academic stress, which is a surprising phenomenon.

The conventional state-of-the-art literature, which frequently presents religiosity as a universal protective buffer against psychological discomfort, is challenged by this finding. Rather, these findings suggest that religiosity may create particular pressures in particular academic situations. Strong moral obligations, strict perfectionism, or severe spiritual anguish can all be signs of a strong religious devotion. If they fall short of high spiritual or intellectual standards, students may feel intense shame because they perceive academic failures as spiritual failings. This implies that how people internalize religious principles and the social influences in their surroundings mediate the intricate relationship between faith and stress.

When evaluating these results, it is important to recognize a number of limitations. First, the results cannot be applied to a larger student population due to the comparatively small sample size ($N = 87$) that was limited to a specific geographic area (Yogyakarta). Second, the study did not differentiate between the intrinsic and extrinsic dimensions of religiosity, instead measuring it as a unidimensional concept. Finally, it is difficult to establish a causal relationship between academic stress and religiosity due to the use of cross-sectional self-reported data.

CONCLUSIONS

This study effectively examined the connection between academic stress and religion among Yogyakarta university students. A substantial positive association ($r = 0.358$, $p < 0.001$) was found using the non-parametric Spearman's rho correlation analysis. These findings contradict the expected direction (H^2 denied), although confirming a strong association (H^1 accepted). Higher levels of academic stress in this group are linked to higher levels of religiosity, according to the data. In the end, this study comes to the conclusion that religiosity does not always serve as a psychological buffer against pressure to perform well academically. Spiritual values can intensify internal conflicts and emotional pain when they are combined with high moral standards and unhealthy coping strategies. As a result, the relationship between

religion and mental health is complex and non-linear, necessitating careful analysis of societal settings and personal coping mechanisms.

This phenomenon provides insight that religiosity, in certain contexts, does not always act as a protector against academic pressure. Instead, religiosity can become an additional source of stress, especially if the spiritual values embraced are not accompanied by healthy and effective coping mechanisms. The burden of moral responsibility, feelings of guilt over academic failure, and pressure to always meet high religious standards can lead to internal conflict and emotional stress. Therefore, it is important to understand that the relationship between religiosity and stress is not simple, but complex and greatly influenced by individual internal factors and the social environment in which students find themselves.

SUGGESTION

Several suggestions are made for further research as well as practical implementation based on the empirical insights this study produced. For University, counseling centers and student affairs departments at universities are urged to create comprehensive support programs that incorporate spiritual and psychological interventions. Institutions should provide value-based counseling, balanced religious forums, and stress-management training catered to students' spiritual backgrounds rather than treating mental health and religious values independently. In order to handle academic challenges without feeling overburdened by moral or spiritual standards, this will assist highly religious students in developing flexible, healthy coping strategies.

Additionally, for future research development, it is recommended that studies on religiosity and academic stress not only examine religiosity levels in general but By distinguishing between intrinsic religiosity (deeply internalized ideas) and extrinsic religiosity (socially or culturally motivated obedience), future research should take a more detailed approach. To give a more thorough foundation for student well-being, researchers are also urged to increase the sample size across several areas and include potential mediators or moderators, such as peer/family social support, academic self-efficacy, and emotional intelligence.

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