

Mitigating anxiety among indonesian students: The moderating role of Islamic religiosity in social support effects

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ABSTRACT

Anxiety is a common mental health issue among university students, which significantly affects their academic performance and well-being. While social support is widely recognized as a protective factor against anxiety, its effectiveness may vary depending on individual psychological factors such as religiosity. This study aims to examine the moderating role of Islamic religiosity in the relationship between social support and anxiety among Indonesian university students. By investigating the interaction, the research seeks to provide insights into faith-based coping mechanisms that may enhance students' psychological resilience. A cross-sectional survey was conducted among 523 university students in Indonesia using purposive sampling. Data were collected through an online questionnaire measuring anxiety (DASS-42), Islamic religiosity (MUDRAS), and social support (MSPSS). Moderation analysis was performed using Moderated Regression Analysis (MRA) Model 1. The findings indicated that both social support ($Z = -3.09$, $p = .002$) and Islamic religiosity are significantly associated with lower anxiety levels ($Z = -3.52$, $p < .001$). Furthermore, Islamic religiosity moderated the relationship between social support and anxiety, suggesting that students with higher religiosity experience greater psychological benefits from social support ($Z = -2.39$, $p = .017$). These results highlighted the importance of integrating religious and social support into student mental health programs. Universities should consider implementing faith-based support systems to enhance students' psychological resilience and well-being, particularly in religiously oriented communities.

INTRODUCTION

Anxiety is one of the most prevalent mental health concerns among university students, significantly impacting their academic performance and overall well-being. Studies have reported high levels of anxiety among students globally, with prevalence rates reaching 69% in the United Kingdom (Oxford CBT, 2024) and 79% in Morocco (Laamiri et al., 2023). In Indonesia, research has shown that approximately 52.9% of students experience high anxiety levels (Laksmini et al., 2021). Given these statistics, understanding the factors that influence student anxiety and potential interventions is crucial.



The transition to university life presents multiple stressors, including academic pressure, social adaptation, financial constraints, and future career concerns. These challenges can contribute to heightened anxiety levels, affecting students' ability to concentrate, perform well academically (Rani, 2025), and maintain healthy interpersonal relationships (Akbarian et al, 2022). Moreover, culture and religious contexts play a role in shaping how students cope with stress and anxiety. Especially in predominantly Muslim societies like Indonesia, where religion significantly influences daily life, Islamic religiosity may serve as an essential coping mechanism for mitigating anxiety. Therefore, it is essential to explore the interaction between psychological support systems and spiritual beliefs.

Anxiety is an emotional response to perceived threats that can negatively impact various aspects of life. Lovibond and Lovibond (1995) define anxiety as a state of fear or worry about potential adverse outcomes, which can interfere with cognitive function and emotional well-being. Previous research reported that high anxiety levels are associated with decreased academic performance, sleep disturbances, and an increased risk of mental health disorders (Liu et al., 2024; Yuksel et al., 2024). Furthermore, the prolonged anxiety has been linked to higher rates of depression and even suicidal ideation among students (Moskow et al., 2024). Given its significant impacts, it is crucial to identify protective factors that help reduce anxiety.

Stress-Buffering Theory seems to be able to be used to provide a framework for thinking, namely that various resources owned by individuals, such as social support, religiosity, and various other psychological dimensions, can act as a buffer against various pressures present in an individual's life (Cohen & Wills, 1985). Numerous studies have identified social support as a key protective factor against anxiety, for example, individuals who receive emotional, instrumental, and informational support tend to experience lower anxiety levels (Ao et al., 2020; Stewart et al., 2022). This is because social support fosters a sense of belonging and security, helping students manage stress more effectively. Moreover, social support has also been linked to improved psychological resilience, lower levels of depression, and overall better mental health outcomes (Katsiroumpa et al., 2025; Scardera et al., 2020). However, the strength of this relationship varies depending on cultural and individual differences, highlighting the need to explore and examine moderating variables.

Religiosity has been recognized as a psychological coping mechanism that enables individuals to interpret stressful experiences through a spiritual lens, ultimately reducing anxiety (Abdel-Khalek et al., 2019; Francis, 2019). Studies indicated that religious individuals tend to have lower anxiety levels due to their reliance on faith-based coping strategies, such as prayer, seeking divine guidance, and engaging in religious communities (Rosmarin & Leidl, 2020). Specifically, in Islamic contexts, religious practices such as shalat (prayer) and dhikr (remembrance of Allah) have been associated with reduced stress and anxiety levels (Duta et al., 2025). Therefore, religiosity, mainly through practices like prayer and remembrance of Allah, plays a significant role in mitigating anxiety and stress, offering individuals a spiritual framework for coping with life's challenges.

Despite these findings, research on the role of Islamic religiosity in moderating the effects of social support on anxiety remains limited. While some studies suggested that religiosity independently reduces anxiety (Areba, 2018; Ismail et al., 2020), fewer studies have examined its interaction with social support. A study by Mahfoud et al. (2023) found that religiosity enhances the positive effects of social support, suggesting that faith-based perspectives may amplify the benefits of social interactions. However, this finding has not been widely tested in Muslim-majority populations, particularly among university students facing academic stressors.

Most existing studies focus on the direct effects of social support on anxiety, while overlooking potential moderating factors such as religiosity. While some research highlighted the role of spirituality in mental health (Plante, 2022; Rezende-Pinto, 2019; Zerem, 2020), few studies specifically examined Islamic religiosity as a moderating variable. Furthermore, previous studies have predominantly been conducted in Western contexts, where the role of religion in daily life differs from that in predominantly Muslim societies like Indonesia. Therefore, this study aimed to fill this gap by investigating the moderating role of Islamic religiosity in the relationship between social support and anxiety among Indonesian university students.

Islamic teachings emphasize the importance of social relationships and seeking support from others in times of psychological distress. The concept of ukhuwah Islamiyah (Islamic brotherhood) fosters a supportive community that can buffer against anxiety (Ao et al., 2020; Stewart et al., 2022). Additionally, religious beliefs provide cognitive frameworks that help individuals interpret challenges positively, reducing perceived threats and psychological distress (Abdel-Khalek et al., 2019; Francis, 2019). Understanding the interplay between social support and Islamic religiosity can provide insights into culturally and religiously sensitive mental health interventions for Muslim students.

In this study, Islamic religiosity is conceptualised as a *moderator* rather than a mediator because it does not represent an explanatory psychological process that accounts for how social support reduces anxiety. A mediating variable must function as a mechanism through which the predictor influences the outcome. However, religiosity operates as a *pre-existing personal resource* that shapes how individuals interpret and benefit from social support. As a relatively stable value-based orientation, religiosity is unlikely to be influenced or altered by social support, making a mediation model theoretically inappropriate. Instead, religiosity is expected to condition the strength or direction of the association between social support and anxiety, which corresponds more closely to a moderation framework.

The moderating role of Islamic religiosity is grounded in the notion that religious beliefs enhance individuals' perceived coping resources. Students with higher levels of religiosity tend to interpret stressors through a spiritual framework that emphasizes divine support, acceptance, and purposeful meaning. This orientation may amplify the psychological benefits of social support, as supportive interactions are perceived not only as interpersonal resources but also as affirmations of God's mercy and communal solidarity. Consequently, religiosity is expected to *strengthen* the stress-buffering effect of social support, leading to lower anxiety among individuals with stronger religious commitment.

This study aims to examine whether Islamic religiosity moderates the relationship between social support and anxiety among Indonesian university students. Based on existing literature, the study hypothesizes that:

1. Greater social support is associated with lower levels of anxiety.
2. Higher Islamic religiosity is associated with lower levels of anxiety.
3. Islamic religiosity moderates the relationship between social support and anxiety, strengthening the negative association between the two variables.

METHODS

This study involved 523 university students from various regions in Indonesia. Participants were selected using a purposive sampling technique commonly used in psychological research to

ensure that respondents met specific criteria relevant to the study objectives. The inclusion criteria were as follows: (1) actively enrolled university students, (2) Muslim, (3) aged between 19 and 26 years, and (4) residing in Indonesia. This targeted sampling method was utilized to obtain a homogeneous group that accurately reflects the study's focus on Islamic religiosity. Given the vastness of Indonesia, participants were recruited from multiple universities across different regions, ensuring geographical diversity in the dataset. Participants came from universities in western Indonesia, central Indonesia, and eastern Indonesia. This approach enhances the generalizability of findings within the context of Indonesian higher education institutions.

The level of anxiety among participants was assessed using the Depression Anxiety Stress Scales (DASS-42), developed by Lovibond and Lovibond (1995). This study employed the Indonesian-adapted version by Marsidi (2021), specifically the 14-item Anxiety subscale. This scale measures various symptoms of anxiety, such as physiological hyperarousal, excessive worry, and fear of losing control. Sample items include: (1) "I feel faint as if I am going to pass out," (2) "I feel fear for no clear reason," and (3) "I have difficulty swallowing." Each item is rated on a four-point scale from 0 (never) to 3 (almost always), with higher scores indicating greater anxiety levels. The Indonesian version of the Anxiety subscale has demonstrated excellent internal consistency, with a Cronbach's alpha of .952. The validity of this scale has been confirmed, with an item-total correlation coefficient of $\geq .300$, meeting the standard criteria for psychological measurement tools.

Islamic religiosity was measured using the Muslim Daily Religiosity Assessment Scale (MUDRAS), initially developed by Olufadi (2017) and later adapted into Indonesian by Suryadi and Hayat (2021). This 28-item scale evaluates three dimensions of Islamic religiosity: (1) bodily worship of Allah, (2) engagement in recommended religious acts, and (3) avoidance of sinful acts. Sample items include: (1) "Praying for one's parents," (2) "Sincerely seeking forgiveness without repeating the same mistakes," and (3) "Encouraging others to do good." Each item is rated on a five-point Likert scale, ranging from 1 (never) to 5 (always). The Indonesian adaptation of MUDRAS has shown high reliability, with a Cronbach's alpha of .93, demonstrating strong internal consistency. The scale's validity is supported by an item-total correlation coefficient of $\geq .300$, aligning with accepted standards for psychological assessments (Suryadi et al., 2020).

Social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS), initially developed by Zimet et al. (1988) and validated for use in Indonesia by Sulistiani et al. (2022). This 12-item scale measures perceived support from three sources: family, friends, and significant others. Sample items include: (1) "I can talk about my problems with my friends," (2) "There is someone special who supports me when I need it," and (3) "I have someone to share my joys and sorrows with." Each item is rated on a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating more outstanding perceived social support. The Indonesian version of MSPSS has demonstrated strong internal consistency, with a Cronbach's alpha of .85. It has been validated with an item-total correlation coefficient of $\geq .300$.

Data collection was conducted through an online survey distributed via Google Forms. Before participation, respondents received a detailed study information sheet explaining the research objectives, confidentiality assurances, and their voluntary participation rights. The institutional review board reviewed the measurement instrument before use in data collection (No: 615b/Dek-FPSB/10/DURT/VIII/2024). The survey was self-administered and took approximately 15–20 minutes to complete. To minimize response bias, multiple strategies were implemented, including randomized item presentation and the inclusion of attention-check questions to identify and exclude inattentive respondents, thereby improving data quality (Robie et al., 2022). Additionally, participants

were informed that responses would remain confidential and anonymous to encourage honest reporting.

Analysis of data was conducted by using Moderated Regression Analysis (MRA) with Jamovi 2.4.0.1. Moderated Regression Analysis is used to determine the extent of the influence of one or more independent variables on the dependent variable, which is strengthened or weakened by the moderating variable (Akbar & Adi, 2022). Before hypothesis testing, assumption tests were carried out, including normality and multicollinearity tests. The normality test was used to determine whether the data set was distributed normal or not, and the multicollinearity test was used to determine whether the independent variables in a regression model correlate or decrease with each other (Putri & Raflis, 2024). The normality testing was conducted using skewness and kurtosis values to confirm that the data met assumptions for parametric testing. To address potential multicollinearity issues, predictor variables were mean-centred, and variance inflation factor (VIF) scores were examined, with values below 2.0 indicating no concerns regarding multicollinearity. Statistical significance was set at $p < .05$, and confidence intervals were reported to enhance result interpretation. Additionally, interaction plots were generated to visually depict how Islamic religiosity influences the relationship between social support and anxiety. This multi-step approach ensured that findings were statistically valid and methodologically robust, strengthening the credibility of the study's conclusions.

RESULT AND DISCUSSION

The participants included students from western (58.9%), central (16.8%), and eastern Indonesia (24.3%), providing a representative cross-section of the student population.

Table 1

Descriptive Data of Participants (N=523)

Demographic Data	N (%)
Gender	
Female	433 (82.8%)
Male	90 (17.2%)
Year of University Enrollment	
2023–2024 (Recent Enrollment)	217 (41.5%)
2021–2022 (Mid Enrollment)	294 (56.2%)
Before 2021 (Early Enrollment)	12 (2.3%)
University Location	
Western Indonesia	308 (58.9%)
Central Indonesia	88 (16.8%)

Table 1 indicates that most participants are female (82.8%), suggesting a higher female enrollment rate or greater willingness among female students to participate in the study. Most students enrolled between 2021 and 2022 (56.2%), with a substantial portion from 2023–2024 (41.5%), reflecting recent academic trends. Only 2.3% enrolled before 2021, likely representing older students or those with extended study periods. Geographically, the most significant representation is from Western Indonesia (58.9%), possibly due to the region's higher population density and larger number

of universities. Meanwhile, 24.3% are from Eastern Indonesia, showing a relatively strong presence despite fewer educational institutions in the area. The diverse distribution of participants ensures a broad perspective on the study's findings.

Although the sample includes students from diverse regions of Indonesia, the proportion of female respondents is notably high (82.8%). This imbalance is consistent with previous survey-based psychological research in Indonesia, where female students tend to demonstrate higher willingness to participate in online studies and self-report measures. Nevertheless, this demographic skew may limit the generalizability of the findings, particularly concerning male students who are underrepresented in the dataset. Therefore, the interpretation of the results should be approached with caution, acknowledging that gender composition may influence anxiety patterns and the manifestation of religiosity and social support.

Table 2*The result of descriptive analysis*

	Anxiety	Islamic religiosity	Social support
N	523	523	523
Missing	0	0	0
Mean	6.50	69.9	35.9
Median	6.00	71.0	36.0
Standard deviation	3.77	10.4	5.92

Table 2 provides an overview of the research data from 523 respondents, with no missing values. The average anxiety level was 6.50, with a standard deviation of 3.77, indicating considerable variation among individuals (ranging from 0 to 19). Islamic religiosity had an average of 69.9, with a standard deviation of 10.4, reflecting a relatively high level of religiosity in the sample (ranging from 26 to 90). Social support averaged 35.9 with a standard deviation of 5.92, showing a relatively stable distribution from 12 to 48. The median values were close to the means, suggesting a near-symmetric data distribution. Overall, the data indicated that religiosity and social support tend to be high, while anxiety varies but is mainly at a moderate level.

Table 3*The result of the normality test*

	Anxiety	Islamic religiosity	Social support
N	523	523	523
Skewness	.591	-1.16	-.351
Std. error skewness	.107	.107	.107
Kurtosis	.169	1.82	.429
Std. error kurtosis	.213	.213	.213

The normality test results indicated the distribution characteristics of the three variables in the study. Anxiety had a skewness of .591 with a standard error of .107, suggesting a slight positive skew, meaning the data is somewhat right-skewed. Islamic religiosity had a skewness of -1.16, indicating a

moderate negative skew, meaning the data is more concentrated on the higher end. Social support had a skewness of -.351, showing a slight negative skew. In terms of kurtosis, anxiety (.169) and social support (.429) were close to normal distribution (kurtosis near 0), while Islamic religiosity (1.82) had a higher kurtosis, suggesting a more peaked distribution. Overall, Islamic religiosity deviated more from normality compared to the other variables.

Table 4*The result of collinearity statistics*

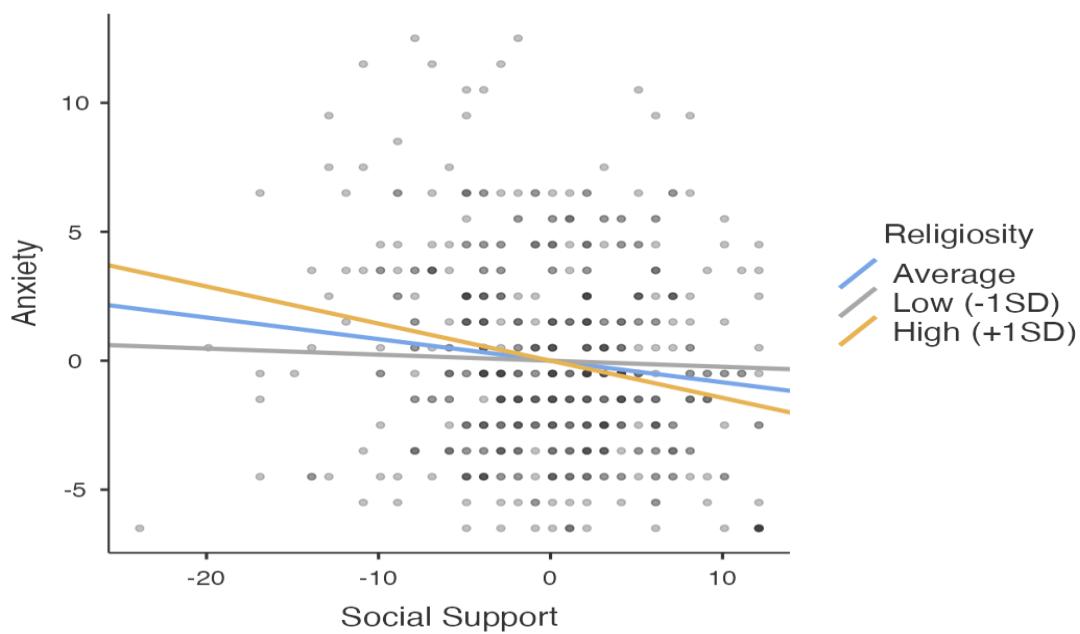
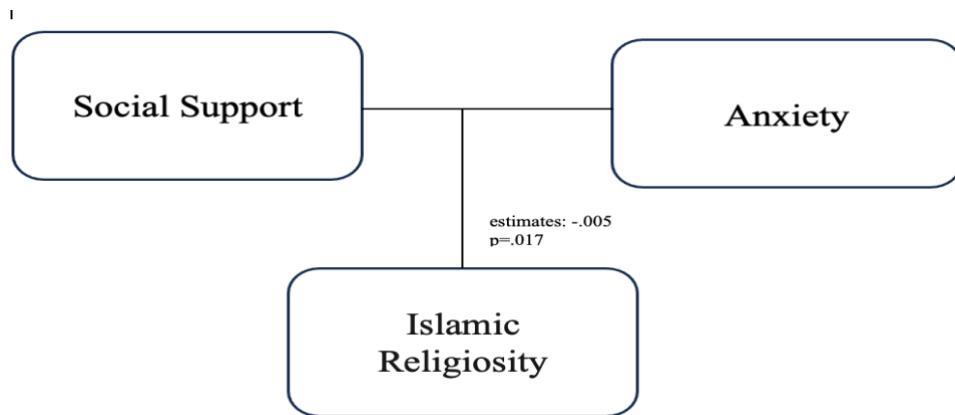
	VIF	Tolerance
Islamic religiosity	1.02	.981
Social support	1.02	.981

The collinearity statistics indicated that Islamic religiosity and social support have a Variance Inflation Factor (VIF) of 1.02 and a tolerance value of .981. These values suggested that multicollinearity is not a concern in this study, as a VIF close to 1 and a tolerance value near 1 indicate minimal correlation between the independent variables. Generally, a VIF below 10 and a tolerance above .1 were acceptable thresholds, confirming that Islamic religiosity and social support are independent enough for regression analysis. This ensured the reliability of the model without multicollinearity affecting the results.

Table 5*The result of moderation estimates*

	Estimate	SE	Z
Social support	-.083	.02709	-3.09
Islamic religiosity	-.054	.01543	-3.52
Social support * Islamic religious	-.005	.00243	-2.39

The moderation analysis indicated that social support has a significant negative effect (Estimate = -.083, SE = .0279, Z = -3.09, p = .002), meaning that higher social support is associated with lower anxiety. Islamic religiosity also showed a significant negative effect (Estimate = -.054, SE = .015, Z = -3.52, p < .001), suggesting that increased religiosity is linked to lower anxiety levels. The interaction term between social support and Islamic religiosity (Estimate = -.005, SE = .002, Z = -2.39, p = .017) was also significant, demonstrating that Islamic religiosity moderates the relationship between social support and anxiety. In other words, the combined effect of social support and religiosity further reduced anxiety, reinforcing their protective roles.

Figure 1*Interaction Plot***Figure 2***Moderation analysis*

Although the interaction term between social support and Islamic religiosity was statistically significant, the effect size was relatively small (estimate = $-.005$). This indicated that religiosity functions as a subtle, rather than substantial, moderator in the relationship between social support and anxiety. The negative coefficient reflected a slight strengthening of the protective effect of social support as religiosity increases. Therefore, while the moderating effect is meaningful in statistical terms, it should be interpreted with caution regarding its practical magnitude.

This study explored how social support and religiosity interact to influence anxiety levels among Indonesian university students. The results aligned with the hypotheses, indicating that: (1) higher social support is associated with lower anxiety; (2) greater religiosity predicts reduced anxiety; and (3) Islamic religiosity serves as a moderating factor in the association between social support and anxiety. These results highlighted the protective roles of social supports and religious factors in reducing anxiety among students within an Islamic cultural context.

Social Support and Anxiety among Students

The results of the current study supported the theory and findings of previous research: for instance, social psychology theory, as explained by Sarason and Sarason (2009), stated that social support can influence an individual's self-conception, attitudes, and behavior. One of the factors that is influenced by social support is anxiety. A population-based study by Stewart et al. (2022) showed that functional social support contributes to reducing anxiety disorders. Moreover, research conducted by Ao et al. (2020) on COVID-19 victims demonstrated that social support has a significant negative correlation with anxiety. In other words, the greater the level of social support an individual receives, the lower their anxiety tends to be. Furthermore, Karim and Yoenanto (2021) revealed that social support plays a crucial role in reducing anxiety. For further details, social support in the form of affection contributes to strengthening spiritual well-being, while social support in the form of information and guidance has an impact in overcoming negative life events.

The sources of social support could vary, such as from peers, family, and significant others. A study conducted by Fauziyah and Ariati (2015) found that social support from a peer could decrease anxiety in final-year students when facing the challenges to find employment. Additional studies have consistently shown that perceived social support negatively influences anxiety levels (Dour et al., 2014; Roohafza et al., 2014), with family support and positive reinterpretation identified as key protective factors against anxiety and depression (Roohafza et al., 2014). The evidence reported that support from family and significant others was associated with reduced perceived stress, enhanced positive affect, and lower levels of anxiety and depression (Acoba, 2024). This is supported by a recent finding stating that social support from family is the strongest predictor of lower anxiety (Yang et al., 2025).

Islamic Religiosity and Anxiety among Students

Another factor that has been linked to positive mental health is religiosity. Individuals with high levels of religiosity often engage in faith-based coping strategies, such as religious reframing, which allows them to view academic and social stressors as trials (*fitnah*) that hold spiritual significance and provide opportunities for personal growth. By interpreting difficulties through an Islamic viewpoint, students can foster acceptance and resilience when facing challenges (Abdel-Khalek et al., 2019; Lloyd & Reid, 2022; Saleem et al., 2021). This coping mechanism helps students reduce adverse emotional reactions to academic stress, enabling them to approach challenges with greater adaptability and psychological stability.

A systematic review study found that most interventions that integrated religious or spiritual components demonstrated effectiveness in reducing depression and anxiety in youth (Aggarwal et al., 2023). Similarly, the evident from 32 studies revealed that, in almost all cases, religious involvement—including spirituality, faith, prayer, religious training, and communal worship—was linked to lower anxiety and stress (Stewart et al., 2019). These associations were consistent across both healthy participants and clinical populations. These findings were in line with a study in Indonesia, which reported a negative association between religiosity and mild to moderate anxiety (Yulianti, Lesmana, & Aryani, 2020). Rosmarin & Leidl (2020) explained that cognitive and emotional aspects of spirituality/religiosity are strongly correlated with anxiety through two different directions. positive spiritual thoughts and emotions are linked to lower anxiety, whereas negative spiritual cognitions are associated with a high level of anxiety.

Forouhari et al. (2019) explained that individuals with an intrinsic religious orientation and a belief in a purposeful origin and ultimate destiny tend to be more hopeful, maintain faith in God,

anticipate positive outcomes, and rely on God during adverse situations. Moreover, religiosity demonstrated a significant inverse relationship with anxiety, with findings indicating that a 1% increase in religiosity corresponded to a 0.271% decrease in anxiety (Sirat & Aesar, 2024). A study conducted by Francis et al. (2019) found that negative religious coping was more strongly associated with poor mental health outcomes than positive religious coping among medical students. Interventions such as psychoeducation and religious cognitive restructuring may help mitigate psychiatric distress in this at-risk group. Not only does religiosity contribute to reduce symptoms of mental disorders but it also plays a crucial role in predicting mental well-being (Ranira et al., 2023) and life satisfaction (Yoo, 2022).

The Moderating Role of Islamic Religiosity in Social Support Effects to Anxiety

The findings of this study indicated that Islamic religiosity significantly moderates the relationship between social support and anxiety. Students with higher levels of religiosity benefit more psychologically from social support, likely because religiosity provides a spiritual framework for interpreting and responding to stressors. This suggested that religiosity not only functions as a direct protective factor against anxiety but also enhances the effectiveness of social support in alleviating anxiety among Muslim students (Amissah & Nyarko, 2020; Lloyd & Reid, 2022; Tedrus & Crepaldi, 2024). From a social psychology perspective, religiosity acts as a cognitive mechanism that helps individuals interpret social interactions within a spiritual context, thereby increasing the effectiveness of social support. Religiosity provides individuals with strength through their belief in God and the practice of worship (Daulay et al., 2022).

These findings expanded the understanding of the relationship between social support and anxiety by demonstrating that the protective effects of social support depend on psychological factors such as religiosity. In the context of Muslim students, religiosity not only shapes personal beliefs but also plays a role in creating a social system that reinforces interpersonal relationships (Engel et al., 2024; Nadeem, 2017; Tineo et al., 2021). Students with high religiosity are more likely to be involved in faith-based communities, which provide emotional support and a spiritual interpretation of life challenges. Conversely, students with low religiosity may perceive social support as merely an instrumental exchange, reducing its effectiveness in alleviating anxiety. Therefore, the practice of religiosity should be encouraged, as it holds potential as a complementary therapeutic intervention (Galvão et al., 2025).

Although religiosity can serve as a protective factor against anxiety, it is crucial to differentiate between types of religiosities and different forms of religious activities that can reduce negative symptoms of mental disorders. Moreover, spiritual acceptance-based religiosity offers more psychological benefits, as it helps individuals view academic and social stressors as divinely ordained tests, fostering resilience and emotional stability. On the other hand, fear-based religiosity, characterized by excessive concern over divine punishment or guilt—can intensify anxiety, as individuals may feel overwhelmed by rigid religious expectations (Aloustani & Mamashli, 2020; Fradelos, 2019; Saleem & Saleem, 2020). The moderating effect of religiosity on anxiety thus depends on whether it is rooted in spiritual acceptance or fear, with the former being more effective in alleviating anxiety and enhancing the benefits of social support.

This study has several limitations that should be taken into account when interpreting the findings. The cross-sectional design restricts causal inference, as the relationships among social support, religiosity, and anxiety cannot be assumed to unfold over time. The reliance on self-report measures also introduces subjective bias and may not fully capture the complexity of students'

psychological states. Additionally, the study was conducted within the cultural context of Indonesia, which may limit the generalizability of the findings to non-Muslim or more secular societies.

Future research should extend these findings using longitudinal or experimental designs to examine how faith-based components influence anxiety reduction over time. Islamic-based intervention studies—such as structured dhikr programs, prayer-based relaxation techniques, or spiritually integrated counselling—could provide stronger evidence for causal effects and help identify the most effective religious coping mechanisms. Furthermore, mixed-method approaches are recommended to explore the nuanced ways in which students interpret and employ faith-based coping. Qualitative interviews or phenomenological studies would offer deeper insight into the emotional, cultural, and spiritual meanings that shape students' responses to stress. Integrating quantitative and qualitative data may also reveal variations between acceptance-based and fear-based religiosity, enriching the overall understanding of how Islamic coping operates in different student groups.

CONCLUSION

This study demonstrated that social support and Islamic religiosity jointly contribute to reducing anxiety among university students, with religiosity modestly enhancing the protective role of supportive relationships by providing spiritual meaning and emotional grounding. These findings underscored the importance of integrating culturally aligned, spiritually sensitive approaches into mental-health programs within Islamic educational contexts. However, such integration must be undertaken carefully, as fear-based or guilt-driven religious messaging may increase rather than decrease anxiety. Accordingly, institutions and practitioners should promote acceptance-based and compassionate religious narratives when incorporating spiritual elements into counselling or student-support initiatives. Overall, the study highlighted the value of combining psychosocial and spiritual resources to support students' emotional resilience in Muslim-majority educational settings.

The findings of this study contributed to the broader theoretical understanding of anxiety regulation by demonstrating that Islamic religiosity serves as a subtle yet meaningful moderator within the stress-buffering pathway. This supports the Stress-Buffering Theory, which posits that personal and contextual resources shape individuals' responses to stress. The moderating role of religiosity suggests that spiritual meaning-making enhances the perceived value of social support, aligning with theories of religious coping that emphasizes acceptance, divine reliance, and cognitive reframing. Additionally, the distinction between positive and fear-based religiosity reinforces contemporary perspectives that not all religious involvement equally contributes to emotional well-being. These results extended the existing literature by providing empirical evidence from a Muslim-majority context, where religiosity is deeply integrated into daily life and likely contributes to differentiated coping profiles among students. From an applied perspective, the results highlighted the importance of integrating psychosocial and spiritual approaches into student mental health programs. Universities may consider developing counselling services that incorporate religiously sensitive practices such as reflection, prayer-based coping, or spiritual mentoring, particularly within Islamic educational environments. Strengthening peer-based support systems may also be more effective when paired with spiritual meaning-making activities, as students with higher religiosity appear to derive greater benefit from supportive interactions. Additionally, campus mental health initiatives should pay attention to students who rely on fear-based religiosity, as this pattern may exacerbate anxiety and necessitate tailored guidance. The findings underscored the need for holistic

interventions that address not only emotional and behavioral factors but also students' spiritual frameworks. The high proportion of female respondents in this study (82.8%) should be taken into account when interpreting the findings. Prior research indicated that female students tend to report higher levels of anxiety and greater engagement with religious coping compared to male students. Consequently, the strength of the associations observed—particularly the role of religiosity in enhancing the effects of social support—may reflect coping patterns more characteristic of female students. This demographic imbalance limits the generalizability of the findings, and future studies should aim for more gender-balanced samples to better capture potential differences in religious coping and help-seeking behaviours.

The cultural context of Indonesia provides an important backdrop for interpreting the results. As the world's largest Muslim-majority nation, Islamic values are deeply embedded in social life, education, and interpersonal relationships. Religious practices such as prayer, dhikr, and communal worship are not only spiritual activities but also culturally normative sources of emotional comfort and collective identity. This environment likely amplifies the psychological salience of religiosity, making it a more powerful moderator than might be observed in non-Muslim or highly secular societies. The finding that religiosity enhanced the stress-buffering effect of social support is therefore culturally coherent, reflecting the centrality of spirituality and communal interconnectedness in the lives of Indonesian students.

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REFERENCES

Abdel-Khalek, A. M., Nuño, L., Gómez-Benito, J., & Lester, D. (2019). The relationship between religiosity and anxiety: A meta-analysis. *Journal of Religion and Health*, 58(5), 1847–1856. <https://doi.org/10.1007/s10943-019-00881-z>

Acoba, E. F. (2024). Social support and mental health: The mediating role of perceived stress. *Frontiers in Psychology*, 15(21), 01-12. <https://doi.org/10.3389/fpsyg.2024.1330720>

Aggarwal, S., Wright, J., Morgan, A. *et al.* (2023). Religiosity and spirituality in the prevention and management of depression and anxiety in young people: a systematic review and meta-analysis. *BMC Psychiatry*, 23, 729. <https://doi.org/10.1186/s12888-023-05091-2>

Akbar, Y. R., & Adi, R. P. (2022). Moderating effect of government regulations on the effect of entrepreneurship orientation on the performance of micro, small and medium enterprises. *Jurnal Ilmiah Akuntansi*, 6(1). <https://doi.org/10.35145/bilancia.v6i1.2094>

Akbarian, H., Mazaheri, M.A., Zabihzadeh, A. *et al.* (2022). Attachment-related anxiety and avoidance and regulation of interpersonal distance in close relationships. *Curr Psychol* 41, 4638–4644. <https://doi.org/10.1007/s12144-020-00939-2>

Aloustani, S., & Mamashli, L. (2020). The effect of spiritual group therapy on death anxiety in the elderly. *Journal of Hayat*, 26, 46–57. <https://consensus.app/papers/the-effect-of-spiritual-group-therapy-on-death-anxiety-in-aloustani-mamashli/fd043fe23a675f89a94ce310931b24f3/>

Amissah, C., & Nyarko, K. (2020). Facing the Ills of Unemployment: The Role of Religiosity and Social Support. *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-019-00977-6>

Ao, Y., Zhu, H., Meng, F., Wang, Y., Ye, G., Yang, L., Dong, N., & Martek, I. (2020). The Impact of Social Support on Public Anxiety amidst the COVID-19 Pandemic in China. *International Journal of Environmental Research and Public Health*, 17(23), 9097. <https://doi.org/10.3390/ijerph17239097>

Areba, E. M. (2018). Religious Coping, Symptoms of Depression and Anxiety, and Well-Being Among Somali College Students. *Journal of Religion and Health*, 57(1), 94–109. <https://doi.org/10.1007/s10943-017-0359-3>

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>

Daulay, N., Darmayanti, N., Harahap, A. C. P., Wahyuni, S., Mirza, R., Dewi, S. S., Hardjo, S., Indrawan, Y. F., Aisyah, S., Harahap, D. P., & Munisa, M. (2022). Religiosity as Moderator of Stress and Well-being among Muslim Students During the Pandemic in Indonesia. *Islamic Guidance and Counseling Journal*, 5(2). 88-103. <https://doi.org/10.25217/igcj.v5i2.2696>

Dour, H. J., Wiley, J. F., Roy-Byrne, P., Stein, M. B., Sullivan, G., Sherbourne, C. D., Bystritsky, A., Rose, R. D., & Craske, M. G. (2014). Perceived social support mediates anxiety and depressive symptom changes following primary care intervention. *Depression and anxiety*, 31(5), 436–442. <https://doi.org/10.1002/da.22216>

Duta, L., Shofiah, V., & Rajab, K. (2025). Prayer and Dhikr as Islamic Psychotherapy in Dealing with Anxiety: Doa dan Dzikir sebagai Psikoterapi Islam dalam Mengatasi Kecemasan. *SALIHA: Jurnal Pendidikan Islam*, 8(2), 287–304. <https://doi.org/10.54396/saliha.v8i2.1932>

Engel, D., Penthin, M., Pirner, M., & Riegel, U. (2024). Religion as a resource? The impact of religiosity on the sense of purpose in life of young Muslim refugees in Germany. *Refuge: Canada's Journal on Refugees*, 40(1), 1–30. <https://doi.org/10.25071/1920-7336.41258>

Fauziyah, F. K., & Ariati, J. (2015). Dukungan sosial teman sebaya dan kecemasan dalam menghadapi dunia kerja pada mahasiswa S1 tingkat akhir. *Jurnal Empati*, 4(4), 255–261. <https://doi.org/10.14710/empati.2015.14352>

Forouhari, S., Hosseini Teshnizi, S., Ehrampoush, M. H., Mazloomy Mahmoodabad, S. S., Fallahzadeh, H., Tabei, S. Z., & Kazemitabaee, M. (2019). Relationship between Religious Orientation, Anxiety, and Depression among College Students: A Systematic Review and Meta-Analysis. *Iranian journal of public health*, 48(1), 43–52. <https://doi.org/10.18502/ijph.v48i1.781>

Fradelos, E. (2019). Connecting the dots: understanding the relationship between religiosity, psychological resilience and depression in breast cancer patients. *Progress in Health Sciences*. <https://doi.org/10.5604/01.3001.0013.3694>

Francis, B. (2019). Religious Coping, Religiosity, Depression and Anxiety among Medical Students in a Multi-Religious Setting. *International Journal of Environmental Research and Public Health*, 16(2). <https://doi.org/10.3390/ijerph16020259>

Francis, B., Gill, J. S., Yit Han, N., Petrus, C. F., Azhar, F. L., Ahmad Sabki, Z., Said, M. A., Ong Hui, K., Chong Guan, N., & Sulaiman, A. H. (2019). Religious Coping, Religiosity, Depression and Anxiety among Medical Students in a Multi-Religious Setting. *International Journal of Environmental Research and Public Health*, 16(2), 259. <https://doi.org/10.3390/ijerph16020259>

Galvão, L. L., Reis, A. S. L. da S., de Lira, C. A. B., Andrade, M. S., Weiss, K., Knechtle, B., Borges, B. J. P., Gentil, P., Rosemann, T., & Vancini, R. L. (2025, August). *Association of religiosity on anxiety and depressive symptoms in the Brazilian population: A cross-sectional study*. *Acta Psychologica*, 258, Article 105218. <https://doi.org/10.1016/j.actpsy.2025.105218>

Ismail, Z., Rasit, N., Zailaini, M. A., & Husin, Z. (2020). Relationship Between Arabic Language Speaking Anxiety and Motivation Among Religious Secondary School Students in Malaysia. *Humanities & Social Sciences Reviews*, 8 (2), 116-123. <https://doi.org/10.18510/hssr.2020.82e14>

Karim, K. & Yoenanto, N.H. (2021). Dukungan sosial dan religiusitas terhadap kecemasan masyarakat yang tinggal sendiri selama masa pandemi Covid-19. *Jurnal Psikologi (UIN Suska)*, 17(2), 114-126. <https://doi.org/10.24014/jp.v17i2.11034>

Katsiroumpa, A., Moisoglou, I., Papathanasiou, I. V., Malliarou, M., Sarafis, P., Gallos, P., Konstantakopoulou, O., Rizos, F., & Galanis, P. (2025). Resilience and Social Support Protect Nurses from Anxiety and Depressive Symptoms: Evidence from a Cross-Sectional Study in the Post-COVID-19 Era. *Healthcare*, 13(6), 582. <https://doi.org/10.3390/healthcare13060582>

Laamiri, F. Z., Barich, F., Mouchhoury, L., Chebabe, M., Chafik, K., Manoussi, A., Marc, I., Kharbach, A., & Barkat, A. (2023). Association of Socio-economic and Mental Health Determinants with Breastfeeding Practices among a Population of Moroccan Women during the COVID-19 Pandemic: A Cross-sectional Study. *Iranian Journal of Neonatology*, 14(2), 12–19. <https://doi.org/10.22038/ijn.2023.66494.2292>

Laksmini, P., Annashr, N. N., & A. Atmadja, T. F. (2021). Kecemasan Mahasiswa di Pulau Jawa pada Masa Pandemi Covid19. *Jurnal Ilmu Kesehatan Bhakti Husada: Health Sciences Journal*, 12(1), 63–70. <https://doi.org/10.34305/Jikbh.V12i1.274>

Liu, X., Zhang, Y., Cao, X., & Gao, W. (2024). Does anxiety consistently affect the achievement goals of college students? A four-wave longitudinal investigation from China. *Current Psychology*, 43(12), 10495–10508. <https://doi.org/10.1007/s12144-023-05184-x>

Lloyd, C., & Reid, G. (2022). Perceived God support as a mediator of the relationship between religiosity and psychological distress. *Mental Health, Religion & Culture*, 25, 696–711. <https://doi.org/10.1080/13674676.2022.2116633>

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)

Marsidi, S. R. (2021). Identification of stress, anxiety, and depression levels of students in preparation for the exit exam competency test. *Journal of Vocational Health Studies*, 5(2), 87. <https://doi.org/10.20473/jvhs.V5.I2.2021.87-93>

Mahfoud, D., Fawaz, M., Obeid, S., & Halli, S. (2023). The co-moderating effect of social support and religiosity in the association between psychological distress and coping strategies in a sample of lebanese adults. *BMC Psychology*, 11, 61. <https://doi.org/10.1186/s40359-023-01102-9>

Moskow, D. M., Lipson, S. K., & Tompson, M. C. (2024). Anxiety and suicidality in the college student population. *Journal of American College Health*, 72(3), 881–888. <https://doi.org/10.1080/07448481.2022.2060042>

Nadeem, M. (2017). The Association Between Muslim Religiosity and Young Adult College Students' Depression, Anxiety, and Stress. *Journal of Religion and Health*, 56(4), 1170–1179. <https://doi.org/10.1007/s10943-016-0338-0>

Olufadi, Y. (2017). Muslim Daily Religiosity Assessment Scale (MUDRAS): A new instrument for muslim religiosity research and practice. *Psychology of Religion and Spirituality*, 9(2), 165–179. <https://doi.org/10.1037/rel0000074>

Oxford CBT. (2024). Student Mental Health Statistics 2024. Student Mental Health Statistics 2024 | Oxford CBT. <https://www.oxfordcbt.co.uk/student-mental-health-statistics-2024/>

Plante, T. G. (2022). Minding the Gap: Spirituality in Clinical Practice During Increased Secularization and Mental Health Needs. *Spirituality in Clinical Practice*. <https://doi.org/10.1037/scp0000298>

Putri, D. A., & Raflis, R. (2024). Pengaruh struktur modal dan ukuran perusahaan terhadap kinerja keuangan dengan good corporate governance sebagai variabel moderasi (Studi pada perusahaan manufaktur industri pariwisata dan rekreasi yang terdaftar di bursa efek indonesia tahun 2020 – 2022). *Jurnal Akuntansi Keuangan dan Bisnis*, 1(4), 700–713. <https://jurnal.ittc.web.id/index.php/jakbs/article/view/753/659>

Rani, S. (2025). Studying the Impact of Anxiety, Stress, and Emotion on Academic Performance: A Systematic Review. *Journal of Social, Humanity, and Education*, 5(2), 131-141, <https://doi.org/10.35912/jshe.v5i2.2437>

Ranira, A. P., Rahmania, F. A. & Anisa, S. N. (2023). The role of anxiety and religiosity on the psychological well-being of generation Z in early adulthood. *International Proceeding 1st ICPSYH2*, 1(18), 157-167.

Rezende-Pinto, A. de. (2019). Spirituality, Religiousness and Mental Health: Scientific Evidence. In *Religion, Spirituality and Health: A Social Scientific Approach* (Vol. 4, pp. 69–86). https://doi.org/10.1007/978-3-030-21221-6_5

Robie, C., Meade, A. W., Risavy, S. D., & Rasheed, S. (2022). Effects of Response Option Order on Likert-Type Psychometric Properties and Reactions. *Educational and Psychological Measurement*, 82(6), 1107-1129. <https://doi.org/10.1177/00131644211069406>

Roohafza, H. R., Afshar, H., Keshteli, A. H., Mohammadi, N., Feizi, A., Taslimi, M., & Adibi, P. (2014). What's the role of perceived social support and coping styles in depression and anxiety?. *Journal of research in medical sciences : the official journal of Isfahan University of Medical Sciences*, 19(10), 944–949.

Rosmarin, D. H., & Leidl, B. (2020). Spirituality, religion, and anxiety disorders. In D. H. Rosmarin & H. G. Koenig (Eds.), *Handbook of spirituality, religion, and mental health* (2nd ed., pp. 41–60). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-816766-3.00003-3>

Saleem, T., & Saleem, S. (2020). Religiosity and Death Anxiety: A Study of Muslim Dars Attendees. *Journal of Religion and Health*, 59, 309–317. <https://doi.org/10.1007/s10943-019-00783-0>

Saleem, T., Saleem, S., Mushtaq, R., & Gul, S. (2021). Belief Salience, Religious Activities, Frequency of Prayer Offering, Religious Offering Preference and Mental Health: A Study of Religiosity Among Muslim Students. *Journal of Religion and Health*, 60(2), 726–735. <https://doi.org/10.1007/s10943-020-01046-z>

Sarason, I. G., & Sarason, B. R. (2009). Social support: Mapping the construct. *Journal of Social and Personal Relationships*, 26(1), 113–120. <https://doi.org/10.1177/0265407509105526>

Scardera, S., Perret, L. C., Ouellet-Morin, I., Gariépy, G., Juster, R.-P., Boivin, M., Turecki, G., Tremblay, R. E., Côté, S., & Geoffroy, M.-C. (2020). Association of Social Support During Adolescence With Depression, Anxiety, and Suicidal Ideation in Young Adults. *JAMA Network Open*, 3(12), e2027491. <https://doi.org/10.1001/jamanetworkopen.2020.27491>

Sirat, Z. & Aesar, H. (2024). The relationship of religiosity and anxiety among University Students: A Case study at Kunduz University. *Kunduz University International Journal of Islamic Studies and Social Sciences*, 1(2), 187-200. <https://doi.org/10.71082/zhes4277>

Stewart, R. A., Patel, T. A., McDermott, K. A., & Cougle, J. R. (2022). Functional and structural social support in DSM-5 mood and anxiety disorders: A population-based study. *Journal of Affective Disorders*, 308, 528–534. <https://doi.org/10.1016/j.jad.2022.04.026>

Stewart, W. C., Wetselaar, M. J., Nelson, L. A., Stewart, J. A., et al. (2019) Review of the effect of religion on anxiety. *Int J Depress Anxiety*, 2(16). <https://doi.org/10.23937/2643-4059/1710016>

Sulistiani, W., Fajriantyi, F., & Kristiana, I. F. (2022). Validation of the Indonesian Version of the Multidimensional Scale of Perceived Social Support (MSPSS): A Rasch Model Approach. *Jurnal Psikologi*, 21(1), 89–103. <https://doi.org/10.14710/jp.21.1.89-103>

Suryadi, B., Hayat, B., & Putra, M. D. K. (2020). Evaluating psychometric properties of the Muslim Daily Religiosity Assessment Scale (MUDRAS) in Indonesian samples using the Rasch model. *Mental Health, Religion & Culture*, 1–16. <https://doi.org/10.1080/13674676.2020.1795822>

Suryadi, B. & Hayat, B. (2021). *Religiusitas: Konsep, Pengukuran, dan Implementasi di Indonesia*. Biblosmia Karya Indonesia.

Tedrus, G., & Crepaldi, C. (2024). Social support, spirituality, and religiosity in epilepsy among adults. *Revista Caribeña de Ciencias Sociales*. <https://doi.org/10.55905/rcssv13n4-003>

Tineo, P., Lowe, S., Reyes-Portillo, J., & Fuentes, M. (2021). Impact of perceived discrimination on depression and anxiety among Muslim college students: The role of acculturative stress, religious support, and Muslim identity. *The American Journal of Orthopsychiatry*. <https://doi.org/10.1037/ort0000545>

Yang, L., Wang, N., Li, D. et al. (2025). Social support and anxiety, a moderated mediating model. *Sci Rep*, 15(29390), 1-10. <https://doi.org/10.1038/s41598-025-14336-x>

Yoo, J. (2023). The effect of religiosity on stress, anxiety, depression, and life satisfaction during the COVID-19 pandemic in Korea. *Journal of Beliefs & Values*, 45(4), 536–552. <https://doi.org/10.1080/13617672.2023.2186645>

Yuksel, M. Y., Serezli, K., & Bostanciogli, N. (2024). The Relationship between Death Anxiety, Satisfaction with Life and Psychological Well-Being in Mid-Adulthood. *Spiritual Psychology and Counseling*, 9(1), 57–74. <https://doi.org/10.37898/spiritualpc.1311639>

Yulianti, I. I. A. U., Lesmana, C. B. J. & Aryani, L. N. A. (2020). Correlation between religiosity and anxiety level in caregivers at intensive care unit. *Journal of Clinical and Cultural Psychiatry*, 1(1), 18-20. <https://doi.org/10.36444/v1i1.009>

Zerem, E. (2020). Comment on the Article Addressing Spirituality, Religiosity and Nationalism from the Perspective of Public and Global Mental Health. In *Psychiatria Danubina* (Vol. 32, Issue 1, pp. 124–126).

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2