

The Muslim Spiritual Attachment Scale–16 for Muslims in Indonesia: Psychometric Evaluation Using Confirmatory Factor Analysis

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Abstract: This study aims to investigate the psychometric properties of the Muslim Spiritual Attachment Scale (M-SAS 16) within the context of Indonesian Muslims. Although this instrument has been widely used in various Muslim-majority countries, no empirical validation has yet been conducted in Indonesia—a nation with the world’s largest Muslim population and distinct cultural and religious characteristics. A total of 450 Muslims in Bandung voluntarily participated in this research, which was conducted during Ramadan 2025. Instruments used included M-SAS 16, Riverside Life Satisfaction Scale, Perceived Stress Scale, and Situational Self-Awareness Scale. Confirmatory factor analysis with the Maximum Likelihood estimator showed that the M-SAS 16 can be tested with various factor structures, namely unidimensional, multidimensional, second-order, or bifactor (fulfillment of all model fit criteria CFI > .90; TLI > .90; RMSEA < .08). Furthermore, measurement invariance testing did not reveal any item bias across gender groups, indicating that the M-SAS 16 is fair and consistent. Overall, the findings of this study confirm that the Indonesian version of the M-SAS 16 is a valid, reliable, and culturally appropriate instrument in Indonesia. These findings could be an important contribution to the development of Islamic psychology psychometrics in Indonesia

Keywords: confirmatory factor analysis; Islamic Psychology; Muslim spirituality attachment; reliability; validity



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Introduction

In contemporary psychology, attachment has become a key variable in explaining the dynamics of relationships between people and with God, ranging from the relationship between children and their parents to the spiritual relationship between humans and God (Kimball et al., 2013). In recent years, spiritual attachment has become a focus of attention for experts in the psychology of religion, as it is believed to shape psychological well-being, the meaning of life, and the ability to cope with life’s

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pressures. Bonab et al. (2013) define spiritual attachment as a vertical connection between humans and God, reflected in the portrayal of God as a figure who supports every aspect of an individual's life.

Ghorbani et al. (2016) state that attachment to caregivers during childhood parallels spiritual attachment. Children who, early in life, form a self-representation based on their caregivers subsequently experience this influence on their future psychosocial functioning. However, other researchers disagree and argue that spiritual attachment differs from attachment to other people (Shoshan et al., 2024). Spiritual attachment is described by most cultures worldwide as an individual's symbolic bond to actively cultivate a connection with God, who possesses unlimited power (Shoshan et al., 2024). Spiritual attachment is described by most cultures around the world as an individual's symbolic commitment to actively cultivate a connection with God, who possesses unlimited power (Shoshan et al., 2024).

During the month of Ramadan, the phenomenon of spiritual attachment can be clearly observed among Muslims. Although fasting involves enduring thirst, hunger, and worldly temptations, it is generally known that there is an increase in acts of worship such as prayer, dhikr, and recitation of the Quran. This heightened intensity of worship can, without one realizing it, strengthen the sense of God's presence in daily life. By fasting, Muslims feel they are carrying out Allah's commands and becoming devout followers. This demonstrates that a relationship with Allah is not based solely on faith; it must also involve a deep emotional and spiritual connection (Yahya et al., 2022).

On another note, the month of Ramadan is known as a month full of mercy and forgiveness. Therefore, many Muslims believe that observing the fast and increasing the frequency of worship can please Allah. The month of Ramadan also strengthens spiritual attachment through shared acts of worship, such as breaking the fast together, performing tarawih prayers together, and reciting the Quran in congregation. When fasting suppresses worldly desires, an individual's inner space becomes calmer, and they experience a more tangible sense of spiritual attachment.

Among Muslims, spiritual attachment is known as "Muslim spiritual attachment." Muslim spiritual attachment refers to the way Muslims form an emotional bond with Allah that reflects a sense of security, connection, and comfort. Several previous studies have clearly shown that spiritual attachment is strongly linked to well-being and spiritual well-being (Henderson & Kent, 2022; Nazari et al., 2023). Strong spiritual attachment can also foster greater psychological resilience and reduce psychological distress (Upenieks, 2022).

Salarhaji et al. (2019) also revealed in their study that spiritual attachment can reduce psychopathological symptoms. Furthermore, spiritual attachment can also serve as a key predictor of mental health (Pirutinsky et al., 2019). By prioritizing God as a supportive figure in human life, individuals can achieve better self-regulation and self-control (Jordan et al., 2021). In the cognitive domain, spiritual attachment can also enhance cognitive abilities, such as optimal rational thinking and good working memory (Counted & Zock, 2019).

However, no scientifically validated instrument that is psychometrically sound and suitable for use has yet been developed to measure spiritual attachment in Indonesia. A review of previous research reveals that the instruments used to measure spiritual attachment are limited; for example, the Attachment to God Scale (AGS), developed by Rowatt & Kirkpatrick (2002), measures spiritual attachment

based on two dimensions, avoidance and anxiety, and consists of 22 items. The AGS was originally developed for Christian and Catholic participants in the United States. It also has limitations regarding its validity, particularly in terms of social desirability (Rowatt & Kirkpatrick, 2002). Many study participants completed the AGS by providing answers that made them appear virtuous and in line with social norms. Such bias appears to be a challenge that can distort the data and reduce the accuracy of the measurement.

Another instrument used to measure spiritual attachment is the Attachment to God Inventory (AGI) (Beck & McDonald, 2004). The AGI was developed exclusively for Christians; therefore, the spiritual attachment measured by the AGI cannot be generalized to other religions. Consistent with the study's findings, the AGI is not suitable for describing spiritual attachment among specific religious groups with differing theological perspectives (Beck & McDonald, 2004).

To measure spiritual attachment among Muslims, the availability of the Muslim Spiritual Attachment Scale 16 (M-SAS 16) (Miner et al., 2017). In Indonesia will fill a research gap, as previous studies have not utilized this instrument. The M-SAS 16 is well-known and widely used in various Muslim countries and demonstrates good psychometric properties. To date, there has been no official research using the M-SAS 16, nor has there been an adaptation of the M-SAS 16 to the cultural context of Indonesia, one of the world's largest Muslim-majority countries, with distinctive characteristics regarding religious practices.

This study is crucial because no previous research in Indonesia has examined or measured spiritual attachment among Indonesian Muslims. One approach that can be used to determine the factor structure consistent with the theoretical model is Confirmatory Factor Analysis (CFA). By applying CFA, this study can identify whether the M-SAS 16 is appropriate for use in Indonesia. The novelty of this study lies in introducing an instrument that meets scientific standards and represents variables in Islamic psychology. This preliminary review of the M-SAS 16 instrument serves as the first step toward providing a relevant instrument for Muslims in Indonesia.

Method

Research Design

The quantitative research design used in this study is a survey-based study with self-reported responses (Hassan, 2016). This design was chosen because data were collected directly from the study participants. Data collection took place during the month of Ramadan in 2025 (over 30 days) using an online questionnaire that included an introduction, an informed consent form, personal information, statements from four instruments, and concluded with a thank-you note for participants' willingness to complete the online questionnaire without any coercion.

Partisipan

The study participants consisted of 450 Muslims observing the fast in the city of Bandung. All participants voluntarily agreed to take part in the study without coercion from any party. The sampling technique used was convenience sampling. The participants' ages ranged from 15 to 26 years (with a mean of 20.63 and a standard deviation of 1.82).

Instrument

The Muslim Spiritual Attachment Scale (M-SAS 16) consists of 16 items that measure four dimensions: proximity, positive model of God, positive model of self, and separation protest (Miner et al., 2017). In terms of construct validity, the M-SAS 16 has good model fit indices in confirmatory factor analysis (CFI = 0.961, TLI = 0.952) and a Cronbach's Alpha reliability coefficient of 0.92 in previous studies, while its split-half reliability is .82. The M-SAS 16 utilizes a Likert scale with five response options ranging from "strongly disagree" to "strongly agree."

The Riverside Life Satisfaction Scale (RLSS) is a brief questionnaire consisting of six items designed to measure overall life satisfaction (Margolis et al., 2019). The RLSS uses a seven-point response scale. In scoring, statements expressing positive satisfaction are scored within the corresponding range; however, items with negative statements are reverse-scored. The reliability coefficient of the RLSS in previous studies was .93. Each RLSS item is answered using a seven-point Likert scale ranging from "strongly disagree" to "strongly agree."

The Perceived Stress Scale (PSS-10) is a widely used unidimensional instrument for measuring the extent to which individuals perceive stress in their lives. This instrument was developed by Cohen et al. (1983) and consists of 10 items with five response options and has been widely used across various cultures. The PSS-10 has a reliability coefficient of .78, indicating stable consistency. The PSS-10 is administered using a five-point response scale ranging from "never" to "very often," with scores ranging from 0 to 4.

The Situational Self-Awareness Scale (SSAS), developed by Govern & Marsch (2001), measures an individual's level of self-awareness regarding a specific situation at a given moment. The SSAS is highly practical for research because it consists of 9 items with seven response options ranging from "strongly disagree" to "strongly agree." The reliability coefficients of the SSAS in previous studies ranged from .79 to .83. In terms of psychometric properties, the SSAS demonstrates high quality as a valid and reliable instrument.

Data Analysis Techniques

The data obtained in this study were analyzed using two statistical software programs. For participant demographic information, descriptive statistics, tests of differences, and tests of discriminant validity, the researcher used SPSS. Meanwhile, to test the factor structure and measurement invariance, the researcher used Confirmatory Factor Analysis (CFA) in Mplus, employing the Maximum Likelihood (ML) estimator. The appropriate testing model in this CFA analysis indicated that the instrument is suitable for use, objective, and free from group-based bias (Khalaf & Abulela, 2021).

Adaptation Procedure

The following is the result of the adaptation carried out by two qualified linguists from a reputable language institution in Indonesia.

Table 1*Adaptation Result*

| Nomor Item | Original | Adaptation |
|------------|--|---|
| 1 | In times of difficulty I seek out God through prayer or reading sacred texts | Dalam masa-masa sulit, saya mencari Tuhan melalui doa atau membaca kitab suci |
| 2 | My confidence in God's closeness and responsiveness encourages me to call on Him | Keyakinan saya bahwa Tuhan dekat dan tanggap membuat saya terdorong untuk memohon kepada-Nya |
| 3 | I reach out to God in times of distress | Saya mengandalkan Tuhan di saat-saat kesusahan |
| 4 | When times are tough I seek proximity to Allah in every prayer and ritual | Ketika menghadapi masa-masa sulit, saya berusaha mendekat kepada Allah dalam setiap doa dan ibadah |
| 5 | God has fulfilled His promise to be with me in my distress | Tuhan telah menepati janji-Nya untuk menyertai saya dalam penderitaan |
| 6 | God has taken my burdens when I have been overwhelmed | Tuhan telah meringankan beban saya ketika saya merasa kewalahan |
| 7 | God helps me when I ask for help | Tuhan menolong saya ketika saya memohon pertolongan |
| 8 | God takes care of me during times of crisis | Tuhan menjaga saya di masa-masa krisis |
| 9 | When I do bad things I know God still loves me | Ketika saya melakukan kesalahan, saya tahu bahwa Tuhan tetap mengasihi saya |
| 10 | God's love for me is unconditional | Kasih Tuhan kepada saya bersifat tanpa syarat |
| 11 | I am supported in times of difficulty by knowing God loves me unconditionally | Saya merasa dikuatkan di masa-masa sulit karena mengetahui bahwa kasih Tuhan kepada saya tanpa syarat |
| 12 | I know I'm not perfect but God loves me anyway | Saya tahu saya tidak sempurna, tetapi Tuhan tetap mengasihi saya |
| 13 | When I feel God has left me I pray frantically for His return | Ketika saya merasa Tuhan telah meninggalkan saya, saya berdoa dengan sungguh-sungguh agar Dia kembali |
| 14 | When I feel separated from God I lament bitterly | Ketika saya merasa terpisah dari Tuhan, saya meratap dengan sedih. |
| 15 | I have cried out to God at times when He seems far away | Saya pernah berseru kepada Tuhan di saat Dia terasa jauh |
| 16 | I persist in crying out to God when God seems distant in my troubles | Saya terus berseru kepada Tuhan ketika Dia terasa jauh ditengah penderitaan saya |

Ethical Clearance

This study has undergone an ethical review conducted by the Institute for Research and Community Service (LP2M) at the State Islamic University (UIN) Sunan Gunung Djati Bandung, under number B-765/Un.05/V.2/TL/10/2025.

Result

Demographic Analysis

Based on data collected from March 1 to 30, 2025, a total of 450 participants agreed to complete the survey link distributed by the researcher. For more detailed information on the participants' demographic data, see Table 1.

Tabel 1

Demografi Partisipan

| Demografi | Frekuensi | Persentase |
|------------------------|-----------|------------|
| <i>Gender</i> | | |
| Male | 225 | 50% |
| Female | 225 | 50% |
| <i>Age Range</i> | | |
| 15-18 Years | 49 | 10.9% |
| 19-22 Years | 356 | 79.1% |
| 23-26 Years | 45 | 10% |
| <i>Education Level</i> | | |
| Junior High School | 2 | 0.4% |
| High School | 134 | 29.8% |
| D3 | 12 | 2.7% |
| S1 | 299 | 66.4% |
| S2 | 3 | .7% |
| <i>Marital Status</i> | | |
| Unmarried | 432 | 96% |
| Married | 15 | 3.3% |
| Divorce | 3 | .7% |

Based on the data presented in Table 1, male and female participants were equally represented, with each gender group comprising 225 participants—a balanced distribution. The largest age group was 19 to 22 years old, accounting for 79.1%, while the remainder fell into other age ranges. In terms of highest level of education, participants were predominantly bachelor's degree holders (66.4%) and high school graduates (29.8%). Meanwhile, based on marital status, unmarried participants (96%) outnumbered those who were married (3.3%) or divorced (0.7%).

Item Normality and Difference Analysis

Muslim spiritual attachment, as explained in the research instrument section, consists of 16 items. The researcher conducted descriptive tests on all items, and the results are presented in Table 2. The results of the descriptive analysis show that all tested items fall within the statistical limits proposed by Mohd Matore et al. (2021), namely a skewness range of -3 to +3 and a kurtosis < 10, indicating that all items are normally distributed. The highest mean values were found in items 10 and 12, which had the same value of 6.49. These two items reflect the participants' conditions, whereas item 1 had the lowest mean value, indicating that item 1 is the least representative of the participants' conditions.

Based on the data shown in Table 2, it is evident that male participants and participants:

Table 2
Item Normality

| Item Number | Mean | SE | SD | Var | Min | Max | Skewness | Kurtosis |
|-------------|------|-----|------|------|-----|-----|----------|----------|
| 1 | 5.64 | .06 | 1.44 | 2.09 | 1 | 7 | -1.21 | 1.24 |
| 2 | 6.44 | .05 | 1.08 | 1.17 | 1 | 7 | -2.49 | 7.03 |
| 3 | 5.86 | .06 | 1.38 | 1.91 | 1 | 7 | -1.50 | 2.27 |
| 4 | 6.16 | .05 | 1.17 | 1.37 | 1 | 7 | -1.81 | 3.90 |
| 5 | 6.43 | .05 | 1.08 | 1.17 | 1 | 7 | -2.48 | 6.79 |
| 6 | 6.36 | .05 | 1.06 | 1.13 | 1 | 7 | -2.14 | 5.33 |
| 7 | 6.34 | .05 | 1.10 | 1.22 | 1 | 7 | -2.17 | 5.49 |
| 8 | 6.38 | .05 | 1.07 | 1.15 | 1 | 7 | -2.17 | 5.29 |
| 9 | 6.40 | .05 | 1.06 | 1.14 | 1 | 7 | -2.07 | 4.59 |
| 10 | 6.49 | .04 | 1.04 | 1.09 | 1 | 7 | -2.56 | 7.42 |
| 11 | 6.48 | .04 | 1.03 | 1.07 | 1 | 7 | -2.62 | 8.10 |
| 12 | 6.49 | .04 | 1.04 | 1.09 | 1 | 7 | -2.64 | 7.92 |
| 13 | 6.37 | .05 | 1.11 | 1.23 | 1 | 7 | -2.36 | 6.64 |
| 14 | 6.32 | .05 | 1.14 | 1.32 | 1 | 7 | -2.23 | 5.81 |
| 15 | 6.12 | .05 | 1.25 | 1.58 | 1 | 7 | -1.77 | 3.36 |
| 16 | 5.98 | .06 | 1.41 | 2.00 | 1 | 7 | -1.63 | 2.47 |

Note: SE = standar error of mean; SD = standard deviation; Var = variance; Min = minimum; Max = Maximum

Tabel 3*T-Test*

| Group | Spiritual Attachment |
|------------------------|----------------------|
| <i>Gender</i> | |
| Male | 99.41 (1.12) |
| Female | 101.28 (0.81) |
| t | -1.348 |
| df | 448 |
| <i>Age Range</i> | |
| 15-18 Years | 98.61 (16.28) |
| 19-22 Years | 100.29 (14.98) |
| 23-26 Years | 102.68 (10.26) |
| F | .910 |
| df | 2 |
| <i>Education Level</i> | |
| Junior High School | 101 (5.65) |
| High School | 100.75 (12.73) |
| D3 | 99.41 (16.04) |
| S1 | 100.20 (15.64) |
| S2 | 100.66 (5.03) |
| F | .045 |
| df | 4 |

The researchers then conducted a comparison test across gender, age range, and education level groups, as shown in Table 3. The t-test for gender groups yielded a t-value of -1.348 and a p-value greater than 0.05, indicating no difference in spiritual attachment between Muslim men and women. An ANOVA test for age groups yielded an F value of 0.910 and a p-value greater than 0.05, meaning there was no

difference in spiritual attachment among the tested age groups. An analysis of differences was also conducted based on the participants' educational levels; no differences in spiritual attachment were found based on educational level, with an F value of 0.045 and $p > 0.05$. Consistent results were found for gender, age groups, and educational levels: no significant differences were observed.

Inter-Item Correlation

The inter-item correlation analysis revealed correlation values ranging from 0.38 to 0.87, indicating that all items measure the same construct (Piedmont, 2014). These findings suggest that the M-SAS 16 can be modeled as a unifactorial scale. This will be confirmed more definitively in the subsequent analysis of the internal structure.

Table 4
Item Correlation

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 1 | 1 | | | | | | | | | | | | | | | |
| 2 | .55 | 1 | | | | | | | | | | | | | | |
| 3 | .48 | .57 | 1 | | | | | | | | | | | | | |
| 4 | .58 | .71 | .59 | 1 | | | | | | | | | | | | |
| 5 | .50 | .80 | .51 | .72 | 1 | | | | | | | | | | | |
| 6 | .50 | .78 | .52 | .73 | .86 | 1 | | | | | | | | | | |
| 7 | .49 | .78 | .55 | .70 | .80 | .87 | 1 | | | | | | | | | |
| 8 | .50 | .74 | .53 | .68 | .78 | .85 | .86 | 1 | | | | | | | | |
| 9 | .42 | .64 | .41 | .57 | .69 | .71 | .69 | .73 | 1 | | | | | | | |
| 10 | .42 | .71 | .43 | .60 | .70 | .72 | .72 | .72 | .76 | 1 | | | | | | |
| 11 | .48 | .73 | .45 | .61 | .69 | .75 | .76 | .77 | .77 | .80 | 1 | | | | | |
| 12 | .45 | .77 | .44 | .62 | .73 | .78 | .75 | .75 | .74 | .82 | .87 | 1 | | | | |
| 13 | .58 | .72 | .57 | .65 | .64 | .66 | .67 | .67 | .57 | .63 | .65 | .70 | 1 | | | |
| 14 | .57 | .72 | .50 | .63 | .63 | .65 | .64 | .61 | .58 | .60 | .64 | .65 | .83 | 1 | | |
| 15 | .38 | .59 | .44 | .51 | .56 | .58 | .54 | .55 | .51 | .53 | .54 | .56 | .66 | .66 | 1 | |
| 16 | .45 | .41 | .34 | .46 | .40 | .46 | .46 | .44 | .51 | .51 | .51 | .48 | .50 | .50 | .52 | 1 |

Internal Structure and Reliability

In this section, the researcher tested four types of factor structure models appropriate for the M-SAS 16, and the results of the model fit tests are presented in Table 5. Previous research by Miner et al. (2017) indicated that the measurement model resulting from exploratory analysis for the M-SAS 16 is multidimensional. However, in this study, the unidimensional, multidimensional, second-order, and bifactor models all met the criteria for model fit indices. It can be observed that the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) values were $> .90$ (McNeish et al., 2018). The factor loadings for all measurement models also fall within the "good" category ($> .30$) (Salsabila et al., 2019). For the unidimensional model, factor loadings ranged from .566 to .892, while for the multidimensional model, they ranged from .583 to .943. Testing with the second-order model yielded factor loadings of .591–.942, and testing with the bifactor model yielded factor loadings of .554–.895. These four test models indicate that all items of the M-SAS 16 are valid measures of spiritual attachment among Muslims.

The results of the confirmatory factor analysis showed that the Construct Reliability (CR) value derived from the M-SAS 16 was 0.96 and the Variance Extracted (VE) value was 0.56, demonstrating that the M-SAS 16 is a consistent instrument for measuring spiritual attachment.

Table 5
Model Fit Indices of the M-SAS 16

| Model | χ^2 | p-value | df | RMSEA, 90% CI | CFI | TLI | SRMR |
|------------------|----------|---------|----|------------------|------|------|------|
| Unidimensional | 296.536 | .00 | 83 | .076 [.066-.085] | .971 | .958 | .031 |
| Multidimensional | 355.084 | .00 | 96 | .077 [.069-.086] | .965 | .956 | .032 |
| Second Order | 358.405 | .00 | 95 | .078 [.070-.087] | .964 | .955 | .036 |
| Bifactor | 314.199 | .00 | 84 | .078 [.069-.087] | .969 | .955 | .031 |

Discriminant Validity

To demonstrate discriminant validity or to compare one instrument with another that measures different attributes. Previous studies have suggested that spiritual attachment is associated with life satisfaction, stress, and self-awareness (Sayin et al., 2019; Timbers & Hollenberger, 2022; Zehra & Schwaiger, 2021). To confirm these previous findings, the researcher correlated the M-SAS 16 with the RLSS, PSS, and SSAS. The results of the discriminant validity can be seen in Table 6; they indicate a positive correlation between spiritual attachment and life satisfaction and self-awareness, while spiritual attachment and stress show a negative correlation. The correlation coefficients ranging from -.092 to .296 indicate weak correlations. Given the low correlation coefficients between the M-SAS 16 and the other three instruments, it can be concluded that the M-SAS 16 meets the criteria for discriminant validity.

Table 6
Discriminant Validity

| Discriminant Validity | Inter-Instrument Correlation (r) |
|--|----------------------------------|
| Spiritual Attachment ↔ Life Satisfaction | .142 |
| Spiritual Attachment ↔ Stress | -.092 |
| Spiritual Attachment ↔ Self-Awareness | .296 |

Measurement Invariance

To determine whether there is gender-based item bias in the M-SAS 16, tests of configural, metric, and scalar invariance were conducted. These three tests revealed that all measurement invariance models in Table 7 met the model fit criteria, namely RMSEA < .08, and CFI and TLI values > .90. Not a single item on the M-SAS 16 exhibited item bias in either the male or female groups. The M-SAS 16 was proven to be an instrument with measurement invariance.

Table 7
Measurement Invariance Test

| Model | χ^2 | p-value | df | RMSEA, 90% CI | CFI | TLI | SRMR |
|------------|----------|---------|-----|------------------|------|------|------|
| Configural | 417.234 | .00 | 170 | .079 [.071-.090] | .967 | .953 | .036 |
| Metric | 438.727 | .00 | 182 | .079 [.070-.089] | .965 | .954 | .061 |
| Scalar | 451.704 | .00 | 194 | .077 [.068-.086] | .965 | .957 | .062 |

Discussion

Based on the findings of the above study, there are several important points to discuss. The results of the descriptive analysis show that all 16 items of the M-SAS 16 fall within the recommended normality range (skewness -3 to +3, and kurtosis < 10) (Mohd Matore et al., 2021), indicating the absence of data distribution deviations. This is important because the normality of data distribution is a fundamental requirement for testing a CFA model. The highest mean item scores were found in the two items measuring unconditional love of God, while the lowest mean item scores were found in the item regarding efforts to draw closer to God through rituals. This pattern of responses can be interpreted to mean that Muslims in Indonesia hold a strong belief in God's love, yet the level of awareness regarding ritual practices still varies.

An analysis of differences based on gender, age, and educational level showed that there were no significant differences in the level of spiritual attachment. These findings clearly indicate that spiritual attachment to Allah is a universal experience that does not depend on demographic characteristics. In the context of the month of Ramadan, during which this study was conducted, the intensity of worship and spiritual reflection tends to increase across all groups, which may have mitigated the occurrence of differences. These results are consistent with research conducted by Yahya et al., (2022), which states that the month of Ramadan is a period for Muslims filled with a comprehensive awareness of spirituality toward Allah, regardless of individual background.

The inter-item correlations ranging from ($r = .38 - .87$) indicate that all items on the M-SAS 16 are moderately to strongly correlated with one another. These high correlations demonstrate that each item on the M-SAS 16 measures the same construct, spiritual attachment to God, even though the statements appear different. This finding also provides a basis for considering the M-SAS 16 to have a unidimensional factor structure.

Confirmatory factor analysis (CFA) using four measurement models (unidimensional, multidimensional, second-order, and bifactor) Met all model fit indices (CFI and TLI > .90 and RMSEA < .08). These CFA results indicate that the factor structure of the M-SAS 16 is acceptable in both unidimensional and multidimensional models. Interestingly, these findings also reinforce those of Miner et al. (2017) Who proposed that spiritual attachment among Muslims comprises unique dimensions, namely, proximity, a positive model of God, a positive model of the Self, and separation protest, which exhibit a hierarchical or dual structure that is interrelated.

The reliability coefficients found, CR = .96 and VE = .56, indicate that the M-SAS 16 has excellent internal consistency. The M-SAS 16 is capable of consistently measuring the construct it is intended to assess. Furthermore, this internal consistency confirms that the Indonesian version of the M-SAS 16 has not lost its theoretical essence despite having been adapted into Indonesian, as demonstrated by the adjustments made by two linguists.

Discriminant validity shows that attachment spirituality has a weak correlation with life satisfaction and self-awareness and is not correlated with stress at all. These low correlation values confirm discriminant validity, proving that spirituality and the three tested variables are distinct constructs. This

reinforces the views of Pirutinsky et al. (2019) & Upenieks (2022), who argue that attachment to God constitutes a unique, irreducible domain.

Measurement invariance testing showed that all three models, configural, metric, and scalar, fully met the criteria for model fit. The fit in this test indicates that the factor structure and meanings of all M-SAS 16 items apply equally to both men and women. These findings demonstrate the absence of gender bias in the M-SAS 16 instrument, confirming its equitable use across gender groups. Conducting these invariance tests is crucial to ensure that the resulting scores accurately reflect construct differences (Khalaf & Abulela, 2021).

Although the findings of this study indicate excellent validity and reliability, there are several research limitations that need to be highlighted. First, the study sample was predominantly young (adolescents and young adults) and was conducted in an urban area. Therefore, generalizations to older age groups or rural populations should be made with caution. Second, the data in this study were obtained through self-reports, which are susceptible to social desirability bias. Therefore, for future research, it is recommended to test the M-SAS 16 on different groups; this could also be conducted as a longitudinal study to capture the dynamics of spiritual attachment among Muslims in Indonesia in greater depth.

Conclusions

This study provides strong empirical evidence that the M-SAS 16 is a valid and reliable instrument for measuring spiritual attachment among Muslims in Indonesia. The overall findings of this study also indicate that the M-SAS 16 possesses psychometric qualities appropriate to the Indonesian cultural context and exhibits flexibility in its factor structure. This study makes a valuable contribution to expanding our understanding of the transcendental relationship between humans and God. The M-SAS 16 can be used by researchers and practitioners alike to objectively assess the level of spiritual attachment among Muslims.

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