

Development and validation of Zikir Quality Scale (ZQS)

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Abstract. Numerous studies have investigated the effects of *dhikr* interventions; however, a comprehensive conceptualization of *dhikr*, particularly in terms of construct validation and psychometric testing, has not yet been established. The present study aimed to develop and validate the Zikir Quality Scale (ZQS) as a psychometric instrument to measure the quality of *dhikr*. A total of 494 respondents, consisting of university and high school students, participated in this instrument development study. Exploratory factor analysis revealed a three-factor structure for the ZQS, comprising intensity ($\alpha = 0.795$), duration–solemnity ($\alpha = 0.777$), and connectivity ($\alpha = 0.832$), with an overall reliability of $\alpha = 0.826$. Evidence of criterion validity was demonstrated through significant correlations with the *Tatmainn al-Qulūb* Scale (TQS; $r = 0.629$; $r = 0.476$), Islamic Positive Religious Coping (IPRCOP; $r = 0.592$), and the Perceived Stress Scale–4 (PSS–4; $r = -0.347$). The strongest association was found between the ZQS and TQS, confirming the theoretical expectation that *dhikr* is closely related to spiritual tranquility. These findings indicate that the ZQS is a reliable and valid instrument for assessing *dhikr* quality. As the first psychometrically validated scale of its kind, the ZQS provides a valuable tool for advancing research in Islamic psychology, which can be further applied, refined, and tested across diverse populations and contexts.

1 Introduction

Within the framework of Islamic psychology, *dhikr* is understood not only as a ritual act of worship but also as a psychological mechanism associated with emotional regulation, religious coping, spiritual tranquility, and the reduction of stress and anxiety [1,2]. Therefore, it is necessary to develop a scale that can map the quality of *dhikr* into measurable dimensions that can be empirically tested. A few attempts have been made to design *dhikr*-related scales. However, these efforts often lacked comprehensive theoretical construction, resulting in instruments that measure *dhikr* only in partial aspects. For example, some studies developed scales to assess the intensity of *dhikr* with theoretically sound frameworks, yet their reports did not provide psychometric evidence beyond Cronbach's alpha reliability coefficients, with no factorial validation of the construct [3]. Other studies have sought to create more holistic measures of *dhikr* quality, supported by robust theoretical foundations and acceptable reliability indices, but these instruments also lacked psychometric construct validation

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through factor analysis [4]. Overall, previous research has largely aimed to produce scales for correlational purposes rather than for the development of psychometrically sound measurement tools. This study contributes by providing a holistic and psychometrically validated scale of dhikr quality that can be reliably used in future research.

Previous research has elaborated various aspects of dhikr. Drawing on al-Ghazali's perspective, some scholars emphasized elements such as fear of Allah (khauf), presence of heart (ḥudūr al-qalb), glorification of Allah, hopefulness, and comprehension of the recitation [5]. Other studies highlighted dimensions that include the remembrance of God, internalization of dhikr utterances, a deep sense of connectedness, the alleviation of negative emotions, and the attainment of tranquility, peace, and serenity during dhikr [3]. Additional theoretical frameworks have also introduced aspects such as intention (niyyah), closeness to Allah (taqarrub), encounter (liqā'), iḥsān (worshiping as if seeing Allah), supplication in humility (tadarru'), fear of divine majesty (khauf), and humility (tawāḍu') [6]. Although these perspectives offer valuable insights, they remain fragmented and require synthesis into a more coherent framework that is compatible with measurable psychological variables.

In its broadest sense, dhikr simply means remembrance. In a more specific and spiritual context, however, dhikr refers to the remembrance of Allah. Beyond being a devotional act, dhikr can also be understood as a psychological and behavioral activity that is possible to examine empirically. One important dimension of this activity is its quality, which reflects not only the frequency or intensity of dhikr but also the depth of meaning, emotional engagement, and spiritual connection that accompany it. To establish a rigorous conceptualization, it is essential to draw upon the insights of classical and contemporary Islamic scholars, who have long discussed the characteristics of meaningful dhikr. By revisiting and synthesizing these criteria, researchers can reconstruct a framework of dhikr quality that is both faithful to Islamic teachings and compatible with the language of modern psychology. This study seeks to advance such a framework, laying the foundation for a psychometric instrument that captures the essence of dhikr quality within the field of Islamic psychology.

Dhikr, in its broadest sense, refers to remembrance, and in its specific religious meaning, it denotes the remembrance of Allah. Within the Islamic spiritual tradition, dhikr has long been regarded as a central practice for nurturing inner peace, cultivating mindfulness of the divine, and strengthening one's relationship with Allah. Beyond its devotional role, dhikr may also be understood as a psychological process that involves attention, emotional regulation, and spiritual connection, making it a practice of considerable interest for both Islamic scholarship and psychology.

A growing number of studies have examined dhikr, yet the majority have done so through intervention-based research, focusing primarily on its effects on mental health, emotional regulation, or stress reduction. Fewer studies have sought to develop measurement instruments for dhikr, and those that exist often remain limited in scope. Some measures have assessed the intensity or frequency of dhikr with sound theoretical underpinnings but lacked psychometric validation beyond internal consistency coefficients. Others have attempted to capture dhikr quality in a more holistic way and reported satisfactory reliability, but they did not test the construct validity of their scales through factor analysis. As a result, dhikr has often been measured in partial or fragmented ways, without establishing a comprehensive psychometric framework.

Given these limitations, there is a pressing need to conceptualize and operationalize dhikr quality as a measurable construct within Islamic psychology. By drawing upon insights from classical scholarship and integrating them with modern psychometric methods, it becomes possible to identify coherent dimensions of *dhikr* and to develop a reliable and valid scale. The present study aims to address this gap by constructing and validating the Zikir Quality

Scale (ZQS) as a holistic instrument for assessing the quality of *dhikr*, supported by rigorous psychometric testing.

2 Methods

2.1 Participants

This research involved a total of 494 participants, drawn from three separate studies. The first study included 293 university students, consisting of 220 women and 73 men. In terms of academic standing, 233 were first-year students, one was a second-year student, 49 were in their third year, seven were in their fourth year, and five were in their fifth year. The second study recruited 100 high school students, of whom 70 were female and 30 were male. Among these respondents, 45 attended public schools while 55 were from private schools. The third study involved 101 university students, comprising 74 women and 27 men. High school and university students were selected because this age group faces significant academic and social challenges where *dhikr* plays a meaningful role among Muslim students, as demonstrated by recent findings [7].

2.2 Research Instrument

The development of the Zikir Quality Scale (ZQS) was grounded from Qur’anic perspective. In the Qur’an, the command to perform *zikran kathīran* (QS. al-Aḥzāb [33]:41–42) underlines the importance of frequency and continuity in *dhikr*, which forms the basis of the intensity dimension. Similarly, the verse “Ala bi-dhikri Allāhi taṭma’innu al-qulūb” (QS. al-Ra’d [13]:28) emphasizes the tranquilizing effect of *dhikr*, highlighting the need for ḥuḍūr al-qalb (presence of heart), reflection, and devotion. These elements constitute the duration and solemnity dimension, which measures the depth of understanding, reflection, and spiritual absorption in *dhikr*. Furthermore, the verse “Fa-udhkurūnī adhkurkum” (QS. al-Baqarah [2]:152) indicates the reciprocal relationship between humans and Allah through remembrance, which serves as the foundation of the connectivity dimension. This dimension reflects how *dhikr* fosters a continuous sense of connection with Allah across situations and contexts.

Table 1. Blue Print of the Zikir Quality Scale (ZQS)	
Dimension	Item
Intensity	1. I regularly perform <i>dhikr</i> .
	2. I continuously perform <i>dhikr</i> from day to day.
	3. At what times do you usually perform <i>dhikr</i> ?
	4. How often do you perform <i>dhikr</i> outside the times mentioned above?
Duration and Solemnity	5. How often do you reflect on the meaning of <i>dhikr</i> ?
	6. How often do you feel a sense of devotion (khushu’) when performing <i>dhikr</i> ?
	7. How often do you feel close to Allah when performing <i>dhikr</i> ?
	8. How well do you understand the phrases of <i>dhikr</i> ?
	9. How much time do you usually spend when performing <i>dhikr</i> ?
Connectivity	10. In every action, I always remember Allah.
	11. I feel connected to Allah wherever I am.

Based on these theoretical foundations, the ZQS was operationalized into three measurable dimensions: (1) Intensity, which assesses frequency, continuity, and habitual practice of *dhikr*; (2) Duration and Solemnity, which captures reflection on meaning, devotion (khushū’), closeness to Allah, understanding of phrases, and the length of time spent

in dhikr; and (3) Connectivity, which measures the extent to which dhikr permeates daily life and nurtures a constant sense of divine presence.

To establish criterion validity of the Zikir Quality Scale (ZQS), several established instruments were employed. The Islamic Positive Religious Coping Scale (IPRCPE) [2] was included to examine the relationship between dhikr quality and positive religious coping strategies. The Taṭmainn al-Qulūb Scale (TQS) [1] which measures spiritual tranquility, was used to validate the assumption that higher quality of dhikr is associated with greater inner peace. The Perceived Stress Scale–4 (PSS-4) [8] was administered to test whether higher levels of dhikr quality are linked with lower levels of perceived stress. In addition, the Westside Test Anxiety Scale (WTAS) [9] and the Career Anxiety Scale [10] were utilized to evaluate whether *dhikr* quality negatively correlates with test-related and career-related anxiety. Together, these instruments provide a framework for testing the convergent and divergent validity of the ZQS through theoretically meaningful associations.

2.3 Data Analysis Technique

This Data were analyzed using several statistical procedures to ensure the psychometric soundness of the Zikir Quality Scale (ZQS). First, exploratory factor analysis (EFA) was conducted to identify the underlying factor structure of the scale and to determine whether the items clustered into coherent dimensions. Internal consistency reliability was then assessed using Cronbach's alpha coefficients for each factor.

To establish criterion validity, Pearson's correlation analyses were performed between the ZQS and other theoretically related constructs, including the Islamic Positive Religious Coping Scale (IPRCPE), the Taṭmainn al-Qulūb Scale (TQS), the Perceived Stress Scale–4 (PSS-4), the Westside Test Anxiety Scale (WTAS), and the Career Anxiety Scale. All analyses were carried out using SPSS. Criterion validity was chosen because it provides empirical evidence that the quality of dhikr, as measured by the ZQS, corresponds with external variables that are conceptually relevant. Positive associations with IPRCOPE and TQS would demonstrate that meaningful dhikr is linked to adaptive coping and inner tranquility [1,2], while negative correlations with stress and anxiety measures (PSS-4, WTAS, Career Anxiety Scale) would confirm the protective function of dhikr against psychological distress.

3 Result

3.1 Exploratory Factor Analysis

Based on data from 293 respondents, an exploratory factor analysis (EFA) was conducted using principal axis factoring with varimax rotation, and a suppression level for small coefficients set at 0.399. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.799, while Bartlett's Test of Sphericity was significant, $\chi^2(55) = 1358.355$, $p < .001$. These indices indicate that the data were suitable for factor analysis. According to Kaiser's (1974) interpretation, KMO values between 0.70 and 0.79 are considered "middling," whereas values above 0.80 are regarded as "meritorious." Thus, the obtained KMO value of 0.799 falls within the upper range of the "middling" category, suggesting that the sample size and inter-item correlations were adequate to proceed with factor analysis [11].

The exploratory factor analysis revealed a three-factor solution for the Zikir Quality Scale (ZQS), accounting for a total of 64.75% of the variance. The first factor, labeled intensity, explained 39.50% of the variance and reflected the frequency and continuity of dhikr practice. The second factor, labeled duration–solemnity, accounted for 13.57% of the

variance and captured the depth of concentration, comprehension, and reverence during dhikr. The third factor, labeled connectivity, explained 11.67% of the variance and represented the sense of closeness and spiritual connectedness with Allah across contexts. Table 2 presents the factor loadings and variance explained for each component.

Table 2. Item Means, Standard Deviations, Factor Loadings, and Item–Total Correlations of the Zikir Quality Scale (ZQS)

Item	Mean	SD	Loadings	Item-Total Correlation
Intensity ($\alpha= 0.795$)				
1. I regularly perform dhikr.	4.64	1.232	0.891	0.770
2. I continuously perform dhikr from day to day.	4.619	1.225	0.864	0.750
3. At what times do you usually perform dhikr?	3.595	2.081	0.604	0.585
4. How often do you perform dhikr outside the times mentioned above?	4.291	1.095	0.476	0.502
Duration and Solemnity ($\alpha= 0.777$)				
5. How often do you reflect on the meaning of dhikr?	4.676	1.490	0.702	0.624
6. How often do you feel a sense of devotion (khushu') when performing dhikr?	4.590	1.351	0.697	0.632
7. How often do you feel close to Allah when performing dhikr?	5.290	1.337	0.591	0.599
8. How well do you understand the phrases of dhikr?	5.079	0.846	0.815	0.568
9. How much time do you usually spend when performing dhikr?	3.942	1.372	0.420	0.404
Connectivity ($\alpha= 0.832$)				
10. In every action, I always remember Allah.	5.529	0.995	0.820	0.713
11. I feel connected to Allah wherever I am.	5.747	1.019	0.807	0.713

The factor loadings of the Zikir Quality Scale (ZQS) items ranged from 0.420 to 0.891 ($M = 0.671$), with no item falling below the threshold of 0.40, indicating that no item needed to be eliminated due to low loading. Item–total correlations ranged from 0.40 to 0.77 ($M = 0.623$), further supporting the adequacy of the items. Reliability analysis showed satisfactory internal consistency, with Cronbach’s alpha of 0.795 for the intensity factor, 0.777 for the duration–solemnity factor, and 0.832 for the connectivity factor. The overall reliability coefficient for the scale was 0.826.

The quality of the items was also supported by satisfactory extraction communalities. Communality values ranged from 0.430 to 0.835, with an average of 0.647. Since no item fell below the minimum acceptable threshold of 0.20, all items were retained. According to Kaiser’s criteria, communalities are considered reliable if the mean extraction exceeds 0.70 for fewer than 30 variables, or at least 0.60 when the sample size exceeds 250 cases. In this study, the mean communality was 0.647 with a sample size of 293, thereby meeting Kaiser’s criterion [12]. These findings suggest that the items demonstrated adequate shared variance with their respective factors, and no issues were detected at the communality level.

Having established the factorial structure, reliability, and item adequacy of the Zikir Quality Scale (ZQS), the next step was to examine its criterion validity. This was achieved

by testing the correlations between the ZQS and several theoretically related constructs, including religious coping, spiritual tranquility, perceived stress, test anxiety, and career anxiety. Such analyses were conducted to determine whether the ZQS demonstrates meaningful associations with external measures in directions consistent with theoretical expectations.

3.2 Criterion-related validity

Criterion-related validity refers to the extent to which a measure corresponds with a “gold standard,” namely an external criterion that accurately reflects the phenomenon being assessed [13]. Establishing criterion validity requires demonstrating significant correlations between the measure of interest and other instruments that have been validated as accurate indicators of the same or related constructs. The core assumption of this validation effort is that scores on the newly developed construct should correlate in theoretically meaningful ways with conceptually related constructs. In the present study, it was hypothesized that the Zikir Quality Scale (ZQS) would show positive correlations with spiritual tranquility, as measured by the *Taṭmainn al-Qulūb* Scale (TQS), and with Islamic Positive Religious Coping (IPRCOPE). Conversely, it was expected that ZQS scores would be negatively correlated with psychological distress, particularly perceived stress as measured by the Perceived Stress Scale–4 (PSS-4), as indicated by the correlation coefficients.

Table 3. Correlation between ZQS, TQS, IPRCOPE, and PSS-4

Variable	1	2	3	4	5	6	7	8	9
1. ZQS	1								
2. Intensity	.787**	1							
3. Duration & Solemnity	.779**	.463**	1						
			.434*						
4. Connectivity	.768**	.358**	*	1					
			.532*	.599*					
5. TQS	.629**	.378**	*	*	1				
			.496*	.573*	.871*				
6. al-Sukūn	.553**	.267**	*	*	*	1			
			.418*	.455*	.850*	.482*			
7. al-Yaqīn	.523**	.383**	*	*	*	*	1		
			.483*	.523*	.518*	.562*	.318*		
8. IPRCOPE	.592**	.444**	*	*	*	*	*	*	1
			-	-	-	-	-	-	
			.246*	.453*	.328*	.457*	.279*		
9. PSS-4	.347*	.275**	.268*	*	*	*	*	*	1

The criterion-related validity of the Zikir Quality Scale (ZQS) was supported by significant correlations with conceptually related constructs. The total ZQS score showed a strong positive correlation with the *Taṭmainn al-Qulūb* Scale (TQS) ($r = .629, p < .01$), as well as with its subdimensions al-Sukūn ($r = .553, p < .01$) and al-Yaqīn ($r = .523, p < .01$). Positive associations were also found with Islamic Positive Religious Coping (IPRCOPE) ($r = .592, p < .01$). Conversely, the ZQS was negatively correlated with perceived stress as measured by the PSS-4 ($r = -.347, p < .05$).

At the dimensional level, the intensity factor correlated positively with TQS ($r = .378, p < .01$), al-Yaqīn ($r = .383, p < .01$), and IPRCOPE ($r = .444, p < .01$), while showing a significant negative association with PSS-4 ($r = -.275, p < .01$). The duration–solemnity factor was positively associated with TQS ($r = .532, p < .01$), al-Sukūn ($r = .496, p < .01$), al-Yaqīn ($r = .418, p < .01$), and IPRCOPE ($r = .483, p < .01$), and negatively correlated with

PSS-4 ($r = -.268, p < .05$). The connectivity factor demonstrated positive correlations with TQS ($r = .599, p < .01$), al-Sukūn ($r = .573, p < .01$), al-Yaqīn ($r = .455, p < .01$), and IPRCOPE ($r = .523, p < .01$), as well as a significant negative correlation with PSS-4 ($r = -.246, p < .01$). These findings indicate that higher quality of *dhikr*, as measured by the ZQS, is associated with greater spiritual tranquility and positive religious coping, and with lower levels of stress.

Table 4. Correlation between ZQS, TQS, and Test Anxiety

Variable	1	2	3	4	5	6	7	8
1. ZQS	-							
2.Quantity	.649**	-						
3.Duration & Solemnity	.704**	.350**	-					
4.Connectivity	.301**	.175	0,087	-				
5.Test Anxiety	-.074	-.124	-.207*	.506**	-			
6. TQS	.476**	.434**	.303**	.403**	-.029	-		
7.al-Sukūn	.437**	.375**	.328**	.336**	-.003	.820**	-	
8.al-Yaqīn	.322**	.319**	.151	.309**	-.045	.784**	.287**	-

The results (study 2) further demonstrated that the Zikir Quality Scale (ZQS) remained positively correlated with the *Tatmainn al-Qulūb* Scale (TQS) ($r = .476, p < .01$) and with its dimensions al-Sukūn ($r = .437, p < .01$) and al-Yaqīn ($r = .322, p < .01$). These findings confirm the criterion validity assumption that *dhikr* quality should be positively associated with spiritual tranquillity. However, the expected negative relationship between the ZQS and test anxiety was not supported in this study ($r = -.074$). Interestingly, while duration–solemnity demonstrated a weak negative correlation with test anxiety ($r = -.207, p < .05$), the connectivity dimension showed a positive association ($r = .506, p < .01$), suggesting a more complex relationship between *dhikr* quality and anxiety.

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Table 5. Correlation between ZQS, TQS, and Carier Anxiety

Variable	1	2	3	4	5	6	7	8
1. ZQS	1							
2.Qantity	.779**	1						
3.Duration & Solemnity	.177	-0.14	1					
4.Connectivity	.300**	.320**	-.330**	1				
5. TQS	-.030	.128	-.324**	.332**	1			
6.al-Sukūn	.008	.147	.235*	.316**	.787**	1		
7.al-Yaqīn	-.050	.092	.313**	.277**	.931**	.508**	1	
8. Carier Anxiety	.112	.009	0.097	.075	-.280**	-.198*	-.274**	1

The findings (study 3) presented in Table 5 indicate that the Zikir Quality Scale (ZQS) did not show a significant association with career anxiety ($r = .112$). This result suggests that, within the current sample, the quality of *dhikr* as measured by the ZQS was not directly related to levels of anxiety about future career prospects. Consequently, no evidence was obtained to support criterion validity in terms of the hypothesized negative association between *dhikr* quality and career-related anxiety.

Nevertheless, the analysis revealed meaningful relationships between the ZQS and spiritual tranquillity, particularly through the connectivity dimension. The connectivity factor showed a significant positive correlation with the Taṭmainn al-Qulūb Scale (TQS) ($r = .332$, $p < .01$). This finding is consistent with earlier results (study 2), where connectivity was also correlated with TQS ($r = .403$) and, in a separate analysis, reached a stronger level of association ($r = .599$). Taken together, these results strengthen the evidence for criterion validity by confirming that connectivity, as one of the core dimensions of the ZQS, is consistently related to spiritual tranquillity across different samples and contexts.

These findings imply that while the ZQS may not capture anxiety-related outcomes, it reliably aligns with constructs reflecting inner peace and certainty of faith. Thus, the ZQS appears to function more effectively as an indicator of positive spiritual states rather than as a predictor of reduced anxiety. This may also reflect the conceptual distinction between *dhikr* as a spiritual practice aimed at enhancing connection with Allah and the broader, multifactorial nature of anxiety, which is influenced by psychological, social, and contextual variables beyond spirituality.

3.3 Measurement Invariance Across Gender

After establishing the factorial structure, reliability, and criterion validity of the Zikir Quality Scale (ZQS), it is also important to evaluate the scale in relation to potential group biases. Previous research has consistently shown that women tend to report higher levels of religiosity compared to men, although these findings may be influenced by cultural factors that shape religious expression and practice [14]. To ensure that the ZQS functions equivalently across gender groups and does not introduce systematic bias, we conducted a gender bias analysis. This analysis aimed to identify whether individual items of the ZQS operate differently for men and women and to determine the extent of potential risk associated with measurement bias.

To ensure that the differences found were not caused by unequal sample sizes between male and female participants, a Levene's Test of Equality was conducted. The result showed no significant difference in variances ($p = 0.926$). This indicates that the significant mean differences observed between genders are not due to unequal variances or sample imbalance, but instead reflect actual differences that can be interpreted as potential evidence of gender-related measurement invariance.

Table 6. Mann–Whitney U Test Results for Gender Differences in ZQS Items

Item	Women		Men		Mann-Whitney U	Z	p	Effect
	M	SD	M	SD				
1. Regularly perform <i>dhikr</i> ..	3.794	2.020	3.158	2.075	7192	-1.509	0.132	-0.088
2. I continuously perform <i>dhikr</i> ..	4.492	1.168	4.290	1.038	7852	-0.926	0.354	-0.054
3. Usually perform <i>dhikr</i> ..	4.476	1.125	4.711	1.275	7637	-1.085	0.278	-0.064
4. perform <i>dhikr</i> outside the time	5.064	1.250	5.632	1.286	6788	-2.416	0.016	-0.142
5. reflect on the meaning..	5.064	0.849	5.184	0.839	7870	-0.911	0.362	-0.053
6. feel a sense of devotion..	3.921	1.366	3.974	1.402	8160	-0.267	0.789	-0.016
7. feel close to Allah ..	4.659	1.185	4.684	1.317	8158	-0.290	0.772	-0.017
8. understand the <i>dhikr</i> ..	4.603	1.238	4.737	1.234	8018	-0.572	0.567	-0.034
9. time spend performing <i>dhikr</i> ..	5.556	0.939	5.474	1.114	8159	-0.267	0.789	-0.016
10. Always remember Allah..	5.492	0.977	6.000	0.945	6504	-2.965	0.003	-0.174
11. Connected to Allah..	5.492	0.977	6.000	0.945	6504	-2.965	0.003	-0.174

The gender bias analysis indicated that differences in scores between women and men were not uniformly significant across all items of the Zikir Quality Scale (ZQS). Although women consistently reported higher scores, only certain items reached statistical significance. Specifically, significant differences were found in items 4, 6, 8, 9, 10, and 11, whereas items 1, 2, 3, and 5 showed no significant differences. This suggests that potential gender bias in the ZQS may be limited to a subset of items and should be interpreted with caution, considering additional evidence.

At the scale level, univariate tests revealed a significant overall difference between men and women on the ZQS ($p = .000$). However, the effect size was weak ($\eta^2 = .043$), indicating that while statistical significance was observed, the practical impact of gender differences was small, accounting for only 4.3% of the variance. In other words, women did not always score higher than men in a substantive sense, as the strength of gender effects was limited.

Analysis of the subscales yielded a similar pattern. For the intensity component, women obtained a mean score of 50.94 ($SD = 9.39$; $SE = 0.63$), compared with 47.07 ($SD = 10.04$; $SE = 1.20$) for men, a statistically significant difference ($p = .003$) with a weak effect size ($\eta^2 = .029$), explaining only 2.9% of the variance. For duration–solemnity, women scored 50.62 ($SD = 8.47$; $SE = 0.57$) compared with 48.14 ($SD = 10.35$; $SE = 1.21$) for men, again yielding a significant difference ($p = .042$) but with a very small effect ($\eta^2 = .014$), explaining only 1.4% of the variance. Finally, for the connectivity component, women scored 51.30 ($SD = 9.54$; $SE = 0.64$), while men scored 46.09 ($SD = 10.40$; $SE = 1.22$), with the difference reaching significance ($p = .042$) and a weak effect size ($\eta^2 = .051$), accounting for 5.1% of the variance.

Taken together, these results suggest that although women tend to report higher levels of dhikr quality than men, the gender differences are consistently weak in magnitude. Therefore, while statistical tests indicate some significant differences, these appear to be largely a product of the relatively large sample size rather than strong gender effects.

4 Discussion

This study demonstrated that the Zikir Quality Scale (ZQS) is a psychometrically sound instrument, with exploratory factor analysis (EFA) revealing a stable three-factor structure that is both theoretically grounded and statistically robust. The adequacy of the Kaiser–Meyer–Olkin (KMO) index, the satisfactory communalities, and the absence of low factor loadings confirm the reliability of the scale’s structure and its individual items. These findings provide strong evidence that the ZQS captures meaningful aspects of *dhikr* quality as conceptualized within Islamic psychology.

The first dimension identified was intensity, which reflects the frequency, continuity, and extent of time devoted to dhikr. This dimension resonates with Qur’anic injunctions that emphasize the importance of abundant remembrance (*dhikran kathīran*) (al-Aḥzāb 33:41–42; Āl ‘Imrān 3:41), remembrance that is aligned with different times and contexts (*wa sabbiḥūhu bukratan wa aṣlā*) (al-Aḥzāb 33:42; Āl ‘Imrān 3:41), and remembrance in all conditions (*alladhīna yadhkurūna Allāha qiyāman wa qu’ūdan wa ‘alā junūbihim*) (Āl ‘Imrān 3:191). Intensity therefore highlights the extent to which dhikr becomes a consistent and integrated part of daily life.

The second dimension was duration–solemnity, which emphasizes the role of mindfulness and humility in dhikr. Solemnity (*khushū’*) entails the presence of heart and a deep awareness of Allah during remembrance, which enhances its transformative effect. Duration here refers to the slowness and steadiness (*ṭuma’nīnah*) of recitation, which supports greater concentration and spiritual engagement. The Qur’an underscores the profound significance of dhikr, describing it as a matter of great consequence (*wa la-dhikru Allāhi akbar*) (al-‘Ankabūt 29:45). This suggests that dhikr carried out with solemnity has deeper spiritual and psychological impact than that performed superficially.

The third dimension was connectivity, which reflects the sense of continual relationship with Allah across different settings and situations. This dimension captures the Qur’anic teaching that remembrance is an act of reciprocal engagement with the Divine (*fa-dhkurūnī adhkurkum*) (al-Baqarah 2:152), as well as the warning not to allow worldly distractions to sever one’s connection with Allah (*lā tul’hikum amwālukum wa lā awlādakum ‘an dhikrillāh*) (al-Munāfiqūn 63:9). The example of the Prophet Muhammad, who was reported to maintain remembrance in all aspects of his life, illustrates that dhikr is not confined to verbal utterances but also encompasses mental and spiritual awareness. In this sense, remembrance begins in the heart and mind before it is expressed verbally, underscoring that dhikr is fundamentally both a cognitive and spiritual process.

The present study further demonstrated criterion validity of the Zikir Quality Scale (ZQS). Among the external measures, the strongest correlation was found between the ZQS and the Taṭmainn al-Qulūb Scale (TQS). This finding is consistent with theoretical assumptions grounded in classical Islamic thought, where dhikr is explicitly linked to inner tranquility, as stated in the Qur’an: “Verily, in the remembrance of Allah do hearts find peace” (al-Ra’d 13:28). Previous experimental studies have similarly confirmed that dhikr can enhance emotional calmness, thereby reinforcing the theoretical and empirical alignment of the ZQS with spiritual tranquility.

The ZQS also correlated positively with the Islamic Positive Religious Coping Scale (IPRCOPE), providing additional support for its criterion validity. Practices such as dhikr, prayer, and recitation of the Qur’an represent common forms of religious coping within

Islam. Interestingly, the connectivity dimension of the ZQS showed the strongest relationship with both TQS and IPRCOPE, suggesting that effective dhikr as a coping mechanism is primarily characterized by a sense of deep connection with Allah. However, the strength of the correlation between ZQS and IPRCOPE was weaker than that with TQS. This difference can be explained theoretically: while dhikr is inherently and directly associated with tranquility, it is only one among several forms of religious coping, and its primary purpose is not limited to stress reduction. Rather, dhikr is fundamentally intended to cultivate inner peace. These results confirm that when a construct is designed from within an Islamic paradigm, its most coherent validation is found in concepts derived from the same paradigm, in this case the Qur'anic assertion that dhikr leads to tranquility.

Regarding its relationship with negative emotional states, the ZQS showed a moderate and significant negative correlation with perceived stress (PSS-4), further supporting its validity. However, no significant associations were observed between ZQS and measures of anxiety, including both test anxiety and career anxiety. This suggests that dhikr may help alleviate stress but does not necessarily reduce anxiety. It is important to note that the anxiety measures used here were limited to academic and career-related contexts, which are common concerns among students. Future studies may benefit from employing more symptom-focused anxiety measures, such as the anxiety subscale of the DASS, to better capture the potential relationship between dhikr quality and anxiety symptoms.

Despite its promising findings, this study is not without limitations. First, the validation relied solely on self-report questionnaires, which may be influenced by social desirability bias. Future research should include non-questionnaire-based criteria, such as daily dhikr frequency observed in natural settings or psychophysiological parameters assessed during dhikr practice. Second, the sample was relatively homogeneous, consisting primarily of young university students, which limited the ability to detect the effects of age, occupation, or educational background. Expanding the sample to include a broader range of demographics would provide a more comprehensive test of the scale's generalizability. Such expansion would also help clarify whether gender-related differences in dhikr quality reflect consistent patterns or are context-specific. Replication of gender-related bias findings across multiple studies would further strengthen the evidence base and guide cautious interpretation of potential measurement bias.

Another limitation of this study concerns the issue of gender bias. As widely noted in the literature, religiosity is often reported to differ by gender, with women generally scoring higher than men [14]. A similar pattern was observed in the present study. Across all analyses of mean differences, women consistently obtained higher scores on the ZQS, including its subscales of intensity, duration–solemnity, and connectivity, with statistically significant results. However, the effect sizes were weak. At the item level, women also scored higher on every item, although only some of these differences reached statistical significance while others did not. On one hand, the consistent trend of higher female scores and the statistical significance of several comparisons suggest the presence of gender bias. On the other hand, the small effect sizes, as indicated by partial eta squared values, together with the fact that not all items differed significantly, highlight the need for cautious interpretation and further investigation.

To clarify whether the higher scores among women reflect genuine differences or are due to item bias, future research should employ Differential Item Functioning (DIF) analysis using the MIMIC model [15]. If item wording bias is confirmed, corrective actions can be considered, such as developing gender-specific norms, eliminating problematic items, or revising item formulations. Establishing separate norms for men and women may also provide a cautious yet practical approach to addressing potential gender bias in this scale.

5 Conclusion

This study developed and validated the Zikir Quality Scale (ZQS) as a psychometrically sound instrument for measuring the quality of *dhikr*. Exploratory factor analysis revealed a three-factor structure consisting of intensity, duration–solemnity, and connectivity, which is both consistent with Islamic teachings and supported by empirical evidence. The ZQS demonstrated adequate reliability, with satisfactory internal consistency across all dimensions. Criterion-related validity was confirmed through significant correlations with spiritual tranquility (TQS), Islamic positive religious coping (IPRCOPE), and perceived stress (PSS-4), supporting the theoretical expectation that *dhikr* is closely linked with inner peace and adaptive coping. However, the absence of significant associations with test anxiety and career anxiety suggests that the influence of *dhikr* may be more specific to stress reduction and tranquility rather than encompassing all forms of anxiety. Gender analyses also revealed that women consistently reported higher scores than men, although effect sizes were weak, highlighting the need for further investigation of potential item bias.

6 Implication

The ZQS offers important contributions to the advancement of Islamic psychology by providing a standardized and reliable tool to measure the quality of *dhikr*. Practically, the scale can be applied in both research and clinical settings, particularly in intervention studies that explore the role of *dhikr* in enhancing psychological well-being, reducing stress, and fostering spiritual growth. Its theoretical grounding in Islamic sources makes it especially suitable for studies aiming to integrate spiritual practices into psychological assessment and therapeutic approaches.

For future research, the ZQS should be validated in more diverse populations across different age groups, occupational backgrounds, and cultural contexts. Employing advanced methods such as Differential Item Functioning (DIF) analysis is necessary to further assess potential gender bias and to refine item formulations where needed. Additionally, the use of non-questionnaire-based validation criteria, such as behavioral observations or psychophysiological measures during *dhikr*, will strengthen the robustness of the scale. In this way, the ZQS can serve as a foundational instrument for bridging classical Islamic concepts of spirituality with contemporary psychological science.

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