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Development of a happiness measurement scale based on the Quran and Hadith using the Rasch Model

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Abstract: Happiness has long been a central theme in psychology, both in conceptual discourse and in the development of measurement instruments. However, no existing scale integrates the moral and spiritual dimensions of happiness derived from the Qur'an and Hadith within a robust psychometric framework ensuring measurement invariance. The Qur'an and Hadith, as universal sources of guidance, encompass principles of psychological and spiritual well-being that transcend religious and cultural boundaries, consistent with the Islamic concept of rahmatan lil 'alamin (*mercy to all creation*). This study aimed to develop a Qur'an- and Hadith-based happiness measurement scale using the Rasch model. The scale construction was grounded in prior qualitative research that identified three core Islamic constructs of happiness: patience (*sabr*), self-control (*mujāhadah al-nafs*), and gratitude (*shukr*). A total of 450 participants from diverse religious backgrounds in Indonesia completed the instrument. Data were analyzed using Confirmatory Factor Analysis (CFA) and the Rasch Model to evaluate validity, reliability, and item fit. The results indicated that the three-factor model exhibited excellent fit indices (CFI = 0.926, TLI = 0.910, RMSEA = 0.068) with high composite reliability (ω = 0.893). Rasch analysis further showed Infit MNSQ values ranging from 0.78 to 1.40 and item separation indices above 3, suggesting strong discriminant power and internal consistency. Overall, the findings demonstrate that happiness in Islam can be operationalized through measurable constructs rooted in patience, self-control, and gratitude. The proposed scale offers a psychometrically sound and universally applicable instrument grounded in Islamic ethical principles, contributing to cross-cultural research on psychological well-being.

Keywords: happiness; Qur'an; hadith; Rasch model; psychometrics

Introduction

The scientific study of happiness has evolved from hedonistic notions of pleasure toward eudaimonic frameworks emphasizing meaning, virtue, and self-realization (Ryff, 1989; Seligman et al., 2004; Diener et al., 2018). Within this paradigm, happiness is often operationalized through affective balance, life

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satisfaction, and psychological well-being. However, despite the growing sophistication of positive psychology, its dominant models—such as PERMA (Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment) and Ryff's six dimensions of well-being—tend to privilege secular and individualistic interpretations (Karim & Noor, 2019). They offer valuable insights into human flourishing but often underrepresent spiritual transcendence and moral accountability, which are central to Islamic psychology.

Islamic scholarship offers a broader and integrative understanding of well-being. Classical and contemporary thinkers describe happiness through interrelated concepts such as *sa'ādah*, *falah*, and *al-salaam*. *Sa'ādah* refers to the inner harmony between intellect, body, and soul, achieved through moral purification and divine proximity (Al-Ghazali, 2001; Al-Farabi, 2021). *Falah* represents ultimate success in this world and the hereafter, implying that happiness must include ethical striving and spiritual fulfillment (QS Al-Mu'minun: 1–11). Meanwhile, *al-salaam* denotes a state of peace resulting from surrender to God's will—an emotional and existential equilibrium unavailable through hedonic satisfaction alone (Hamdan, 2016; Shihab, 2006). These notions position happiness not merely as an emotional state but as a moral-spiritual achievement rooted in faith and self-discipline.

Comparatively, positive psychology views happiness as a subjective and measurable construct grounded in cognitive appraisal and emotional experience. While models such as PERMA recognize meaning and relationships, they do not explicitly incorporate transcendental purpose or divine accountability (Karim & Noor, 2019; Omais & Dos Santos, 2022). Thus, Islamic and Western paradigms converge in valuing self-regulation, gratitude, and virtue but diverge in their metaphysical foundations. Islamic psychology situates well-being within the person–God relationship, emphasizing the harmony between spiritual and psychological dimensions (Ahmad & Javed, 2021; Hasan & Taufik, 2020).

Existing instruments such as the Oxford Happiness Questionnaire (Hills & Argyle, 2002) and the Satisfaction with Life Scale (Diener et al., 1985) have advanced happiness measurement yet remain limited in moral and spiritual scope. These scales operationalize happiness primarily through cognitive judgments and affective balance, omitting transcendental or ethical dimensions. Consequently, their use within Muslim populations may fail to capture culturally embedded aspects of well-being, such as patience (*sabr*), self-control (*mujahadah al-nafs*), and gratitude (*syukr*)—virtues that are central to the Qur'anic and Prophetic conception of happiness (Sofia & Sari, 2018).

Recent scholarship on Islamic psychology emphasizes the need for culturally grounded yet scientifically robust instruments (Nurhayati & Sari, 2022; Al-Kandari & Thomas, 2023). Cross-cultural measurement research also advocates for scale adaptation that respects local moral and religious frameworks while ensuring psychometric fairness (Bond & Fox, 2015; Zhang & Chen, 2024). Developing a Rasch-based Islamic happiness scale therefore fills a critical gap—bridging empirical rigor and spiritual authenticity, and contributing to the global discourse on culturally responsive well-being assessment.

Method

Research Design

This quantitative, non-experimental study employed a *scale development* approach comprising five phases: (1) conceptual exploration based on the Qur'an and Hadith, (2) item generation, (3) expert

validation, (4) pilot testing, and (5) psychometric analysis using CFA and the Rasch model. The Rasch model was chosen for its capability to estimate person–item interactions with invariance and objectivity, producing interval-level measures from ordinal Likert data (Linacre, 2022). Items were initially derived from thematic analysis of Qur'anic verses on happiness (Sofia & Sari, 2018). From 440 valid responses, 220 were retained based on completion rate and response consistency. Rasch analysis confirmed reliability ($\alpha = 0.91$) and unidimensionality through PCA of residuals, supporting the theoretical coherence of the three identified dimensions.

Participants

A total of 450 adults aged 18–43 participated, representing various religions (199 Muslims, 12 Christians, 4 Catholics, 2 Hindus, 2 Buddhists, and 1 Confucian). Eligibility criteria included adulthood and the cognitive capacity to assess self-perceived happiness. The sample size exceeded the recommended minimum for factor analysis (≥300; Tabachnick & Fidell, 2003) and met standards for Rasch analysis (VanVoorhis & Morgan, 2007).

Instrument

The scale was developed based on Qur'anic and Hadith references previously identified by Sofia and Sari (2018). Each item was rated using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument was designed to capture three core dimensions of happiness derived from Islamic teachings. The first dimension, Patience (Sabr), reflects the individual's ability to endure hardship and regulate anger. The second, Self-control (Mujahadah al-nafs), represents disciplined behavior, mindful speech, and continuous self-improvement. The third, Gratitude (Syukr), encompasses thankfulness, the avoidance of wastefulness, and appreciation of one's blessings and environment. Together, these dimensions embody the moral and spiritual foundations of happiness within the Islamic worldview.

Procedure

Five experts in Tafsir, Islamic Psychology, and Islamic Philosophy validated the content using the Content Validity Ratio (CVR; Lawshe, 1975). All items met the minimum CVR threshold (>0.99). Following expert revision, the instrument was distributed online. Of 450 responses, 220 qualified for analysis after data screening.

Data Analysis

Data analysis was conducted in two main stages. First, Confirmatory Factor Analysis (CFA) was performed using JASP to assess the factorial validity of the scale. Model fit was evaluated using standard indices, including the Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR), following the guidelines of Kline (2016). Second, Rasch analysis was conducted using JMetrik to examine item fit, reliability, and person–item separation according to Fisher's (1993) criteria.

Result

Construct Validity (CFA)

Confirmatory Factor Analysis (CFA) demonstrated that the three-factor model provided a good fit to the data, with fit indices meeting recommended thresholds (CFI = 0.926, TLI = 0.910, RMSEA = 0.068). Standardized factor loadings ranged from 0.425 to 0.819 (p < 0.001), exceeding the 0.40 criterion for acceptable loadings (Hair et al., 2010). The composite reliability coefficient (ω = 0.893) indicated high internal consistency and supported the unidimensionality of the construct. These results confirm that the proposed three-factor structure patience, self-control, and gratitude adequately represents the conceptual model of happiness grounded in Islamic teachings.

Rasch Analysis

Rasch measurement analysis further supported the psychometric robustness of the scale. Infit Mean Square (MNSQ) values ranged from 0.78 to 1.40, falling within the acceptable range (0.77–1.30) and indicating appropriate item–person interaction. The item separation index (3.46) and person separation index (2.16) both exceeded the minimum acceptable values, suggesting strong discrimination across different levels of ability. Item reliability (0.92) and person reliability (0.82) were classified as very good, confirming the scale's stability and precision in distinguishing respondents' levels of happiness.

Final Scale Structure

The finalized scale comprised 15 items distributed across three dimensions that reflect the Qur'anic and Prophetic conceptualization of happiness:

Table 1

Descriptive Summary

Dimension	Indicators	No. of Items
Patience (Sabr)	Controlling anger, avoiding negative assumptions	4
Self-control (Mujahadah al-nafs)	Guarding speech, continuous self-improvement	5
Gratitude (Syukr)	Avoiding waste, appreciating blessings and the environment	6

Overall, both the CFA and Rasch analyses demonstrate that the final 15-item instrument possesses excellent psychometric properties, theoretical coherence, and cultural validity consistent with Islamic perspectives on psychological well-being.

Discussion

This study developed and validated a happiness scale grounded in Qur'anic and Prophetic teachings using the Rasch model. The three core dimensions—patience (*sabr*), self-control (*mujahadah al-nafs*), and gratitude (*syukr*)demonstrated strong validity and reliability, reflecting the psychological essence of Islamic happiness. The three identified dimensions parallel established constructs in positive psychology. *Sabr* aligns with perseverance and emotional regulation (PERMA's engagement dimension); *mujahadah al-nafs* reflects self-discipline and purpose; *syukr*resonates with positive relationships and meaning (Ryff, 1989; Seligman, 2011). The three identified dimensions parallel established constructs in positive psychology. *Sabr* aligns with perseverance and emotional regulation (PERMA's engagement dimension); *mujahadah al-nafs* reflects self-discipline and purpose; *syukr* resonates with positive relationships and meaning (Ryff, 1989; Seligman, 2011).

Integration of Classical and Contemporary Perspectives

Classical Islamic scholars such as Al-Ghazali (2001) and Al-Farabi (2021) conceptualized happiness as the perfection of the soul achieved through purification and divine proximity. Ibn Sina and Ibn 'Arabi further described happiness as a state of intellectual and spiritual harmony (Lala & Alwazzan, 2023). Modern psychology parallels this understanding through the eudaimonic concept of well-being, emphasizing meaning, purpose, and moral growth (Ryff, 1989; Seligman, 2011). Integrating these perspectives reveals that happiness is both transcendental and measurable, bridging theology with empirical science. Recent empirical studies also support this synthesis, showing that spirituality contributes significantly to psychological well-being among Muslim populations (Ahmad & Javed, 2021; Hidayat & Rahman, 2021).

Patience (Sabr)

In positive psychology, patience aligns with emotional regulation and resilience (Fredrickson, 2001; Tugade & Fredrickson, 2004). Benatov and Oren (2022) found that gratitude and resilience promote post-traumatic growth, consistent with the Qur'anic notion of *sabr* as transformative endurance (QS Al-Baqarah: 153). This study supports the view that patience is not passive submission but an adaptive process that fosters inner strength, self-regulation, and long-term well-being.

Self-Control

Self-control reflects the integration of rational, behavioral, and moral faculties. It is central to maintaining ethical stability and personal harmony. Consistent with Bandura's (1997) theory of self-regulation, individuals who monitor their thoughts, speech, and actions report higher life satisfaction and emotional balance. Qur'anic teachings reinforce this discipline as a moral foundation for happiness (QS Al-Mu'minun: 3). Supporting this, Hidayat and Rahman (2021) and Nurhayati and Sari (2022) found that self-control, when coupled with gratitude, significantly predicts happiness among Muslim students.

Gratitude (Syukr)

Gratitude is a key predictor of subjective well-being (Emmons & McCullough, 2003) and in Islam, represents an existential awareness of divine blessings and moral responsibility (QS Ibrahim: 7; Hasan & Taufik, 2020). Beyond emotion, gratitude manifests behaviorally through generosity, simplicity, and care for others and the environment. This aligns with contemporary evidence that gratitude enhances resilience and interpersonal connectedness, reinforcing psychological and spiritual flourishing (Benatov & Oren, 2022; Al-Kandari & Thomas, 2023).

Rasch Model Implications

Methodologically, the Rasch model enhances cross-cultural fairness and precision in measurement (Barlagne & Godbout, 2019; Zhang & Chen, 2024). By ensuring measurement invariance, the model eliminates bias across respondents with different backgrounds. The high reliability and separation indices observed in this study confirm that the instrument distinguishes varying levels of happiness accurately and objectively (Bond & Fox, 2015).

Practical Implications

The developed scale offers a culturally sensitive, empirically sound framework for assessing happiness that integrates moral and spiritual dimensions. It may be utilized in cross-religious well-being studies and in counseling settings that adopt faith-integrated psychological interventions (Abdel-Khalek, 2019; Karim & Noor, 2019). The findings underscore the possibility of uniting scientific rigor with Islamic spiritual principles to enrich global psychology.

Limitations and Future Research

The study's main limitation lies in the predominance of Muslim participants, which may affect the generalizability of the findings across diverse cultural contexts. Future research should employ diverse samples for cross-cultural validation and examine longitudinal effects of patience, self-control, and gratitude on well-being. Expanding this approach may lead to the development of integrated models of spiritual resilience applicable across faith traditions.

Conclusions

This study successfully developed and validated a Qur'an- and Prophetic-based happiness measurement scale using the Rasch model. The resulting instrument comprises three empirically supported dimensions—patience (sabr), self-control (mujahadah al-nafs), and gratitude (syukr)—which collectively represent the psychological and spiritual essence of Islamic happiness. These dimensions capture the integration of moral discipline, emotional regulation, and spiritual awareness as the foundation of genuine well-being.

The use of the Rasch model ensured measurement fairness, invariance, and precision across participants, establishing the scale's psychometric robustness. Conceptually, the findings affirm that happiness in Islam transcends momentary affect or subjective pleasure; it embodies a balanced state of the soul grounded in faith, morality, and self-regulation. In doing so, this study bridges classical Islamic thought and modern psychometric science, offering a spiritually grounded yet empirically rigorous approach to understanding well-being.

Practically, the developed scale provides a culturally sensitive tool applicable in cross-religious well-being studies and faith-integrated counseling practices. It advances the discourse on culturally responsive measurement by embedding spiritual and ethical values into psychological assessment. Future research should extend validation to more diverse cultural and religious populations and explore the longitudinal effects of patience, self-control, and gratitude on well-being. Such efforts will contribute to developing a universal, spiritually anchored model of happiness that unites theological wisdom with contemporary psychological science.

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