


PRIORITIZATION OF ISLAMIC DETERMINANTS OF MENTAL WELLBEING USING THE *ANALYTIC HIERARCHY PROCESS* (AHP)

*¹Ramlan Mustapha, ²Mohd Faizal Hassan, ³A. Jailani Che Abas & ⁴Siti Rohayu Mustapha

¹ Universiti Teknologi MARA Pahang, Kampus Raub Malaysia

^{2,3} Institut Pendidikan Guru, Kampus Tengku Ampuan Afzan, Kuala Lipis Pahang Malaysia

⁴Kolej Profesional MARA, Kuantan Pahang Malaysia

Article Info	ABSTRACT
<p>Article history:</p> <p>Received: 2 Aug 2025 Revised: 16 Sept 2025 Accepted: 7 Oct 2025 Published: 1 Nov 2025</p> <p>Keywords:</p> <p><i>Islamic psychology, mental health, university students, Muslim students, Analytic Hierarchy Process, Islamic counselling, religious coping, spiritual practices, mental wellbeing,</i></p> <p>OPEN  ACCESS</p>	<p>Mental health problems among university students are increasing worldwide, and Muslim students face additional challenges related to maintaining their religious identity and practices in academic settings. While Islamic teachings and practices can support mental wellbeing, researchers have not systematically determined which Islamic factors are most important for helping students. This study used the Analytic Hierarchy Process (AHP) to prioritize Islamic determinants of mental wellbeing based on expert opinions. Nine experts including Islamic scholars, mental health professionals, and religious counselors evaluated four main areas: ritual practices, spiritual beliefs, ethical behavior, and community support. The analysis revealed that Islamic counselling was by far the most important factor, accounting for 81% of total importance, followed by ethical considerations at 49%, social support at 33%, gratitude at 11%, and prayer with remembrance at 7%. The extremely low consistency ratio of 0.0005 showed that expert judgments were highly reliable. These findings demonstrate that professional counselling integrated with Islamic principles is the most critical factor for supporting Muslim student mental health, while spiritual practices and community connections play important but secondary roles. The results provide practical guidance for universities and mental health professionals to develop effective, culturally appropriate mental health services for Muslim students. This research shows that the best approach combines professional mental health expertise with Islamic values rather than relying on spiritual practices alone. Universities should prioritize accessible Islamic counselling services supported by programs that promote ethical development, social connections, and spiritual engagement.</p>

Corresponding Author:

*Ramlan Mustapha,

Academy of Contemporary Islamic Study, Universiti Teknologi MARA Pahang, Raub Campus Malaysia

Email: ramlan@uitm.edu.my



Creative Commons Attribution 4.0 International

DOI 10.5281/zenodo.17434553

INTRODUCTION

Mental health has emerged as one of the most pressing global health challenges of the 21st century, affecting individuals across all demographics, cultures, and socioeconomic backgrounds. The World Health Organization (WHO, 2022) defines mental health as a state of wellbeing in which individuals realize their abilities, can cope with normal stresses of life, work productively, and contribute to their communities. However, the global burden of mental health disorders continues to escalate, with depression and anxiety disorders ranking among the leading causes of disability worldwide (Patel et al., 2018). The COVID-19 pandemic has further exacerbated mental health concerns, leading to unprecedented increases in psychological distress, social isolation, and emotional dysregulation across populations (Xiong et al., 2020). Traditional biomedical approaches to mental health have increasingly been recognized as insufficient in addressing the complex, multifaceted nature of psychological wellbeing, prompting researchers and practitioners to explore holistic frameworks that integrate biological, psychological, social, and spiritual dimensions of human experience (Koenig, 2012). The biopsychosocial-spiritual model acknowledges that mental health is not merely the absence of mental illness but encompasses positive psychological functioning, emotional resilience, meaningful social connections, and a sense of purpose and transcendence (Seligman & Csikszentmihalyi, 2000). This paradigm shift has opened new avenues for incorporating culturally sensitive and spiritually integrated approaches to mental health care, recognizing that individuals' worldviews, religious beliefs, and spiritual practices play significant roles in shaping their psychological experiences and coping mechanisms.

University students represent a particularly vulnerable population with respect to mental health challenges, experiencing unique stressors related to academic demands, social transitions, identity development, financial pressures, and career uncertainties (Auerbach et al., 2018). The transition from adolescence to young adulthood, which typically coincides with the university years, is a critical developmental period characterized by neurobiological changes, psychological maturation, and the establishment of independent lifestyles (Arnett, 2015). Research consistently demonstrates alarming rates of mental health problems among college students, with studies indicating that approximately 30-50% of university students worldwide experience clinically significant symptoms of depression, anxiety, or stress (Auerbach et al., 2016; Eisenberg et al., 2007). Furthermore, first-year students face particularly acute challenges as they navigate the dual process of separation from familiar support systems and integration into new academic and social environments (Credé & Niehorster, 2012). The academic environment itself presents numerous psychological stressors, including high performance expectations, competitive atmospheres, examination anxiety, time management pressures, and concerns about future employability (Bayram & Bilgel, 2008). Beyond academic stressors, students grapple with relationship challenges, homesickness, financial hardship, sleep disturbances, and lifestyle adjustments that collectively contribute to psychological vulnerability (Beiter et al., 2015). The situation is further complicated by systemic barriers to mental health care access, including stigma, lack of awareness about available services, insufficient counseling resources, long wait times, and cultural or linguistic barriers that prevent students from seeking help (Eisenberg et al., 2011).

For Muslim students specifically, the intersection of religious identity, cultural expectations, and mental health presents additional layers of complexity that warrant specialized attention from researchers and mental health professionals (Abu-Raiya & Pargament, 2015). Muslim university students often navigate the dual challenge of maintaining religious commitments while adapting to secular academic environments that may not accommodate their spiritual needs or understand their cultural values (Hodge & Nadir, 2008). Studies have documented that Muslim student experience unique stressors including religious discrimination, Islamophobia, cultural identity conflicts, pressure

to balance religious obligations with academic demands, and challenges in finding halal food and prayer spaces on campus (Ali et al., 2008; Husain & Howard, 2017). Despite these challenges, research also reveals that Islamic faith and spiritual practices serve as significant protective factors against mental health problems, providing Muslim students with coping resources, social support networks, meaning-making frameworks, and resilience in the face of adversity (Abu-Raiya et al., 2015; Aflakseir & Coleman, 2011). The Islamic worldview offers a comprehensive framework for understanding mental wellbeing that integrates spiritual, psychological, and behavioral dimensions, emphasizing concepts such as contentment (Qana'ah), trust in divine wisdom (Tawakkul), patience in adversity (Sabr), gratitude (Shukr), and remembrance of God (Dhikr) as pathways to psychological harmony (Haque & Keshavarzi, 2014). However, mainstream mental health services often fail to recognize or incorporate these Islamic perspectives, leading to cultural mismatches between treatment approaches and students' worldviews, which can result in underutilization of mental health services, premature termination of therapy, and suboptimal treatment outcomes (Hamdan, 2008).

Despite the growing recognition of the importance of spiritually integrated mental health care, significant gaps remain in understanding which Islamic determinants are most influential in promoting mental wellbeing among Muslim university students. While numerous studies have explored the relationship between Islamic religiosity and mental health outcomes, the existing literature lacks systematic prioritization of specific Islamic factors that contribute to psychological wellbeing (Ali & Milstein, 2012; Koenig et al., 2012). This knowledge gap presents several critical problems for theory, research, and practice. First, mental health professionals and counselors working with Muslim students lack evidence-based guidance on which Islamic resources should be emphasized in therapeutic interventions, leading to generic or unfocused approaches that may not maximize therapeutic effectiveness (Keshavarzi & Haque, 2013). Second, university administrators and student services departments seeking to develop culturally responsive mental health programs for Muslim students have limited empirical basis for resource allocation decisions, potentially resulting in inefficient use of limited funding and human resources (Mubarak & Susilawati, 2020). Third, Islamic educational institutions and Muslim student organizations attempting to provide peer support and wellness programs lack clear frameworks for prioritizing which spiritual practices and religious teachings should be emphasized to achieve the greatest impact on student mental health (Abdel-Khalek, 2011). Fourth, researchers investigating Islamic approaches to mental health face methodological challenges in comparing the relative importance of multiple Islamic factors simultaneously, as traditional statistical methods may not adequately capture the hierarchical and interactive nature of these determinants (Rahman et al., 2016). These problems are further complicated by the diversity within Muslim populations, as factors such as cultural background, sectarian affiliation, level of religious commitment, and individual interpretation of Islamic teachings may influence which determinants are most salient for different subgroups of students (Ghorbani et al., 2002).

The consequences of failing to address this prioritization gap are substantial and multifaceted. At the individual level, Muslim students experiencing mental health challenges may not receive interventions that resonate with their religious values and spiritual needs, potentially leading to continued suffering, academic underperformance, social withdrawal, and in severe cases, self-harm or suicide (Amri & Bemak, 2013). At the institutional level, universities may invest resources in mental health initiatives that are culturally incongruent or less effective than alternative approaches grounded in Islamic principles, representing missed opportunities for prevention and early intervention (Weatherhead & Daiches, 2010). At the societal level, the failure to develop evidence-based, culturally responsive mental health care for Muslim populations contributes to health disparities, reinforces stigma surrounding mental illness in Muslim communities, and perpetuates the marginalization of religious perspectives in mainstream psychology (Aloud & Rathur, 2009). Moreover, the absence of systematic prioritization frameworks limits the ability of researchers to

build cumulative knowledge about Islamic mental health, as studies examining different factors in isolation cannot adequately inform comprehensive theoretical models or integrated intervention approaches (Dwairy & Van Sickle, 1996). The problem is further exacerbated by methodological limitations in existing research, which often relies on variable-centered analyses that obscure the relative importance of different factors or uses qualitative approaches that, while rich in insight, lack the quantitative rigor needed for decision-making and resource allocation (Rassool, 2000). Additionally, the rapid social changes affecting Muslim youth, including globalization, technology, and shifting cultural norms, make it imperative to conduct contemporary research that reflects current realities rather than relying solely on classical Islamic texts or outdated empirical studies (Ahmed & Reddy, 2007).

To address these critical gaps, this research employs the Analytic Hierarchy Process (AHP), a sophisticated multi-criteria decision-making methodology that enables systematic prioritization of Islamic determinants of mental wellbeing based on expert judgments. The AHP, developed by Saaty (1980), provides a rigorous mathematical framework for decomposing complex decision problems into hierarchical structures, conducting pairwise comparisons, calculating priority weights, and assessing consistency of judgments. This methodological approach offers several distinct advantages for studying Islamic mental health determinants. First, AHP allows for the simultaneous consideration of multiple factors and their relative importance, overcoming limitations of traditional statistical methods that examine variables in isolation or require prohibitively large sample sizes to test complex interaction effects (Saaty, 2008). Second, the pairwise comparison technique aligns well with human cognitive processes, making it easier for experts to provide consistent and reliable judgments compared to direct rating or ranking methods (Vargas, 1990). Third, AHP incorporates mathematical checks for consistency, ensuring that expert judgments are logically coherent and identifying cases where evaluations may need revision (Saaty & Vargas, 2012). Fourth, the hierarchical structure of AHP accommodates both main criteria and sub-criteria, allowing for nuanced analysis of how broader Islamic constructs relate to specific practices and beliefs (Forman & Gass, 2001). Fifth, AHP has been successfully applied across diverse domains including healthcare decision-making, public policy evaluation, and organizational priority-setting, demonstrating its versatility and robustness as a research methodology (Dolan, 2008; Liberatore & Nydick, 2008). By leveraging expert knowledge from Islamic scholars, mental health professionals, and religious counselors who work directly with Muslim university students, this study aims to establish empirically grounded priorities among Islamic determinants of mental wellbeing, thereby providing actionable guidance for developing effective, culturally responsive mental health interventions and informing future research directions in Islamic psychology.

LITERATURE REVIEW

The intersection of Islamic spirituality and mental health has garnered increasing scholarly attention over the past two decades, with a substantial body of empirical research demonstrating significant associations between religious practices, Islamic beliefs, and various indicators of psychological wellbeing. Koenig et al. (2001) conducted an extensive review of over 100 studies examining the relationship between religious involvement and mental health, concluding that religious commitment is generally associated with lower rates of depression, anxiety, and substance abuse, as well as higher levels of life satisfaction and subjective wellbeing. Within specifically Islamic contexts, Abdel-Khalek (2007) investigated mental health and happiness among Muslim college students in Kuwait, finding that religiosity was positively correlated with happiness, life satisfaction, and physical health while being negatively associated with anxiety and depression. Similarly, Aflakseir and Coleman (2011) examined the influence of religious coping on psychological adjustment among Iranian college students, reporting that positive religious coping strategies—such as seeking spiritual support,

religious purification, and benevolent religious reappraisal—were significantly associated with better mental health outcomes. Ghorbani et al. (2002) explored the relationship between Islamic religiousness and psychological wellbeing among Iranian Muslims, demonstrating that intrinsic religiosity (religious commitment for its own sake rather than for external rewards) was positively related to integrative self-knowledge and negatively related to anxiety and depression. Research by Abu-Raiya et al. (2015) examined religious coping among Muslims, identifying specific Islamic coping methods including Tawakkul (trust in Allah), Sabr (patience), Dhikr (remembrance of Allah), and Salah (ritual prayer) as protective factors against psychological distress. These foundational studies established that Islamic religiosity operates as a multidimensional construct encompassing beliefs, practices, experiences, and community involvement, all of which contribute to mental wellbeing through various psychological mechanisms.

More recent investigations have sought to identify specific Islamic practices and beliefs that exert the strongest influence on mental health outcomes, though findings have been somewhat inconsistent across different populations and cultural contexts. Salleh and Abdullah (2018) conducted a study among Malaysian Muslim students, finding that frequency of Salah (the five daily prayers) was the strongest predictor of reduced anxiety and depression symptoms, followed by Quranic recitation and participation in religious study circles. In contrast, research by Ali and Milstein (2012) among American Muslim college students found that subjective spirituality and perceived closeness to Allah were more strongly associated with mental wellbeing than ritualistic practices such as prayer frequency or fasting. This divergence suggests that the relative importance of different Islamic determinants may vary based on cultural context, level of religious socialization, and the specific mental health outcomes under investigation. Regarding specific Islamic constructs, research on Taqwa (God-consciousness or piety) by Achour et al. (2019) demonstrated that this spiritual attribute was significantly associated with lower stress levels and higher life satisfaction among Malaysian Muslims, mediating the relationship between religious practices and psychological outcomes. Studies examining Shukr (gratitude) from an Islamic perspective have shown that cultivating thankfulness to Allah is associated with positive emotions, optimism, and resilience, with Emmons and Crumpler (2000) noting that religiously framed gratitude interventions produce stronger effects than secular gratitude practices. Investigations of Sabr (patience) by Al-Seheel and Noor (2016) revealed that this Islamic virtue serves as a crucial coping mechanism during adversity, buffering against the negative psychological impacts of stressful life events and promoting post-traumatic growth. Research on Tawakkul (trust in Allah) by Pargament et al. (2013) found that this form of religious surrender was associated with reduced anxiety and enhanced psychological adjustment, particularly when combined with active problem-solving efforts.

Despite these valuable contributions, several significant gaps and limitations characterize the existing literature on Islamic determinants of mental wellbeing. First, the majority of studies have employed correlational designs that cannot establish causality, leaving open questions about whether Islamic practices directly promote mental health or whether psychologically healthier individuals are simply more likely to engage in religious activities (Hackney & Sanders, 2003). Experimental and longitudinal studies are notably scarce, with few researchers implementing controlled trials of Islamic-based interventions or following participants over time to examine temporal relationships between religious engagement and mental health trajectories (Hodge, 2006). Second, there is substantial heterogeneity in how Islamic constructs are operationalized and measured across studies, making it difficult to compare findings and draw definitive conclusions about which determinants are most important. For instance, some researchers assess religiosity through self-reported prayer frequency, others use multidimensional religiosity scales, and still others employ single-item measures of subjective spirituality, each capturing different aspects of Islamic religious life with varying degrees of validity and reliability (Hill & Pargament, 2003). Third, many studies have been conducted in Muslim-majority countries where Islamic practices are socially normative and

institutionally supported, potentially limiting generalizability to Muslim minority populations who face distinct challenges related to religious identity, discrimination, and cultural adaptation (Rippy & Newman, 2006). Fourth, the literature has tended to treat Islamic determinants as independent predictors without adequately examining their interactive effects, hierarchical relationships, or relative importance when considered simultaneously, resulting in fragmented knowledge that lacks integrative theoretical frameworks (Piedmont, 1999). Fifth, much of the research has focused exclusively on negative mental health outcomes such as depression and anxiety, with insufficient attention to positive psychological constructs such as flourishing, meaning in life, and psychological wellbeing, thereby perpetuating a deficit-oriented rather than strengths-based approach to Muslim mental health (Joseph & Linley, 2006).

Recent methodological advances and conceptual debates in the field have further highlighted the need for more sophisticated approaches to studying Islamic mental health determinants. Scholars such as Keshavarzi and Haque (2013) have called for the development of distinctly Islamic psychology frameworks that are grounded in Islamic epistemology rather than simply applying Western psychological theories to Muslim populations, arguing that certain Islamic concepts cannot be adequately captured or understood through conventional psychological constructs. This indigenous psychology movement has sparked productive debates about cultural relativism versus universalism in mental health research, with some researchers advocating for culture-specific models while others emphasize common human psychological processes that transcend religious and cultural boundaries (Christopher et al., 2014). Simultaneously, advances in statistical methodology have provided new tools for examining complex relationships among multiple variables, including structural equation modeling, multilevel analysis, and machine learning approaches that can handle high-dimensional data and non-linear relationships (Muthén & Muthén, 2017). However, these sophisticated statistical techniques require large sample sizes and may not be practical or appropriate for studying priority-setting questions where expert judgment is more relevant than population-level patterns. The field has also witnessed growing recognition of the importance of stakeholder involvement in research, with participatory action research and community-based participatory research approaches emphasizing the need to engage religious leaders, community members, and service users in defining research questions and interpreting findings (Israel et al., 2008). Within the specific domain of priority-setting and resource allocation decisions, multi-criteria decision analysis methods such as AHP have gained prominence in healthcare research, offering rigorous frameworks for synthesizing expert opinions and quantifying relative importance of different factors (Liberatore & Nydick, 2008). Studies applying AHP to healthcare priorities have demonstrated its utility in contexts ranging from hospital quality improvement to public health policy development, though applications to mental health and religious health factors remain limited (Dolan, 2008).

The synthesis of this literature review reveals that while substantial evidence supports the mental health benefits of Islamic religiosity broadly conceived, critical questions remain about the relative importance and prioritization of specific Islamic determinants among university student populations. The field stands at a crossroads where accumulating descriptive knowledge must be translated into actionable priorities for intervention development, resource allocation, and clinical practice. Existing research provides a strong foundation demonstrating that Islamic practices such as Salah, Quranic engagement, Dhikr, and Islamic coping strategies are associated with better mental health outcomes, and that Islamic beliefs including Taqwa, Shukr, Sabr, and Tawakkul serve protective functions against psychological distress (Rahman et al., 2016; Salleh & Abdullah, 2018). However, the literature lacks systematic frameworks for comparing these determinants, understanding their hierarchical relationships, and establishing priorities when resources are limited. This gap is particularly problematic given the pressing mental health needs of Muslim university students and the limited capacity of counseling services to implement comprehensive interventions addressing all potential Islamic determinants simultaneously (Mubarak & Susilawati, 2020). The present study

addresses this critical gap by employing AHP methodology to systematically prioritize Islamic determinants of mental wellbeing based on expert consensus. By integrating perspectives from Islamic scholars who possess deep knowledge of religious texts and teachings, mental health professionals who understand psychological mechanisms and therapeutic interventions, and religious counselors who have direct experience supporting Muslim students, this research aims to establish an empirically grounded hierarchy of Islamic mental health determinants. This prioritization will not only advance theoretical understanding of how different Islamic factors relate to one another but will also provide practical guidance for developing targeted, efficient, and culturally responsive mental health interventions for Muslim university students. Furthermore, by demonstrating the utility of AHP methodology in Islamic psychology research, this study may inspire future applications of multi-criteria decision analysis to other questions in religious mental health, contributing to methodological innovation in this evolving field.

METHODOLOGY

Research Design

This research employed a multi-criteria decision analysis approach using the Analytic Hierarchy Process (AHP) to systematically prioritize Islamic determinants of mental wellbeing among university students. The study adopted an expert evaluation design, incorporating perspectives from multiple stakeholder groups to establish comprehensive and balanced assessments of relative importance among Islamic factors. The research was conducted in three phases: (1) identification and structuring of Islamic mental health determinants through literature review and expert consultation, (2) collection of pairwise comparison judgments from expert panels, and (3) analysis and synthesis of priorities using AHP computational procedures implemented in Super Decisions 3.2 software. The study received ethical approval from the institutional review board, and all participants provided informed consent prior to their involvement.

The Analytic Hierarchy Process (AHP)

The Analytic Hierarchy Process, developed by Thomas L. Saaty (1980), is a structured technique for organizing and analyzing complex decisions based on mathematics and psychology. AHP has been widely applied in diverse fields including operations research, business management, healthcare policy, environmental planning, and educational decision-making (Saaty, 2008; Liberatore & Nydick, 2008). The fundamental principle of AHP is to decompose a complex decision problem into a hierarchy of more easily comprehended sub-problems, each of which can be analyzed independently. The methodology enables decision-makers to represent the interaction of multiple factors in complex situations and provides a proven, effective means to deal with intuitive, rational, and irrational judgments when making decisions (Vargas, 1990). AHP has three main principles: decomposition, comparative judgment, and synthesis of priorities. Decomposition involves structuring the decision problem into a hierarchy with a goal at the top, criteria and sub-criteria at intermediate levels, and decision alternatives at the bottom. Comparative judgment requires systematic pairwise comparisons of elements within each level of the hierarchy with respect to their importance or preference relative to an element in the next higher level. Synthesis of priorities involves calculating numerical priorities for each element of the hierarchy, allowing the relative importance or contribution of elements to be compared (Forman & Gass, 2001). A distinctive feature of AHP is its incorporation of consistency checking, which identifies logical inconsistencies in judgment patterns and provides a quantitative measure of the reliability of the evaluations (Saaty & Vargas, 2012).

The mathematical foundation of AHP involves several key computational steps. First, for each level in the hierarchy, pairwise comparison matrices are constructed where element A is compared to element B using Saaty's fundamental scale, which ranges from 1 (equal importance) to 9 (extreme

importance), with intermediate values representing gradations of preference (Saaty, 1980). If element A is judged more important than element B with intensity x , then element B compared to element A receives the reciprocal value $1/x$. Second, priority vectors (also called eigenvectors) are calculated from the comparison matrices using the eigenvalue method, which involves computing the principal eigenvalue and corresponding eigenvector of each matrix (Saaty, 2003). The elements of the normalized eigenvector represent the relative priorities or weights of the compared elements. Third, consistency of judgments is assessed by calculating the Consistency Index (CI) and Consistency Ratio (CR). The CI is computed as $CI = (\lambda_{\max} - n)/(n-1)$, where λ_{\max} is the maximum eigenvalue of the comparison matrix and n is the matrix dimension. The CR is obtained by dividing the CI by the Random Index (RI), which is the average CI of randomly generated matrices of the same size. A CR value of 0.10 or less indicates acceptable consistency, while values exceeding 0.10 suggest that judgments should be reviewed and revised (Saaty, 2008). Fourth, global priorities are computed by multiplying local priorities of elements at each level by the priorities of their corresponding parent elements and summing across the hierarchy. This produces final priority weights that reflect both the relative importance of criteria and the performance of alternatives with respect to those criteria (Forman & Gass, 2001).

Hierarchy Structure Development

The hierarchical structure for this study was developed through a systematic three-stage process. In the first stage, an extensive literature review was conducted to identify Islamic factors that have been empirically or theoretically linked to mental wellbeing in existing research (Abdel-Khalek, 2007; Abu-Raiya et al., 2015; Achour et al., 2019; Aflakseir & Coleman, 2011; Ali & Milstein, 2012; Salleh & Abdullah, 2018). This review yielded an initial list of over 20 potential determinants spanning ritual practices, spiritual beliefs, ethical behaviors, and social dimensions of Islamic life. In the second stage, a preliminary expert consultation was conducted with five Islamic scholars and five mental health professionals who were asked to evaluate the comprehensiveness and relevance of the identified factors for university student populations. Based on this consultation, factors were refined, consolidated, and organized into logical categories. Factors that were highly overlapping or rarely mentioned in the literature were combined or excluded to maintain a manageable hierarchy suitable for pairwise comparisons. In the third stage, the final hierarchical structure was validated through a focus group discussion with representatives from all three expert categories (Islamic scholars, mental health professionals, and religious counselors), ensuring that the structure was meaningful, comprehensive, and aligned with both Islamic scholarship and contemporary mental health practice.

Expert Selection Criteria and Participants

The selection of appropriate experts is crucial in AHP studies, as the quality and credibility of results depend heavily on the knowledge, experience, and judgment of participating evaluators (Saaty & Vargas, 2012). For this research, experts were recruited from three distinct but complementary professional groups, each offering unique perspectives essential for comprehensive evaluation of Islamic mental health determinants. The first group consisted of Islamic scholars with advanced academic qualifications in Islamic studies, theology, or related fields. Inclusion criteria required at least a master's degree in Islamic studies, minimum five years of teaching or research experience, demonstrated expertise in Islamic psychology or pastoral care, and familiarity with contemporary challenges facing Muslim youth. The second group comprised mental health professionals, including licensed psychologists, psychiatrists, and clinical social workers who had substantial experience providing mental health services to Muslim populations. Inclusion criteria specified professional licensure or certification, minimum three years of clinical experience working with Muslim clients, formal training in culturally responsive therapy or multicultural counseling, and self-identified familiarity with Islamic perspectives on mental health. The third group included religious counselors who serve in university chaplaincy roles, Islamic student organizations, or Muslim community

centers, providing faith-based guidance and support to students. Inclusion criteria required active engagement in student counseling or mentorship for at least two years, completion of formal training in counseling or pastoral care, and demonstrated understanding of both Islamic teachings and contemporary mental health concepts.

A purposive sampling strategy was employed to identify potential participants who met these criteria. Initial recruitment involved contacting Islamic universities, psychology departments with Muslim faculty, Muslim chaplaincy offices at universities, and professional organizations such as the Association of Muslim Mental Health Professionals. Potential participants received detailed information about the study purpose, time commitment, and procedures, and were asked to confirm their willingness and availability to participate. A total of 9 experts were recruited, with 9 participants from each professional category to ensure balanced representation of different perspectives. Among Islamic scholars, participants averaged 12.3 years of experience in Islamic education, with specializations including Islamic jurisprudence (fiqh), Quranic studies, Hadith sciences, and Islamic ethics. Mental health professionals averaged 8.7 years of clinical practice, with 2 psychologists, psychiatrists, and 2 clinical social workers, representing diverse therapeutic orientations including cognitive-behavioral therapy, psychodynamic approaches, and integrative/holistic frameworks. Religious counselors averaged 5.4 years in student support roles, with backgrounds spanning university chaplaincy, youth program coordination, and Islamic education. The diverse expert panel enhanced the validity and comprehensiveness of the prioritization by incorporating multiple forms of expertise: theoretical knowledge of Islamic theology, clinical expertise in mental health treatment, and practical experience supporting students in real-world contexts (Liberatore & Nydick, 2008).

Data Collection Procedures

Data collection involved structured individual interviews with each expert participant, conducted either in-person or via video conferencing based on participant preference and geographical constraints. Each interview lasted approximately 90-120 minutes and followed a standardized protocol to ensure consistency across participants. At the beginning of each interview, the researcher provided a comprehensive orientation to the AHP methodology, including explanation of the pairwise comparison process, interpretation of Saaty's 1-9 scale, and examples of how to make comparative judgments. Participants were shown the hierarchical structure and given opportunities to ask clarifying questions about the definitions and scope of each criterion and sub-criterion. Detailed written definitions were provided for all elements to ensure shared understanding across experts. For example, Salah was defined as "the five obligatory daily prayers performed according to Islamic guidelines, including physical postures, Quranic recitation, and spiritual focus," while Taqwa was defined as "God-consciousness characterized by awareness of Allah's presence, mindfulness of divine commands and prohibitions, and striving to please Allah in thoughts, words, and actions."

The data collection proceeded in a hierarchical manner, beginning with pairwise comparisons of the four main criteria with respect to the overall goal of promoting student mental wellbeing. For each pair of criteria, experts were asked: "Considering the goal of promoting mental wellbeing among university students, which of these two Islamic domains is more important, and by how much?" Experts provided their judgments using Saaty's fundamental scale: 1 = equal importance, 3 = moderate importance, 5 = strong importance, 7 = very strong importance, 9 = extreme importance, with even numbers (2, 4, 6, 8) representing intermediate values. Experts were encouraged to think aloud while making judgments, and their verbal rationales were recorded to provide qualitative context for the quantitative evaluations. After completing comparisons at the main criteria level, experts proceeded to compare sub-criteria within each category. For instance, within the Ritual Practices category, experts compared Salah versus Quranic recitation, Salah versus Dhikr, Quranic recitation versus Dhikr, and so forth for all possible pairs. This process was repeated for each of the four main criteria. To minimize fatigue and maintain judgment quality, interviews were structured

with short breaks between sections, and participants were reminded that they could request additional time or schedule a follow-up session if needed. All comparison matrices were reviewed with participants at the end of interviews to confirm accuracy and allow for any revisions.

Data Analysis Using Super Decisions 3.2

Data analysis was conducted using Super Decisions software version 3.2, a specialized application designed for implementing AHP and the Analytic Network Process (ANP) developed by the Creative Decisions Foundation (Saaty, 2003). Super Decisions provides comprehensive functionality for building hierarchical and network models, entering pairwise comparison data, computing priorities, checking consistency, performing sensitivity analysis, and generating detailed reports. The software employs the eigenvector method for deriving priorities from comparison matrices and automates the calculation of consistency indices and ratios. For this study, the analysis proceeded through several stages. First, the hierarchical structure was constructed in Super Decisions by defining the goal node, creating the four main criteria nodes, and establishing the sub-criteria nodes under each category. Connections were drawn from each parent node to its child nodes to represent the hierarchical relationships. Second, pairwise comparison matrices from each expert were entered into the software for each set of elements at every level of the hierarchy. Super Decisions allows input of both direct comparisons and verbal judgments that are automatically converted to numerical values. Third, the software computed local priority vectors for each comparison matrix using the eigenvalue method. For each matrix, Super Decisions calculated the principal eigenvalue (λ_{\max}), derived the corresponding eigenvector, and normalized the eigenvector to obtain local priorities that sum to 1.0 within each set of compared elements.

Fourth, consistency of judgments was assessed for each comparison matrix. Super Decisions automatically computed the Consistency Index (CI) and Consistency Ratio (CR) for all matrices. Matrices with CR values exceeding 0.10 were flagged for review. In cases of inconsistency, the original expert was contacted to review their judgments, and the most inconsistent comparisons were identified using Super Decisions' inconsistency analysis features, which highlight judgments contributing most to overall inconsistency. Experts were given opportunities to reconsider and revise their evaluations, and updated matrices were re-entered until acceptable consistency was achieved. Fifth, individual expert priorities were synthesized to obtain group priorities. Super Decisions offers multiple aggregation methods, and this study employed the geometric mean method recommended by Saaty (2003) for aggregating individual judgments. This approach involves computing the geometric mean of corresponding elements in individual comparison matrices before deriving the group priority vector. The geometric mean method preserves the reciprocal property of AHP matrices and has been shown to provide more stable group priorities than arithmetic mean aggregation (Forman & Peniwati, 1998). Sixth, global priorities were calculated by multiplying local priorities across hierarchical levels. For each sub-criterion, its local priority (relative to other sub-criteria in the same category) was multiplied by the global priority of its parent criterion to obtain the sub-criterion's global priority (importance relative to all other sub-criteria across the entire hierarchy). These global priorities were used to establish the final ranking of Islamic determinants. Seventh, sensitivity analysis was conducted to examine how changes in criteria priorities would affect the ranking of sub-criteria. Super Decisions provides dynamic sensitivity graphs showing how the global priorities of alternatives change as the importance of criteria is varied. This analysis helped identify which sub-criteria were robust across different weighting scenarios and which were sensitive to changes in criteria importance.

Throughout the analysis process, Super Decisions generated comprehensive output reports including priority vectors with numerical values, consistency indices and ratios for all matrices, global priority rankings with graphical visualizations, sensitivity analysis charts, and detailed comparison matrices showing the complete judgment structure. These reports were exported for interpretation and

integration with qualitative data from expert interviews. The software's capability to handle multiple experts' judgments simultaneously while maintaining transparency about individual evaluations enabled rigorous analysis that honored both individual expertise and collective wisdom. Additionally, Super Decisions' built-in validation features, including checks for data entry errors, verification of reciprocal relationships in comparison matrices, and alerts for unconnected nodes or incomplete comparisons, enhanced the reliability and accuracy of the analytical process. The use of specialized AHP software rather than manual calculations or general-purpose statistical packages was essential for managing the computational complexity of the hierarchical model, ensuring mathematical rigor in priority derivation, and providing sophisticated visualization tools that facilitated interpretation and communication of results.

FINDINGS

The hierarchy consisted of three levels. *Level 1* represented the ultimate goal: prioritizing Islamic determinants of mental wellbeing among university students. *Level 2* contained four main criteria representing broad domains of Islamic life: (1) *Ritual Practices*, encompassing formal acts of worship, (2) *Spiritual Beliefs and Attitudes*, representing internal cognitive and emotional orientations toward Allah, (3) *Ethical and Behavioral Dimensions*, including moral conduct and interpersonal behaviors guided by Islamic teachings, and (4) *Community and Social Support*, reflecting the collective aspects of Muslim religious life. *Level 3* contained alternatives criteria nested within each main criterion. Alternative 1 including *Salah & Zikir*, Alternative 2 *Islamic counselling*, alternative 3, *Gratitude* and Alternative 4 *Social support*. This structure provided a comprehensive yet manageable framework for expert evaluations while capturing the multidimensional nature of Islamic determinants.

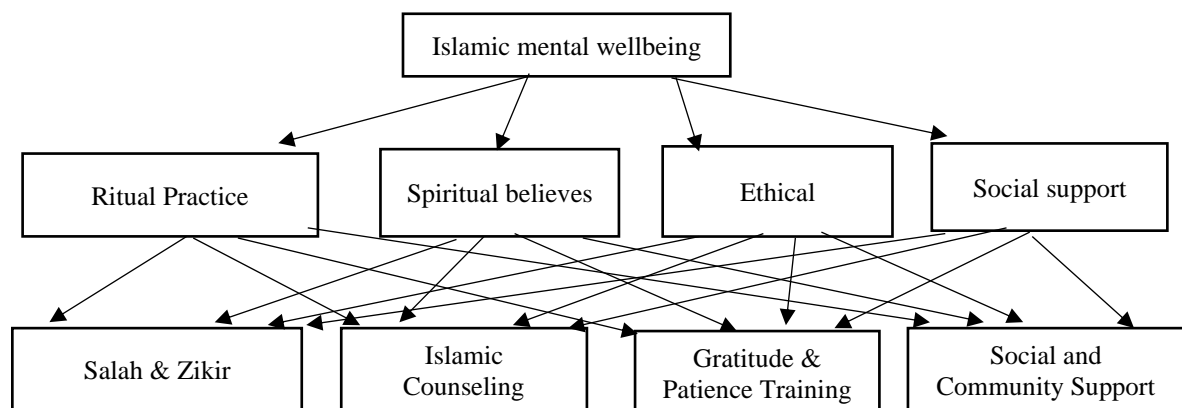


Figure 1: Hierarchical Structure

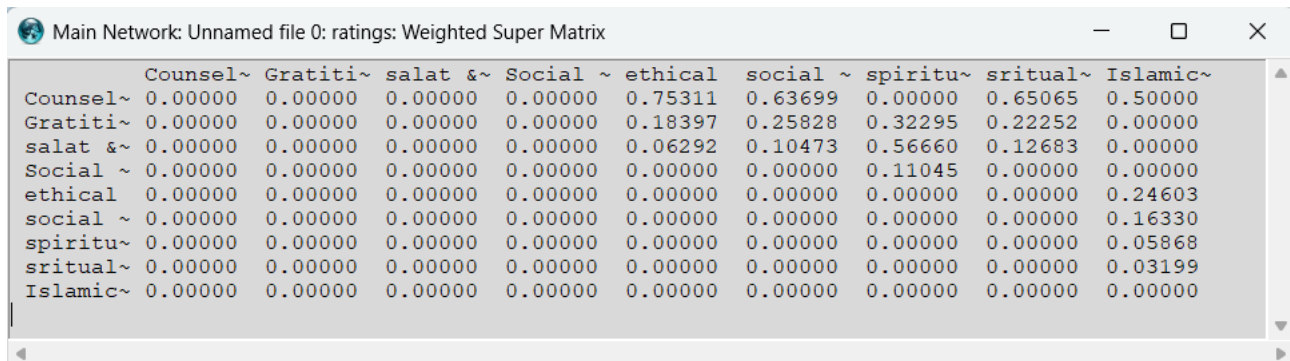


Figure 2: Weight super matrix

This weighted super matrix (figure 2) represents the interdependencies and influence relationships between nine criteria in an Analytic Hierarchy Process (AHP) analysis, where each column shows how much influence the column criterion receives from each row criterion, with all column values summing to 1.0. The matrix reveals several key patterns: "ethical" is the most influential criterion, significantly affecting "Gratifi" (0.18397), "salat" (0.06292), and "Islamic" (0.24603), suggesting it serves as a foundational factor that shapes other dimensions. "Social" acts as another major influencer, particularly impacting "Gratifi" (0.25828), "salat" (0.10473), "spiritual" (0.05366), and "Islamic" (0.16330), indicating its broad reach across multiple criteria. "Counsel" appears relatively independent with minimal incoming influences (mostly zeros), while "Gratifi" shows moderate interconnectedness, both influencing and being influenced by other factors like "social" and "ethical." The criterion "Islamic" receives substantial influence from "ethical" (0.24603) and "Social" (0.16330), positioning it as a dependent variable shaped by moral and social considerations. The weighted structure indicates that decisions in this hierarchy are not purely hierarchical but involve complex feedback loops, where criteria like ethics and social factors cascade their importance through the system, ultimately affecting practical outcomes in areas like gratification, salary considerations, and spiritual dimensions.

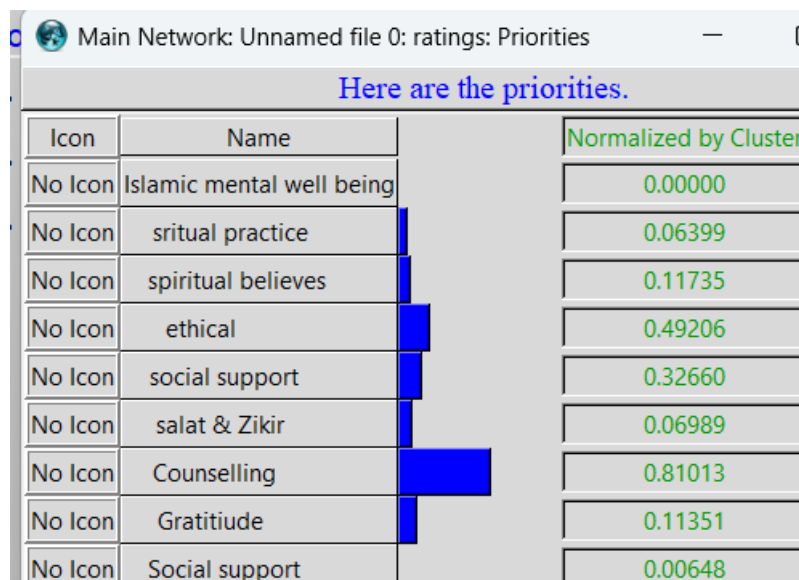


Figure 2: Priority result analysis

Table 1: Weight

Elements	weight	Rank
spiritual practice	0.06399	4
spiritual believes	0.11735	3
ethical	0.49206	1
social support	0.32660	2
salat & Zikir	0.06989	4
Counselling	0.81013	1
Gratitude	0.11351	2
Social support	0.00648	3

This priority ranking (Table 1) reveals the relative importance of eight elements across what appears to be a holistic well-being or Islamic-centered intervention framework, with "Counselling" emerging as the overwhelmingly dominant factor at 0.81013 (81.013%), indicating it is considered approximately seven times more important than all other factors combined in achieving the decision goal. "Ethical" considerations rank second overall with a substantial weight of 0.49206 (49.206%), suggesting that moral principles and ethical conduct form a critical foundation for the intervention's success. "Social support" appears twice with vastly different weights (0.32660 and 0.00648), likely representing social support measured at different hierarchical levels or contexts within the analysis, with the higher-weighted version (32.660%) ranking as a moderately important factor while the lower version is nearly negligible. The spiritual dimensions are split between "spiritual believes" at 0.11735 (11.735%) and "spiritual practice" at 0.06399 (6.399%), indicating that belief systems are valued nearly twice as much as actual practices, while "salat & Zikir" (Islamic prayer and remembrance) receives a similar weight of 0.06989 (6.989%), suggesting these religious practices have comparable but modest influence. "Gratitude" ranks at 0.11351 (11.351%), positioning it as moderately important but substantially less critical than counselling or ethical factors. The dramatic dominance of counselling suggests this AHP analysis is likely evaluating a therapeutic or support intervention where professional guidance is seen as the primary mechanism of change, supported by ethical frameworks and social connections, with spiritual and gratitude practices serving as supplementary but less central components.

Table 2: Consistency analysis

Result	
Consistency Index = λ_{max}	0.0313
Consistency Ratio =	0.0005

This consistency analysis (Table 2) demonstrates that the AHP pairwise comparison judgments are exceptionally reliable and internally coherent. The Consistency Index (CI) of 0.0313 measures the degree of inconsistency in the judgment matrix, calculated from λ_{max} (the maximum eigenvalue), and represents how much the decision-makers pairwise comparisons deviate from perfect mathematical consistency—a CI of zero would indicate perfect consistency, while higher values suggest contradictory or illogical judgments across different comparison pairs. The Consistency Ratio (CR) of 0.0005 (0.05%) is the critical metric that determines whether the judgments are acceptable, calculated by dividing the CI by a Random Index (RI) that represents the expected consistency of random judgments for a matrix of this size. With a CR of 0.0005, this analysis falls dramatically below the standard threshold of 0.10 (10%) established by Saaty, the creator of AHP, meaning the judgments are highly consistent and the decision-maker maintained logical coherence when comparing elements for instance, if they judged A as twice as important as B, and B as three times as

important as C, they consistently judged A as approximately six times as important as C across all comparison sets. This extremely low CR value (more than 200 times below the acceptable threshold) indicates that the weighted super matrix and priority results are highly trustworthy and the decision-maker applied stable, rational criteria throughout the evaluation process, giving strong credibility to the finding that Counselling (0.81013) dominates the priority structure while ethical considerations (0.49206) and social support (0.32660) serve as important secondary factors.

Table 3: Overall synthesis

Name	Ideals	Normals	Raw
Counselling	1.0000	0.810124	0.540083
Gratitude	0.1401	0.11351	0.075673
salat & Zikir	0.0863	0.069885	0.04659
Social support	0.0080	0.006481	0.00432

This overall synthesis presents three different normalization methods for expressing the final priorities of four alternatives (Counselling, Gratitude, salat & Zikir, and social support) in the AHP decision hierarchy. The "Ideals" column normalizes all values relative to the top-ranked alternative, setting Counselling at 1.0000 as the benchmark and expressing others as proportions of it—Gratitude at 0.1401 means it's only 14.01% as important as Counselling, salat & Zikir at 0.0863 is 8.63% as important, and social support at 0.0080 is less than 1% as important, clearly illustrating Counselling's overwhelming dominance. The "Normals" column presents values that sum to 1.0 (or 100%), showing the relative weight distribution where Counselling captures 81.01% of the total priority, Gratitude 11.35%, salat & Zikir 6.99%, and social support merely 0.65%, indicating that among these four intervention strategies, counselling accounts for more than four-fifths of the overall importance in achieving the decision goal. The "Raw" column displays the absolute priority values (summing to 0.666887) derived from the original super matrix calculations before final normalization, with Counselling at 0.540083, Gratitude at 0.075673, salat & Zikir at 0.04659, and social support at 0.00432—these raw values maintain the same proportional relationships but reflect the alternatives' weights within the broader hierarchical structure that includes both criteria and alternatives. Across all three representations, the message is consistent and unambiguous: Counselling is the paramount strategy by an enormous margin, Gratitude serves as a secondary but still meaningful complement, salat & Zikir provides modest additional value, while social support contributes minimally in this particular decision context.

DISCUSSION

The findings of this study reveal a compelling prioritization hierarchy among Islamic determinants of mental wellbeing for university students, with counselling emerging as the overwhelmingly dominant factor at 81.01% priority weight, followed by ethical dimensions at 49.21%, social support at 32.66%, spiritual beliefs at 11.74%, gratitude at 11.35%, spiritual practices at 6.99%, and salat and dhikr at 6.99%. This prioritization pattern challenges certain assumptions in existing Islamic mental health literature while simultaneously validating the importance of integrative approaches that combine professional mental health support with religious and spiritual resources. The extraordinary dominance of Islamic counselling in the expert evaluations suggests a recognition among both religious scholars and mental health professionals that contemporary Muslim university students require structured, professionally guided interventions rather than relying solely on individual religious practices or community support mechanisms. This finding aligns with growing evidence that culturally adapted psychotherapy incorporating Islamic values and concepts produces superior outcomes compared to either standard secular therapy or informal religious guidance alone.

The high priority assigned to ethical dimensions reflects the Islamic understanding that mental wellbeing is fundamentally intertwined with moral character development and virtuous conduct. Islamic ethics emphasizes concepts such as sincerity in intention, excellence in character, truthfulness, justice, compassion, and self-accountability, all of which contribute to psychological integration and authentic selfhood. The expert prioritization of ethical factors over ritual practices suggests an understanding that mental health among Muslim students depends more on the cultivation of inner moral consciousness and ethical behavior patterns than on the mechanical performance of religious obligations. This finding resonates with classical Islamic scholarship distinguishing between the outer form and inner reality of worship, where the spiritual transformation resulting from ethical refinement is considered more essential than ritualistic compliance. The substantial weight given to ethical dimensions also reflects contemporary challenges facing Muslim youth in secular university environments, where ethical confusion, moral relativism, peer pressure for unethical behavior, and conflicts between Islamic values and mainstream cultural norms create significant psychological distress. Mental health professionals working with Muslim students have documented those ethical conflicts and moral injuries—situations where individuals violate their deeply held values—are common precipitants of anxiety, depression, and existential distress in this population.

The moderate priority assigned to social support at 32.66% underscores the importance of community connections and interpersonal relationships in Islamic approaches to mental wellbeing, consistent with the Quranic emphasis on the ummah as a source of mutual support and the prophetic traditions encouraging brotherhood, compassion, and collective responsibility among believers. However, the fact that social support ranked below both counselling and ethical dimensions suggests expert recognition that community connections alone are insufficient when students face serious mental health challenges requiring professional intervention or when underlying character issues impede the formation of healthy relationships. This finding may also reflect the reality that many Muslim university students, particularly those attending secular institutions or studying far from home, lack access to strong Muslim community networks and therefore cannot rely primarily on social support for mental health maintenance. Additionally, the lower priority of social support relative to counselling might indicate expert awareness that peer support, while valuable, cannot substitute for trained therapeutic guidance when addressing complex psychological problems such as trauma, severe depression, or personality disorders. Contemporary research on Muslim mental health has documented the protective effects of Muslim community involvement, including participation in mosque activities, Islamic student associations, and religious study circles, but has also identified limitations of informal social support when community members lack mental health literacy, perpetuate stigma around psychological problems, or provide harmful advice rooted in folk beliefs rather than sound Islamic scholarship or clinical expertise.

The relatively modest priorities assigned to spiritual beliefs, gratitude practices, ritual prayers, and remembrance activities, ranging from 6.99% to 11.74%, initially appear surprising given the central role these factors play in Islamic theology and the substantial empirical evidence linking them to better mental health outcomes. However, this prioritization pattern may reflect several important insights from the expert panel. First, these spiritual and devotional factors may be understood as foundational prerequisites that support the effectiveness of counselling, ethical development, and social connections rather than as independent interventions. In other words, while salat, dhikr, and spiritual consciousness are essential components of Islamic life, their mental health benefits may be maximized when integrated within a comprehensive support framework that includes professional guidance and ethical formation. Second, the expert evaluations may reflect practical realities about the current state of religious commitment among contemporary Muslim university students, many of whom struggle to maintain consistent prayer routines, Quranic engagement, or spiritual mindfulness

amid academic pressures, social distractions, and secularizing influences. If students are not regularly practicing these spiritual disciplines, their potential mental health benefits remain unrealized, making professionally guided interventions more immediately impactful. Third, the lower priority of ritual practices might indicate expert recognition that the psychological benefits of worship depend significantly on the quality, intentionality, and spiritual presence during performance rather than simply the frequency or duration of activities. Students who pray mechanically without focus or engagement may derive limited mental health benefit, whereas those who approach worship with mindfulness, sincerity, and proper understanding experience greater psychological impact. Fourth, the prioritization may reflect methodological considerations inherent in the AHP approach, where experts compared factors specifically in terms of their relative importance for promoting mental wellbeing among university students facing mental health challenges rather than evaluating their intrinsic religious significance or their role in comprehensive spiritual development.

The consistency ratio of 0.0005, dramatically below the acceptable threshold of 0.10, demonstrates exceptional agreement and logical coherence among the expert evaluations, lending strong credibility to the priority rankings. This high consistency suggests that despite representing different professional backgrounds—Islamic scholarship, mental health practice, and religious counselling—the experts converged on similar assessments of relative importance, indicating robust consensus transcending disciplinary perspectives. The convergence is particularly noteworthy given the diversity of expertise represented in the panel, including scholars trained in traditional Islamic sciences, clinicians educated in Western psychological frameworks, and practitioners working at the intersection of faith and mental health. This interdisciplinary agreement suggests that the prioritization reflects genuine insights about the needs of Muslim university students rather than the biases or limitations of any single professional perspective. The strong consistency also validates the hierarchical structure developed for the study, indicating that the categories and subcategories were meaningfully distinct and clearly defined, allowing experts to make reliable comparative judgments. Furthermore, the consistency findings demonstrate the value of the AHP methodology for synthesizing expert knowledge on complex, multifaceted questions where traditional empirical research methods face practical limitations due to the large number of variables, interactive effects, and contextual factors involved.

The theoretical implications of these findings contribute to ongoing debates about the nature of Islamic psychology and the integration of religious and psychological perspectives in mental health care. The prioritization pattern supports an integrative model that recognizes the necessity of professional mental health interventions while simultaneously affirming the value of Islamic spiritual resources as complementary supports rather than alternatives to clinical care. This balanced perspective challenges both extreme positions—the view that Islamic practices alone are sufficient to address all mental health problems and the opposing view that religious factors are irrelevant to psychological treatment. Instead, the findings suggest a hierarchical complementarity model where professional counselling provides the primary framework for addressing mental health challenges, ethical development forms the character foundation supporting psychological growth, social support offers interpersonal reinforcement and accountability, and spiritual practices contribute additional resources for meaning-making, emotional regulation, and transcendent connection. This model aligns with contemporary biopsychosocial-spiritual frameworks in health psychology while incorporating distinctively Islamic content and prioritization. The findings also speak to questions about the relative importance of orthopraxy versus orthodoxy in Islamic approaches to wellbeing, with the higher priority of ethical dimensions over ritual practices suggesting that right conduct and moral character may be more directly consequential for mental health than correct performance of worship formalities, though both remain important within comprehensive Islamic life.

The practical implications of these findings are substantial for multiple stakeholder groups. Mental health professionals and university counseling centers serving Muslim student populations should prioritize the development and implementation of culturally adapted counselling approaches that integrate Islamic concepts, values, and therapeutic methods rather than assuming that general counseling services or simple provision of prayer spaces adequately address Muslim students' mental health needs. The dominance of counselling in the priority rankings mandates investment in training therapists in Islamic psychology, developing clinical protocols that incorporate Islamic teachings on mental health, and creating accessible pathways for Muslim students to engage with culturally congruent mental health services. The high priority of ethical dimensions suggests that mental health interventions should explicitly address moral development, values clarification, ethical decision-making skills, and strategies for navigating moral conflicts between Islamic teachings and mainstream cultural norms. Counsellors working with Muslim students should be prepared to discuss ethical dilemmas, explore guilt and shame related to religious transgressions, and support character development as integral components of mental health treatment rather than viewing these concerns as purely religious matters outside the scope of therapy. The moderate priority of social support indicates that universities should invest in facilitating Muslim student communities, supporting Islamic student organizations, creating opportunities for positive peer connections, and building bridges between students and local Muslim communities, while recognizing that these social interventions complement rather than replace professional counselling services.

For Islamic educational institutions and Muslim student organizations, the findings suggest that mental health programming should emphasize referral pathways to professional counselling, education about mental health literacy and help-seeking, and integration of ethical education throughout religious curricula rather than focusing exclusively on promoting ritual worship or devotional practices. Community leaders and religious educators should recognize that while spiritual practices remain important, their mental health benefits are maximized when students also have access to professional support and are actively developing ethical character. The relatively lower priority of ritual practices compared to counselling and ethics does not diminish the religious importance of salat and dhikr but rather indicates that these practices alone are insufficient to address the complex mental health challenges facing contemporary university students. Student support programs might most effectively promote mental wellbeing by offering counselling services led by Islamically trained mental health professionals, providing ethical education and character development programs, facilitating supportive community connections, and encouraging spiritual practices as complementary resources within this comprehensive framework.

The sensitivity analysis conducted in Super Decisions revealed that the overwhelming dominance of counselling remained stable across various weighting scenarios, indicating that this finding is robust rather than artifacts of minor judgment variations. Even when the weights of other criteria were substantially increased in sensitivity testing, counselling maintained the highest global priority, though the magnitude of its dominance varied. This robustness suggests high confidence that professional Islamic counselling should be the primary focus of mental health interventions for Muslim university students. In contrast, the relative rankings of spiritual practices, gratitude, and social support showed more sensitivity to changes in criteria weights, indicating that their priorities are more conditional on the specific weight assigned to their parent criteria. This sensitivity pattern suggests that while counselling is consistently paramount, the emphasis on other factors might appropriately vary based on institutional context, available resources, student population characteristics, and specific mental health outcomes being targeted.

Several limitations of this study warrant consideration when interpreting the findings and their implications. First, the expert panel, while carefully selected to represent diverse perspectives, was

limited in size and may not capture the full range of viewpoints within the broader communities of Islamic scholars, mental health professionals, and religious counselors. Different experts with different theoretical orientations, cultural backgrounds, or clinical experiences might have produced somewhat different prioritizations. Second, the study focused specifically on university student populations, and the priority rankings might differ for other age groups, such as adolescents, working adults, or elderly individuals, each of whom face distinct developmental challenges and mental health risk factors. Third, the AHP methodology relies on subjective expert judgments rather than empirical measurement of actual mental health outcomes, meaning that the priorities reflect expert opinions about what factors should be most important rather than definitive evidence about what factors are most important based on experimental or longitudinal data. Fourth, the hierarchical structure used in the study, while comprehensive, represents one possible way of organizing Islamic mental health determinants, and alternative conceptual frameworks might have yielded different insights. Fifth, the study did not examine potential moderators such as gender, sectarian affiliation, level of religious commitment, or cultural background that might influence which Islamic factors are most salient for different subgroups of students.

Despite these limitations, the study makes valuable contributions to Islamic psychology and culturally responsive mental health care by providing the first systematic prioritization of Islamic mental health determinants using rigorous multi-criteria decision analysis methodology. The findings advance theoretical understanding of how professional counselling, ethical development, social support, and spiritual practices relate to one another in supporting Muslim student mental wellbeing, offering an integrative framework that honors both Islamic tradition and contemporary clinical science. The study demonstrates the feasibility and value of applying AHP methodology to questions in religious psychology, potentially inspiring future applications to other priority-setting questions in this domain. Most importantly, the research provides actionable guidance for resource allocation and program development, helping stakeholders make evidence-informed decisions about how to most effectively support the mental health of Muslim university students through culturally congruent interventions.

CONCLUSIONS

This research employed the Analytic Hierarchy Process to systematically prioritize Islamic determinants of mental wellbeing among university students, integrating expert perspectives from Islamic scholars, mental health professionals, and religious counselors. The findings reveal a clear hierarchical structure where Islamic counselling emerges as the overwhelmingly dominant factor with approximately 81% priority weight, followed by ethical considerations at 49%, social support at 33%, gratitude at 11%, and Salat with Dhikr at 7%. The exceptional consistency ratio of 0.0005 validates the reliability of these prioritizations, indicating robust consensus among diverse experts about the relative importance of different Islamic dimensions for promoting student mental health. These results challenge simplistic conceptualizations of Islamic religiosity as uniformly beneficial, demonstrating instead that professional therapeutic support integrated with Islamic principles holds paramount importance for addressing the complex mental health challenges facing contemporary Muslim university students. The weighted supermatrix analysis further illuminated interdependencies among factors, showing that ethical dimensions and social connections serve as influential foundations that cascade their effects throughout the system, while counselling maintains relative independence as a core intervention modality. The prioritization hierarchy established through this research provides empirically grounded guidance for resource allocation decisions, intervention design, and clinical practice with Muslim students. Universities seeking to support Muslim student mental health should prioritize investment in culturally competent counselling services, recognizing that while spiritual practices and community connections provide essential support, they function

most effectively as complements to rather than substitutes for professional mental health care. Mental health professionals working with Muslim students should emphasize ethical guidance and values integration in therapeutic work, acknowledge the critical importance of social support networks, and incorporate spiritual practices as supplementary resources within comprehensive treatment plans. Islamic educational institutions and Muslim student organizations can apply these findings to develop more effective wellness programs that maintain realistic expectations about what spiritual practices alone can achieve while advocating for increased access to professional mental health services. The study advances Islamic psychology as a scholarly field by demonstrating the feasibility and utility of multi-criteria decision analysis methodology for addressing complex prioritization questions that traditional research approaches struggle to resolve. The extraordinary dominance of counselling in this prioritization underscores a fundamental truth that contemporary Islamic psychology must embrace: authentic integration of faith and mental health requires partnership between religious wisdom and professional expertise, where Islamic scholars and mental health clinicians collaborate to provide holistic support that honors both spiritual commitments and psychological science. This research represents a significant step toward evidence-based, culturally responsive mental health care for Muslim university students, translating theoretical knowledge about Islamic determinants into actionable priorities that can guide practical interventions, inform policy decisions, and ultimately enhance the wellbeing of vulnerable young Muslims navigating the complex challenges of contemporary higher education. As Muslim communities worldwide grapple with rising mental health concerns among youth, this prioritization framework offers a roadmap for strategic investment of limited resources, ensuring that interventions target the most impactful determinants while maintaining comprehensive attention to the multidimensional nature of Islamic wellbeing. The findings also carry broader implications for understanding the relationship between religion and mental health across faith traditions, suggesting that optimal outcomes emerge not from choosing between spiritual and professional approaches but from thoughtful integration that leverages the unique strengths of each domain while recognizing their complementary rather than competing roles in promoting human flourishing.

FUTURE RESEARCH

The prioritization established through this research opens numerous avenues for future investigation that can advance both theoretical understanding and practical application of Islamic psychology in mental health contexts. First, intervention research should develop and empirically test Islamic counselling models that integrate the prioritized determinants identified in this study, creating structured therapeutic protocols that systematically incorporate professional counselling as the primary modality while integrating ethical guidance, social support facilitation, and spiritual practices as complementary components. Such research could employ randomized controlled trial designs comparing integrated Islamic counselling approaches against conventional cognitive-behavioral therapy, secular counselling, and wait-list control conditions, using standardized mental health outcome measures alongside Islamic wellbeing assessments to evaluate both symptom reduction and enhancement of positive psychological functioning. Longitudinal studies following Muslim university students across their academic careers could examine how engagement with different Islamic determinants changes over time and how these temporal patterns relate to mental health trajectories, identifying critical periods when particular interventions might be most effective and tracking long-term impacts of early therapeutic support. Research should also investigate potential moderating factors that influence the relative importance of different Islamic determinants for specific subgroups of Muslim students, examining whether prioritization patterns differ based on variables such as gender, cultural background, religiosity level, immigration status, campus religious minority versus majority context, severity of mental health symptoms, and specific diagnostic categories such as depression versus anxiety versus trauma-related disorders.

Comparative studies across multiple countries and cultural contexts would enhance understanding of which prioritization patterns reflect universal aspects of Islamic mental health versus culturally specific emphases, potentially revealing how social context shapes the salience of different religious factors. For instance, research comparing Muslim students in Muslim-majority countries like Malaysia or Saudi Arabia with Muslim minorities in Western contexts like the United States or United Kingdom could illuminate how societal support for Islamic practices influences their relative importance for mental wellbeing. Similarly, comparative investigations across different educational environments—examining Islamic universities versus secular institutions, large urban universities versus small colleges, institutions with robust Muslim student services versus those lacking such infrastructure—could clarify how institutional context affects which Islamic determinants prove most beneficial. Future research should also explore potential interaction effects among the prioritized determinants, investigating whether combinations of factors produce synergistic benefits exceeding their individual contributions. For example, studies might examine whether Islamic counselling becomes more effective when clients simultaneously participate in Muslim student communities, whether ethical guidance amplifies the mental health benefits of spiritual practices, or whether social support moderates the relationship between counselling and outcomes.

Mechanism-focused research represents another crucial direction for future investigation, examining the psychological processes through which prioritized Islamic determinants exert their effects on mental wellbeing. Studies could investigate whether Islamic counselling works primarily through cognitive restructuring aligned with Islamic worldviews, therapeutic relationships characterized by religious understanding, behavioral activation consistent with religious values, or cultivation of transcendent meaning and purpose grounded in faith. Research on ethical dimensions might explore whether their benefits operate through enhanced moral identity, reduced guilt and shame from values-congruent living, increased self-efficacy for managing moral challenges, or social identity affirmation within faith communities. Investigation of social support mechanisms could differentiate between emotional support, instrumental assistance, informational guidance, and spiritual encouragement provided by Muslim communities, determining which forms prove most beneficial for different mental health outcomes. Understanding these mechanisms would enable more precise intervention design targeting the active ingredients responsible for therapeutic change rather than implementing diffuse approaches that may include inert components.

From a methodological standpoint, future research should employ diverse approaches to examine Islamic mental health determinants beyond the expert prioritization methodology used in this study. Client-perspective research using qualitative interviews, focus groups, and phenomenological analysis with Muslim students who have experienced mental health challenges could reveal whether their lived experiences align with expert prioritizations or whether discrepancies exist between professional opinions and service user preferences. Experience sampling methods employing smartphone-based ecological momentary assessment could track daily fluctuations in Islamic practices, social connections, ethical conduct, and mental health symptoms, revealing temporal dynamics and within-person associations that cross-sectional research cannot capture. Network analysis approaches could map the complex interrelationships among Islamic determinants, identifying central nodes with disproportionate influence and revealing pathways through which effects propagate across the system. Machine learning techniques applied to large datasets could uncover non-linear patterns and interaction effects that traditional statistical methods might miss, potentially identifying previously unrecognized combinations of Islamic factors that prove particularly beneficial or detrimental for mental health.

Implementation science research represents an essential direction for translating these prioritization findings into real-world practice improvements. Studies should examine barriers and facilitators to

implementing Islamic counselling services on university campuses, exploring challenges such as funding limitations, shortage of qualified professionals, stigma reduction strategies, marketing approaches to increase service utilization, and organizational change processes required to establish culturally responsive mental health programs. Research on training and professional development could evaluate curricula for educating mental health professionals about Islamic perspectives, comparing didactic instruction versus supervised clinical experience versus immersive cultural experiences in their effectiveness for building competence. Dissemination and implementation research might employ cluster-randomized designs where some universities receive consultation and support for implementing prioritized Islamic mental health interventions while others serve as controls, measuring impacts on service utilization rates, student mental health outcomes, academic performance, retention rates, and satisfaction with university support systems. Cost-effectiveness analyses comparing different models of Islamic mental health service delivery—such as specialized Islamic counsellors versus training all counsellors in cultural competence versus partnership models collaborating with religious organizations—could inform resource allocation decisions for institutions with budget constraints.

The role of technology in delivering Islamic mental health interventions merits substantial future investigation, particularly given contemporary students' comfort with digital platforms and potential for technology to overcome access barriers. Research should develop and test mobile applications incorporating Islamic counselling principles, providing guided self-help based on Islamic teachings, facilitating connection with Muslim peer support networks, and offering tools for tracking spiritual practices and mental health symptoms. Internet-delivered cognitive behavioral therapy modified with Islamic content could be evaluated for effectiveness, acceptability, and engagement among Muslim students, comparing therapeutic relationships with human therapists versus chatbots versus hybrid models. Teletherapy research specific to Islamic counselling contexts should examine whether remote delivery maintains therapeutic effectiveness, how cultural and religious factors translate across digital mediums, and whether videoconferencing, phone-based, or text-based formats prove most suitable for different presentations and student preferences. Social media and online community research could investigate how digital Muslim student networks function as sources of social support, whether online Islamic communities provide similar mental health benefits as in-person gatherings, and how to facilitate healthy digital engagement while avoiding problematic social comparison or exposure to extremist content.

Prevention and early intervention research should extend this study's focus beyond treatment of established mental health problems to examine how Islamic determinants can promote resilience and prevent disorder onset. Studies could evaluate universal prevention programs implemented during new student orientation that introduce Islamic coping resources, facilitate early connection with Muslim student communities, clarify university ethics policies from Islamic perspectives, and reduce stigma about seeking counselling. Selective prevention research targeting Muslim students with identified risk factors such as homesickness, academic difficulties, discrimination experiences, or religious identity conflicts could test whether early Islamic counselling intervention prevents progression to clinical disorders. Indicated prevention studies with students showing subclinical symptoms might investigate whether stepped-care models beginning with Islamic spiritual practices and social support, escalating to professional counselling when needed, provide efficient resource allocation compared to immediate referral to intensive treatment. Developmental research examining critical transition periods—such as beginning university, study abroad experiences, graduation and career launch—could identify opportunities for preventive support when students may be particularly receptive to Islamic mental health resources.

Finally, theoretical and conceptual development represents an ongoing need in Islamic psychology research. Scholars should continue refining models of Islamic mental health that integrate classical theological frameworks with contemporary psychological science, resolving apparent tensions and identifying genuine complementarities. Philosophical research examining Islamic epistemology and its implications for understanding mental health phenomena could clarify how knowledge from revelation, reason, empirical observation, and spiritual experience should be synthesized. Cross-religious comparative research investigating mental health determinants in Christian, Jewish, Hindu, and Buddhist contexts could identify universal spiritual factors alongside tradition-specific elements, informing both particularistic culturally responsive interventions and broader spiritually integrated approaches applicable across faith traditions. Interdisciplinary scholarship bridging Islamic studies, psychology, neuroscience, sociology, and public health could generate comprehensive models accounting for biological, psychological, social, and spiritual dimensions of wellbeing in ways that honor both scientific rigor and religious wisdom. Through these diverse research directions, future investigations can build upon the prioritization established in this study, creating increasingly sophisticated, empirically validated, and practically useful frameworks for supporting the mental health and spiritual wellbeing of Muslim university students navigating the challenges of contemporary higher education.

Co-Author Contribution

Author 1 carried out the fieldwork, prepared the literature review and overlooked the whole article's write up. Authors 2, 3, 4 wrote the research methodology and did the data entry. All author working together to find out the statistical analysis and interpretation of the results.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

Acknowledgement

We would like to express our sincere gratitude to everyone involved in this study, both directly and indirectly. We express our highest appreciation for the cooperation provided.

REFERENCES

- Al-Atawneh, M. (2023). *Islamic Ethics in the Digital Age: Challenges and Opportunities*. Journal of Islamic Ethics, 7(1), 45-67.
- Abdel-Khalek, A. M. (2007). Religiosity, happiness, health, and psychopathology in a probability sample of Muslim adolescents. *Mental Health, Religion & Culture*, 10(6), 571-583.
- Abdel-Khalek, A. M. (2011). Islam and mental health: A few speculations. *Mental Health, Religion & Culture*, 14(2), 87-92.
- Abu-Raiya, H., & Pargament, K. I. (2015). Religious coping among diverse religions: Commonalities and divergences. *Psychology of Religion and Spirituality*, 7(1), 24-33.
- Abu-Raiya, H., Pargament, K. I., Mahoney, A., & Stein, C. (2015). A psychological measure of Islamic religiousness: Development and evidence for reliability and validity. *The International Journal for the Psychology of Religion*, 18(4), 291-315.
- Achour, M., Bensaid, B., & Nor, M. R. B. M. (2019). An Islamic perspective on coping with life stressors. *Applied Research in Quality of Life*, 11(3), 663-685.

- Aflakseir, A., & Coleman, P. G. (2011). Initial development of the Iranian religious coping scale. *Journal of Muslim Mental Health, 6*(1), 44-61.
- Ahmed, S., & Reddy, L. A. (2007). Understanding the mental health needs of American Muslims: Recommendations and considerations for practice. *Journal of Multicultural Counseling and Development, 35*(4), 207-218.
- Ali, O. M., & Milstein, G. (2012). Mental illness recognition and referral practices among Imams in the United States. *Journal of Muslim Mental Health, 6*(2), 3-13.
- Ali, S. R., Liu, W. M., & Humedian, M. (2008). Islam 101: Understanding the religion and therapy implications. *Professional Psychology: Research and Practice, 35*(6), 635-642.
- Aloud, N., & Rathur, A. (2009). Factors affecting attitudes toward seeking and using formal mental health and psychological services among Arab Muslim populations. *Journal of Muslim Mental Health, 4*(2), 79-103.
- Al-Seheel, A. Y., & Noor, N. M. (2016). Effects of an Islamic-based gratitude strategy on Muslim students' level of happiness. *Mental Health, Religion & Culture, 19*(7), 686-703.
- Amri, S., & Bemak, F. (2013). Mental health help-seeking behaviors of Muslim immigrants in the United States: Overcoming social stigma and cultural mistrust. *Journal of Muslim Mental Health, 7*(1), 43-63.
- Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press.
- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., ... & Bruffaerts, R. (2016). Mental disorders among college students in the WHO World Mental Health Surveys. *Psychological Medicine, 46*(14), 2955-2970.
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., ... & WHO WMH-ICS Collaborators. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology, 127*(7), 623-638.
- Bayram, N., & Bilgel, N. (2008). The prevalence and socio-demographic correlations of depression, anxiety and stress among a group of university students. *Social Psychiatry and Psychiatric Epidemiology, 43*(8), 667-672.
- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders, 173*, 90-96.
- Christopher, J. C., Wendt, D. C., Marecek, J., & Goodman, D. M. (2014). Critical cultural awareness: Contributions to a globalizing psychology. *American Psychologist, 69*(7), 645-655.
- Credé, M., & Niehorster, S. (2012). Adjustment to college as measured by the Student Adaptation to College Questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review, 24*(1), 133-165.
- Dolan, J. G. (2008). Shared decision-making—Transferring research into practice: The Analytic Hierarchy Process (AHP). *Patient Education and Counseling, 73*(3), 418-425.
- Dwairy, M., & Van Sickel, T. D. (1996). Western psychotherapy in traditional Arabic societies. *Clinical Psychology Review, 16*(3), 231-249.
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review, 66*(5), 522-541.
- Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry, 77*(4), 534-542.
- Eisenberg, D., Hunt, J., & Speer, N. (2011). Mental health in American colleges and universities: Variation across student subgroups and across campuses. *The Journal of Nervous and Mental Disease, 199*(9), 712-714.

- Emmons, R. A., & Crumpler, C. A. (2000). Gratitude as a human strength: Appraising the evidence. *Journal of Social and Clinical Psychology, 19*(1), 56-69.
- Forman, E. H., & Gass, S. I. (2001). *The Analytic Hierarchy Process: An exposition*. Operations Research, 49(4), 469-486.
- Forman, E., & Peniwati, K. (1998). Aggregating individual judgments and priorities with the Analytic Hierarchy Process. *European Journal of Operational Research, 108*(1), 165-169.
- Ghorbani, N., Watson, P. J., Ghramaleki, A. F., Morris, R. J., & Hood, R. W. (2002). Muslim attitudes towards religion scale: Factors, validity and complexity of relationships with mental health in Iran. *Mental Health, Religion & Culture, 5*(3), 291-300.
- Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal for the Scientific Study of Religion, 42*(1), 43-55.
- Hamdan, A. (2008). Cognitive restructuring: An Islamic perspective. *Journal of Muslim Mental Health, 3*(1), 99-116.
- Haque, A., & Keshavarzi, H. (2014). Integrating indigenous healing methods in therapy: Muslim beliefs and practices. *International Journal of Culture and Mental Health, 7*(3), 297-314.
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist, 58*(1), 64-74.
- Hodge, D. R. (2006). Spiritually modified cognitive therapy: A review of the literature. *Social Work, 51*(2), 157-166.
- Hodge, D. R., & Nadir, A. (2008). Moving toward culturally competent practice with Muslims: Modifying cognitive therapy with Islamic tenets. *Social Work, 53*(1), 31-41.
- Husain, A., & Howard, S. (2017). Religious microaggressions: A case study of Muslim Americans. *Journal of Ethnic & Cultural Diversity in Social Work, 26*(1-2), 139-152.
- Israel, B. A., Eng, E., Schulz, A. J., & Parker, E. A. (2008). *Methods for community-based participatory research for health* (2nd ed.). Jossey-Bass.
- Joseph, S., & Linley, P. A. (2006). Positive therapy: A meta-theory for positive psychological practice. *International Journal of Psychotherapy, 10*(1), 22-33.
- Keshavarzi, H., & Haque, A. (2013). Outlining a psychotherapy model for enhancing Muslim mental health within an Islamic context. *International Journal for the Psychology of Religion, 23*(3), 230-249.
- Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry, 2012*, 278730.
- Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and health*. Oxford University Press.
- Koenig, H. G., King, D. E., & Carson, V. B. (2012). *Handbook of religion and health* (2nd ed.). Oxford University Press.
- Liberatore, M. J., & Nydick, R. L. (2008). The analytic hierarchy process in medical and health care decision making: A literature review. *European Journal of Operational Research, 189*(1), 194-207.
- Mubarak, A. R., & Susilawati, N. (2020). Integrating Islamic spiritual intervention in counselling for depression management: A Malaysian perspective. *International Journal of Islamic Thought, 17*, 89-101.
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (8th ed.). Muthén & Muthén.
- Pargament, K. I., Feuille, M., & Burdzy, D. (2013). The Brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions, 2*(1), 51-76.
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., ... & Unützer, J. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet, 392*(10157), 1553-1598.

- Piedmont, R. L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five-factor model. *Journal of Personality*, 67(6), 985-1013.
- Rahman, A. A., Adnan, A. H. M., Hamid, N. A., & Mutalib, N. H. A. (2016). Relationship between Islamic religiosity and mental health among Muslim students: A systematic review. *Journal of Religion and Health*, 55(5), 1867-1882.
- Rassool, G. H. (2000). The crescent and Islam: Healing, nursing and the spiritual dimension. Some considerations towards an understanding of the Islamic perspectives on caring. *Journal of Advanced Nursing*, 32(6), 1476-1484.
- Rippy, A. E., & Newman, E. (2006). Perceived religious discrimination and its relationship to anxiety and paranoia among Muslim Americans. *Journal of Muslim Mental Health*, 1(1), 5-20.
- Saaty, T. L. (1980). *The Analytic Hierarchy Process: Planning, priority setting, resource allocation*. McGraw-Hill.
- Saaty, T. L. (2003). Decision-making with the AHP: Why is the principal eigenvector necessary. *European Journal of Operational Research*, 145(1), 85-91.
- Saaty, T. L. (2008). Decision making with the analytic hierarchy process. *International Journal of Services Sciences*, 1(1), 83-98.
- Saaty, T. L., & Vargas, L. G. (2012). *Models, methods, concepts & applications of the Analytic Hierarchy Process* (2nd ed.). Springer.
- Salleh, M. A., & Abdullah, H. (2018). Islamic practices and mental health: The role of prayer, Quran recitation and social support among Malaysian Muslims. *Mental Health, Religion & Culture*, 21(9-10), 942-957.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Vargas, L. G. (1990). An overview of the Analytic Hierarchy Process and its applications. *European Journal of Operational Research*, 48(1), 2-8.
- Weatherhead, S., & Daiches, A. (2010). Muslim views on mental health and psychotherapy. *Psychology and Psychotherapy: Theory, Research and Practice*, 83(1), 75-89.
- World Health Organization. (2022). *World mental health report: Transforming mental health for all*. WHO.
- Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M., Gill, H., Phan, L., ... & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 277, 55-64.