

Systematic Review

Mindfulness and Spiritual Intelligence: A Systematic Review

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Abstract

Background: Mindfulness and spiritual intelligence have emerged as significant psychological constructs associated with adaptive functioning and mental well-being. Although a growing body of quantitative research has examined the relationship between these constructs, the existing literature remains fragmented across populations, cultural contexts, and measurement approaches. A systematic synthesis of this evidence is therefore warranted. **Methods:** This systematic review was conducted in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A comprehensive search was carried out across PsycINFO, PubMed, Scopus, Web of Science, EBSCO, and Google Scholar to identify peer-reviewed quantitative studies published in the English language between January 2010 and December 2024. Studies published in early 2025 that were available online or indexed at the time of the search were also considered for inclusion. Eligible studies assessed both mindfulness and spiritual intelligence using validated psychometric instruments and reported quantitative statistical associations between the two constructs. Data extraction focused on study characteristics, sample features, measurement tools, and the direction and magnitude of reported associations. Given the heterogeneity in study designs and outcome measures, findings were synthesized using a narrative approach. **Results:** 16 studies met the inclusion criteria. The studies were conducted across diverse cultural and occupational contexts and predominantly employed cross-sectional or correlational designs. Across all included studies, mindfulness was positively associated with spiritual intelligence. Although the strength of the reported associations varied, the overall pattern of findings consistently indicated that higher levels of mindfulness were associated with higher levels of spiritual intelligence, regardless of population or measurement instrument. **Conclusions:** The available quantitative evidence indicates a consistent positive association between mindfulness and spiritual intelligence. However, significant heterogeneity in study designs, sample characteristics, and measurement tools limits direct comparability across studies. Future research would benefit from longitudinal and experimental designs, as well as greater standardization of measurement approaches, to clarify the nature and directionality of this association.

Keywords: mindfulness; spiritual intelligence; quantitative studies; correlational research; PRISMA; systematic review

1. Introduction

Psychological research has shown increasing interest in constructs related to awareness, meaning-making, and higher-order cognitive functioning, particularly as they pertain to mental health outcomes and adaptive behavior. Among these, mindfulness has been extensively investigated as a psychological construct characterized by present-centered awareness and the deliberate regulation of attention toward internal and external experiences (Baer et al., 2019; Creswell, 2017; Van Dam et al., 2018). Empirical evidence has consistently associated mindfulness with reduced psychological distress and enhanced emotional functioning across diverse populations and cultural contexts (Goldberg et al., 2022; Gu et al., 2016; Khoury et al., 2015).

Recent empirical reviews and meta-analytic investigations have further clarified the psychological mechanisms underlying mindfulness, particularly its role in attentional regulation, emotional processing, and adaptive coping across diverse populations. These developments have contributed to a more nuanced conceptualization of mindfulness as a multidimensional construct oper-

ating across cognitive, affective, and behavioral domains (Chems-Maarif et al., 2025; Lindsay and Creswell, 2019; Maloney et al., 2024; Sumantry and Stewart, 2021).

Parallel to this growing body of mindfulness research, spiritual intelligence has gained recognition as a distinct psychological construct broadly defined as an individual's capacity to address existential questions, construct personal meaning, and integrate spiritual awareness into problem-solving and everyday functioning. Contemporary conceptualizations emphasize its multidimensional nature, encompassing critical existential thinking, transcendental awareness, and conscious state expansion. Importantly, it is framed as a cognitive-existential resource rather than a construct limited to religious belief or affiliation (Fidelis et al., 2024; Jenaabadi, 2018; Pinto et al., 2024).

A conceptual distinction between mindfulness and spiritual intelligence is also important for understanding their potential relationship. Mindfulness refers primarily to a regulatory process of present-centered awareness and attentional monitoring of internal and external experiences. In contrast, spiritual intelligence is conceptualized



as a higher-order cognitive capacity related to existential reflection, meaning construction, and the interpretation of life experiences within a broader framework of purpose and values. Although these two constructs may interact in the context of psychological functioning, they represent conceptually distinct processes operating at different levels of awareness and meaning-making.

Although mindfulness and spiritual intelligence originate from distinct theoretical and philosophical traditions, early quantitative research has suggested a meaningful convergence between the two constructs. Mindfulness has also been conceptualized as a process that facilitates meaning-making and reflective awareness (Garland et al., 2015; Maloney et al., 2024; Shapiro et al., 2018). Among the earliest empirical studies examining this relationship, a positive association between mindfulness and overall spiritual intelligence was reported in a sample of organizational employees, suggesting that heightened present-moment awareness is associated with greater existential reflection and meaning-making capacity (Agarwal and Mishra, 2016).

Subsequent research extended this line of inquiry to applied and professional contexts. Studies conducted with healthcare professionals demonstrated that mindfulness was positively associated with spiritual intelligence and that spiritual intelligence served an explanatory role in linking mindfulness to resilience and adaptive coping under conditions of occupational stress (Salmabadi et al., 2016). These findings provided early evidence for the functional relevance of spiritual intelligence within mindfulness-related psychological processes.

Research conducted with student populations further supported the association between mindfulness and spiritual intelligence. Studies involving nursing and university students reported that higher levels of mindfulness were associated with greater spiritual intelligence and lower levels of death anxiety, suggesting that mindfulness may facilitate existential integration and spiritual awareness in young adulthood (Jenaabadi, 2018). Similar patterns were observed in studies involving adolescents and young adults, in which spiritual intelligence consistently emerged as a correlate of mindfulness-related psychological outcomes (Singh and Gupta, 2021).

Beyond correlational findings, more recent studies have examined applied dimensions of mindfulness that directly influence spiritual intelligence. Research on mindful communication practices demonstrated that structured mindfulness-based behaviors significantly enhanced spiritual intelligence among students, highlighting the developmental potential of such approaches within educational contexts (Kusuma et al., 2023).

Recent investigations have examined mindfulness and spiritual intelligence within broader psychological models and multicultural contexts. Evidence suggests that while mindfulness robustly predicts mental health outcomes such as anxiety and depressive symptoms, the contribution of

spiritual intelligence may vary across its specific dimensions, indicating that the two constructs are related yet non-redundant (Ünal-Aydın et al., 2020). These findings underscore the conceptual complexity of the relationship between mindfulness and spiritual intelligence.

In applied social and life-transition contexts, spiritual intelligence has been identified as an important psychological resource associated with adjustment and adaptation. Research involving divorced women found that spiritual intelligence, combined with mindfulness-related processes, was positively associated with social adjustment and post-divorce adaptation, emphasizing its relevance as a coping resource in the context of major life stressors (Sedighi and Khoshkhatti, 2025).

Despite the growing volume of empirical research examining mindfulness and spiritual intelligence, the literature remains fragmented. Existing studies vary considerably in their conceptual definitions, measurement instruments, sample characteristics, and analytical approaches (Chems-Maarif et al., 2025; Goldberg et al., 2022; Van Dam et al., 2018). Moreover, the majority of available studies rely on cross-sectional or correlational designs, limiting the integration of findings into a coherent and theoretically grounded synthesis (Agarwal and Mishra, 2016; Jenaabadi, 2018; Ünal-Aydın et al., 2020). To date, no systematic review has specifically synthesized empirical evidence on the relationship between mindfulness and spiritual intelligence across different populations, contexts, and measurement approaches.

Accordingly, a systematic review synthesizing empirical evidence on the relationship between mindfulness and spiritual intelligence is warranted. The present review systematically examines quantitative studies published between 2010 and December 2024, including early 2025 articles available online or indexed at the time of the literature search, with the aim of clarifying the nature, strength, and consistency of the association between these two constructs. In addition, the review seeks to identify methodological patterns and gaps within the existing literature, thereby informing directions for future research.

2. Materials and Methods

This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Prior to the beginning of the review, a review protocol specifying the study objectives, eligibility criteria, search strategy, and procedures for data extraction and synthesis was developed to ensure methodological rigor and transparency. The protocol was registered with the Open Science Framework (OSF).

2.1 Research Question

The review question was structured using an observational framework consistent with the Population–

Exposure–Outcome (PEO) approach, which is widely applied in systematic reviews examining associations between psychological constructs. The population included participants from any demographic or occupational background. The exposure of interest was mindfulness, assessed through a validated psychometric instrument. The outcome was defined as the statistical association between mindfulness and spiritual intelligence as reported across quantitative studies.

Based on this framework, the guiding research question was: What empirical evidence exists regarding the association between mindfulness and spiritual intelligence in quantitative studies published between 2010 and 2025 that employed validated psychometric measures for both constructs?

2.2 Inclusion and Exclusion Criteria

To be eligible for inclusion, studies were required to meet the following criteria: (1) publication as a peer-reviewed journal article employing a quantitative research design; (2) publication in English between January 2010 and December 2024; (3) assessment of mindfulness through a validated psychometric instrument; and (4) inclusion of a validated psychometric measure of spiritual intelligence. Articles published in early 2025 that were available online or indexed in the searched databases at the time of the literature search were also considered for inclusion.

Studies were excluded if they employed exclusively qualitative methods, lacked quantitative statistical analysis, or failed to empirically examine the relationship between mindfulness and spiritual intelligence. Additionally, dissertations, conference papers, or other non-peer-reviewed sources were excluded regardless of their content. Collectively, these criteria were designed to ensure methodological consistency across the included literature and to support a focused, evidence-based synthesis of the association between the two constructs.

2.3 Search Strategy and Study Selection

A systematic literature search was conducted to identify empirical studies examining the relationship between mindfulness and spiritual intelligence across six electronic databases: PsycINFO, PubMed, Scopus, Web of Science, EBSCO, and Google Scholar. Search terms related to mindfulness and spiritual intelligence were combined using Boolean operators. Given the broad and non-specific nature of results generated by Google Scholar, screening was limited to the first thirty pages of records sorted by relevance, consistent with established practice in systematic reviews.

The search encompassed studies published from January 2010 to December 2024. In addition, screening of early 2025 articles that were already available online or indexed in the selected databases at the time of the search. To ensure methodological consistency, the search was limited to peer-reviewed journal articles published in the English

language. Dissertations, conference papers, book chapters, and purely qualitative studies were excluded during the screening process.

The search strategy combined controlled vocabulary terms and free-text keywords related to the two core constructs. Specifically, the primary search terms “mindfulness” and “spiritual intelligence” were used across databases, with relevant synonyms and related terms applied where appropriate to enhance retrieval sensitivity. The Boolean search query was structured as (“mindfulness”) AND (“spiritual intelligence”) and applied consistently across databases. Where database-specific indexing systems were available, minor adjustments were applied to accommodate controlled vocabulary and search interface requirements.

The search yielded a total of 210 records (PsycINFO = 11; PubMed = 6; Scopus = 37; Web of Science = 25; EBSCO = 4; Google Scholar = 127). Prior to screening, 75 records were removed, comprising duplicates ($n = 58$), records that failed to meet basic eligibility requirements such as peer-reviewed status or publication type ($n = 12$), and records excluded for other reasons, including language restrictions or lack of full-text availability ($n = 5$).

The remaining 135 records were screened based on titles and abstracts, resulting in the exclusion of 98 records that did not address both mindfulness and spiritual intelligence or were otherwise irrelevant to the scope of the review. 37 full-text articles were subsequently sought for retrieval, of which 3 could not be accessed. The full texts of the remaining 34 studies were assessed for eligibility. At this stage, 18 studies were excluded due to the absence of quantitative analysis ($n = 13$) or failure to empirically examine the relationship between mindfulness and spiritual intelligence ($n = 5$). Ultimately, 16 studies met all inclusion criteria and were included in the final review (see Fig. 1).

2.4 Data Extraction and Analysis

Data extraction was conducted independently by 4 reviewers for all studies included in the final review. A structured data extraction form was developed *a priori* to ensure consistency with the objectives and scope of this systematic review, which focuses on the empirical association between mindfulness and spiritual intelligence. The extraction process targeted studies employing quantitative, non-experimental designs, primarily correlational and cross-sectional in nature.

Prior to full data extraction, the reviewers held a calibration meeting to clarify extraction criteria, align coding decisions, and establish a shared understanding of all data items. The extraction form was piloted on a small subset of included studies, and minor refinements were made to improve clarity and consistency. Any discrepancies identified during the extraction process were resolved through discussion among the reviewers until consensus was reached.

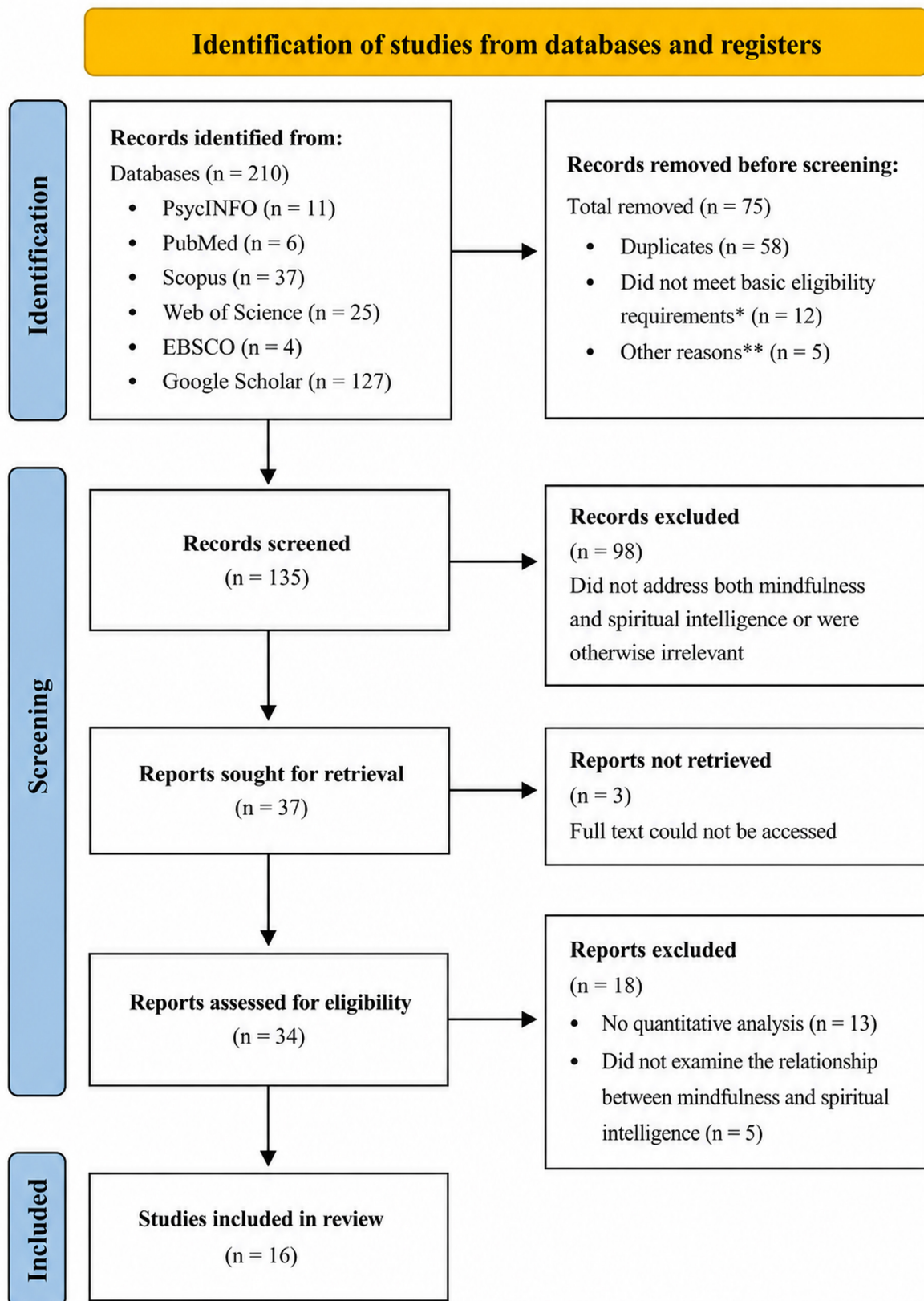


Fig. 1. PRISMA flow diagram illustrating the literature search and study selection process. PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses. (*) Basic eligibility requirements refer to records that did not meet the predefined eligibility criteria regarding peer-reviewed status or publication type. (**) Other reasons refer to records excluded because of language restrictions or lack of full-text availability.

The following data were extracted from each study: (1) bibliographic information, including author(s) and year of publication; (2) country in which the study was conducted; (3) sample characteristics and sample size; (4) study design; (5) mindfulness measurement instrument; (6) spiritual intelligence measurement instrument; and (7) the reported direction and magnitude of the association between mindfulness and spiritual intelligence, including correlation coefficients where available. Only statistical associations as reported by the original authors were extracted, without reanalysis or modification of the reported results.

Due to heterogeneity in measurement instruments and study designs, a quantitative synthesis or meta-analysis was not undertaken. Instead, the extracted data were synthesized descriptively to facilitate comparison across studies and to identify patterns in measurement approaches, sample characteristics, and reported associations between the two constructs. The primary extracted study characteristics are summarized in Table 1, and the narrative synthesis of findings is presented in the Results section.

2.5 Data Synthesis

This review synthesized quantitative evidence from observational studies examining the association between mindfulness and spiritual intelligence. As all included studies employed non-experimental designs, primarily correlational and cross-sectional approaches, the data synthesis focused on the reported statistical relationships between the two constructs rather than on intervention effects.

Due to the variability in study populations, measurement instruments, and analytical approaches, a meta-analytic synthesis was not performed. In particular, the included studies employed a range of validated mindfulness and spiritual intelligence scales and reported associations using different statistical indicators, most commonly Pearson correlation coefficients. This methodological heterogeneity precluded the calculation of a pooled effect size estimate.

Accordingly, a narrative quantitative synthesis was applied. Extracted data were organized into structured summary tables to facilitate cross-study comparisons. The synthesis examined the direction and strength of the reported associations between mindfulness and spiritual intelligence within each study, with particular emphasis on whether each relationship was positive, negative, or nonsignificant. Where reported, correlation coefficients were presented to illustrate the magnitude of associations, without reanalysis or transformation of the original data. This approach enabled systematic comparison of findings across diverse contexts while preserving the methodological integrity of the original studies. The synthesis highlights patterns in reported associations and identifies areas of consistency and variation in the empirical literature, without aggregating results into a single summary statistic.

3. Results

The included studies reported a consistent positive statistical association between mindfulness and spiritual intelligence across all examined contexts. This pattern was observed across different study designs, populations, and measurement instruments, providing a coherent descriptive overview of the available empirical evidence. Given the substantial heterogeneity in methodological approaches, sample characteristics, and assessment tools, findings are presented descriptively and organized thematically in the subsections below rather than synthesized through meta-analytic procedures.

3.1 Study Design and Methodological Characteristics

All 16 studies included in the review employed quantitative, non-experimental research designs. The majority adopted a cross-sectional design (e.g., Afzal et al., 2025; Ajele et al., 2021; Akshara et al., 2024; Alshebami et al., 2023; Parkinson and Smith, 2023; Saini and Seema, 2021; Singh and Gupta, 2021; Ünal-Aydın et al., 2020). Several studies used correlational designs (e.g., Agarwal and Mishra, 2016; Arora and Chauhan, 2025; Awad Ibrahim et al., 2023; Kusuma et al., 2023; Salmabadi et al., 2016; Sedighi and Khoshkhatti, 2025), while 1 study employed a time-lagged design to examine the association between mindfulness and spiritual intelligence over time (Cai et al., 2023). Across all studies, data were collected via self-report questionnaires, and statistical analyses examined associations between the two constructs.

3.2 Sample Characteristics and Geographical Distribution

The included studies were conducted across a wide range of cultural and geographical contexts, encompassing South Asia, East Asia, the Middle East, Africa, and Western regions. Countries represented included India, Iran, Turkey, Nigeria, Saudi Arabia, Egypt, China, Pakistan, Indonesia, and the United States. Study populations were diverse, comprising bank employees (Agarwal and Mishra, 2016; Akshara et al., 2024), hospital staff and nursing faculty members (Awad Ibrahim et al., 2023; Salmabadi et al., 2016), university students (Afzal et al., 2025; Alshebami et al., 2023; Arora and Chauhan, 2025; Cai et al., 2023; Ünal-Aydın et al., 2020), adolescents and high-school students (Kusuma et al., 2023; Varghese and Sharma, 2021), adults with chronic illness (Ajele et al., 2021), individuals in managerial or practitioner roles (Parkinson and Smith, 2023; Saini and Seema, 2021), young adults (Singh and Gupta, 2021) and community-based samples such as divorced women (Sedighi and Khoshkhatti, 2025). Sample sizes ranged from relatively small cohorts ($n = 98$) to larger samples exceeding 600 participants.

Variation in sample characteristics may partially account for differences in the strength of reported associations. Studies conducted in populations experiencing elevated psychological demands, such as healthcare pro-

Table 1. Characteristics of included studies and direction of the reported association between mindfulness and spiritual intelligence.

Study	Sample characteristics	Country	Mindfulness scale	Spiritual intelligence scale	Outcomes
Agarwal & Mishra (2016)	120 bank employees	India	MAAS	SISRI-24	Positive association
Salmabadi et al. (2016)	120 hospital staff	Iran	MAAS	SISRI-24	Positive association
Ünal-Aydin et al. (2020)	184 university students	Turkey	FFMQ-S	SSI	Positive association
Ajele et al. (2021)	636 adults with diabetes	Nigeria	MAAS	SISRI-24	Positive association
Saini & Seema (2021)	473 participants in management positions	India	FFMQ	SQ21	Positive association
Singh & Gupta (2021)	168 young adults	India	MAAS	SIS-MK	Positive association
Varghese & Sharma (2021)	500 adolescents	India	MAAS	SIS-MK	Positive association
Alshebami et al. (2023)	202 university students	Saudi Arabia	GM	SISRI-24	Positive association
Awad Ibrahim et al. (2023)	351 nursing faculty members	Egypt	MAAS	SISRI-24	Positive association
Cai et al. (2023)	395 university students	China & Pakistan	G-MFN	SISRI-24	Positive association
Kusuma et al. (2023)	98 high-school students	Indonesia	MC	SQ	Positive association
Parkinson & Smith (2023)	454 participants practitioners	United States	FFMQ	SISRI-24	Positive association
Akshara et al. (2024)	403 bank employees	India	MAAS	SISRI-24	Positive association
Afzal et al. (2025)	200 University students	Pakistan	MAAS	SISRI-24	Positive association
Arora & Chauhan (2025)	100 adults (students)	India	FFMQ-15	SISRI-24	Positive association
Sedighi & Khoshkhatti (2025)	361 divorced women	Iran	Neff SCS (Not assessed)	ISIS	Positive association

Note: Because the included studies used different statistical methods and reported results using heterogeneous indicators (e.g., correlations, regression models, or indirect effects), the table summarizes the direction of the reported association rather than presenting standardized statistical coefficients. Sedighi and Khoshkhatti (2025) did not directly assess mindfulness. Instead, the study employed the Neff Self-Compassion Scale (SCS), which measures self-compassion rather than mindfulness. The study is included because it examined spiritual intelligence in relation to a conceptually related construct.

MAAS, Mindful Attention Awareness Scale; FFMQ-S, Five Facet Mindfulness Questionnaire; FFMQ-15, 15-item Five Facet Mindfulness Questionnaire; GM, global mindfulness scale; G-MFN, general mindfulness scale; SISRI-24, Spiritual Intelligence Self-Report Inventory; SSI, Spiritual Intelligence Scale; SQ, Spiritual Quotient measures; ISIS, Integrated Spiritual Intelligence Scale; SCS, Self-Compassion Scale; SIS-MK, Spiritual Intelligence Scale–Mishra and Kumar.

professionals or individuals navigating major life transitions, tended to report stronger associations between mindfulness and spiritual intelligence compared with those conducted in general student populations.

3.3 Measurement Instruments

Mindfulness was assessed using a range of validated psychometric instruments. The most frequently used mea-

sure was the Mindful Attention Awareness Scale (MAAS), a unidimensional self-report instrument designed to assess the frequency of present-centered awareness and attentional engagement in everyday experiences. The MAAS was applied across studies involving employees, students, adolescents, and healthcare professionals in multiple countries (e.g., Afzal et al., 2025; Agarwal and Mishra, 2016; Ajele et al., 2021; Akshara et al., 2024; Awad Ibrahim et al., 2023;

Salmabadi et al., 2016; Singh and Gupta, 2021; Varghese and Sharma, 2021).

Multidimensional assessments of mindfulness were also employed, most notably the Five Facet Mindfulness Questionnaire (FFMQ) and its short forms (FFMQ-S, FFMQ-15). The FFMQ evaluates five components of mindfulness, including observing internal experiences, describing experiences, acting with awareness, non-judging of inner experiences, and non-reactivity. This instrument was used particularly in studies involving students, managers, and practitioners (Arora and Chauhan, 2025; Parkinson and Smith, 2023; Saini and Seema, 2021; Ünal-Aydın et al., 2020). Additional instruments included the general mindfulness scale (G-MFN), global mindfulness scale (GM), and mindful communication (MC), reflecting variability in the operationalization of mindfulness across studies (Alshebami et al., 2023; Cai et al., 2023; Kusuma et al., 2023). In addition, one study included the Neff Self-Compassion Scale within its structural model; however, this instrument should not be regarded as a direct measure of mindfulness. Parkinson and Smith (2023) employed the FFMQ, whereas Sedighi and Khoshkhatti (2025) included the Neff Self-Compassion Scale in a related but conceptually distinct role.

A comparative analysis of these instruments indicates that the granularity of reported associations was influenced by the measurement approach employed. Studies using the unidimensional MAAS generally reported a positive association between mindfulness and spiritual intelligence. By contrast, studies employing the FFMQ assessed mindfulness as a multidimensional construct and consequently reported associations involving specific facets rather than an overall score. These differences reflect methodological variation across studies and preclude direct comparability of effect patterns.

A direct comparison of studies using the MAAS and those employing the FFMQ indicates meaningful differences in how the association with spiritual intelligence is represented. Studies using the MAAS, a unidimensional measure, consistently reported overall positive associations at the level of the global construct. In contrast, studies employing the FFMQ, a multidimensional instrument, reported associations at the level of specific mindfulness facets, with certain facets demonstrating stronger relationships with specific dimensions of spiritual intelligence than others. This pattern reflects differences in measurement structure rather than inconsistency across findings, and suggests that multidimensional instruments allow for more differentiated observation of the association, whereas unidimensional measures capture it at a general level.

Spiritual intelligence was most commonly measured using the Spiritual Intelligence Self-Report Inventory (SISRI-24), a 24-item instrument designed to assess spiritual intelligence across four dimensions, such as critical existential thinking, personal meaning production, transcen-

dental awareness, and conscious state expansion. This instrument was used in the majority of included studies across different populations and cultural settings (e.g., Agarwal and Mishra, 2016; Ajele et al., 2021; Akshara et al., 2024; Cai et al., 2023; Salmabadi et al., 2016). Additional validated instruments included the Spiritual Intelligence Scale (SSI), Spiritual Quotient measures (SQ, SQ21), the Spiritual Intelligence Questionnaire (SIQ), and culturally adapted scales such as the Spiritual Intelligence Scale–Mishra and Kumar (SIS-MK) and Integrated Spiritual Intelligence Scale (ISIS) (Alshebami et al., 2023; Sedighi and Khoshkhatti, 2025; Singh and Gupta, 2021; Ünal-Aydın et al., 2020; Varghese and Sharma, 2021).

3.4 Narrative Synthesis

Given the heterogeneity of included studies with respect to design, participant characteristics, and measurement instruments, a meta-analytic approach was not deemed appropriate. Findings were therefore synthesized narratively to facilitate comparison of how the relationship between mindfulness and spiritual intelligence was reported across studies. The synthesis is organized around three key themes: variation in sample characteristics, differences in measurement approaches, and the magnitude of reported associations.

Beyond describing study characteristics, the synthesis also examined patterns that may account for variation in the reported associations. Particular attention was given to differences in participant populations, cultural contexts, and the measurement instruments used to assess both mindfulness and spiritual intelligence.

The reviewed studies varied considerably in sample characteristics and size. Some were conducted with relatively small community-based samples, whereas others involved larger groups of students or working professionals. Participants represented a broad range of backgrounds, including adolescents, university students, healthcare professionals, employed adults, and community members. Such sample diversity provides valuable contextual breadth and may partially account for the observed variation in the strength of reported associations.

Further examination of these samples suggests that the strength of the mindfulness-spiritual intelligence relationship may be context-dependent. Notably, in populations navigating significant life transitions or high-stress environments, such as healthcare professionals during the Coronavirus Disease 2019 (COVID-19) pandemic or clinical samples, the association appeared more pronounced. In these contexts, spiritual intelligence may function as a vital resource for adaptive coping, facilitated by the heightened self-awareness associated with mindfulness practice. In contrast, among general student samples, the relationship may reflect a more developmental or trait-based alignment between the constructs.

Measurement approaches also varied across studies. Mindfulness was assessed using several established instruments, most frequently the MAAS and the FFMQ. Spiritual intelligence was commonly measured using the SISRI-24 or conceptually related scales. Variations in scale structure, scoring procedures, and conceptual emphasis across these instruments are likely to have influenced the magnitude of the reported correlations.

The variability in reported effect sizes across the literature can be attributed in part to these methodological nuances. Beyond scale structure, the cultural adaptation of spiritual intelligence instruments (e.g., SIS-MK), appears to have played a significant role; scales incorporating local cultural or religious frameworks often yielded higher correlations, suggesting that the intelligence dimension of spirituality is more accurately captured when measurement is aligned with the participants' cultural schemas. Furthermore, the magnitude of reported associations was often higher in studies adopting a multidimensional conceptualization of both constructs, allowing for a more comprehensive capture of shared variance between cognitive awareness and existential meaning.

Despite these methodological differences, a consistent pattern emerged across the literature: the majority of studies reported a positive relationship between mindfulness and spiritual intelligence. However, the strength of this relationship was not uniform, with reported associations ranging from modest to more pronounced. The strength of the association varied depending on sample characteristics and measurement approaches. Where correlation coefficients were reported, the magnitude of the associations generally fell within a weak-to-moderate positive range. Although precise values differed across studies due to differences in samples and measurement instruments, the reported coefficients consistently indicated positive relationships, with no studies reporting null or negative findings. This variability in magnitude reflects methodological and contextual differences across studies rather than substantive disagreement regarding the direction of the association. These differences appear to be more closely related to variation in samples, cultural contexts, and measurement choices than to any fundamental disagreement in the empirical findings. Overall, the narrative synthesis indicates that mindfulness and spiritual intelligence tend to be positively associated across different populations and research settings.

3.5 Risk of Bias and Quality Assessment

The methodological quality of the included studies was assessed to identify potential sources of bias relevant to observational and correlational research designs. Given that all included studies employed non-experimental quantitative approaches, the assessment focused on domains appropriate for cross-sectional and correlational research rather than criteria designed for randomized or intervention-based designs.

As summarized in Table 2, quality appraisal addressed four domains: sample adequacy, validity of measurement instruments, appropriateness of statistical analyses, and clarity of reporting. Sample adequacy was evaluated based on the reported sample size and the clarity of participant description. Most studies were judged to have adequate samples; however, a small number were rated as limited due to relatively small sample sizes.

Measurement validity was rated as adequate across all included studies, as each employed established or previously validated instruments to assess both mindfulness and spiritual intelligence. Statistical analyses were consistently appropriate, with all studies reporting correlation-based methods aligned with their stated research aims. Reporting clarity was similarly judged to be adequate across studies, with sufficient description of methods and results to support meaningful interpretation.

Overall, study quality ranged from moderate to high. No study was excluded solely on the basis of quality assessment. Instead, identified limitations, primarily concerning sampling methods and sample size, were considered during interpretation of the narrative synthesis findings. This approach ensured that conclusions were informed by both the consistency of results and the methodological characteristics of the included studies.

A comparison of findings across quality ratings did not reveal systematic differences in the reported magnitude of associations. Both moderate- and high-quality studies consistently reported positive relationships between mindfulness and spiritual intelligence, with no clear pattern suggesting that higher methodological quality was associated with stronger or weaker effect sizes. This observation should nonetheless be interpreted with caution, as the synthesis was based on reported results without quantitative pooling, and variability in measurement approaches and sample characteristics may have influenced the observed effect sizes.

4. Discussion

The present systematic review aimed to synthesize empirical evidence on the relationship between mindfulness and spiritual intelligence. One important observation emerging from the reviewed literature is that mindfulness and spiritual intelligence appear to function as related yet conceptually distinct constructs. Whereas mindfulness is primarily characterized by present-centered awareness and attentional regulation, spiritual intelligence reflects broader existential and meaning-oriented cognitive capacities. This distinction is consistent with theoretical perspectives that conceptualize mindfulness as a regulatory process of awareness, whereas spiritual intelligence reflects higher-order processes related to meaning construction and existential reflection. Our synthesis suggests that mindfulness may constitute a foundational condition for reflective awareness,

Table 2. Methodological quality assessment of included studies.

Study	Study design	Sample adequacy	Measurement validity	Statistical analysis	Reporting clarity	Overall quality
Agarwal & Mishra (2016)	Correlational	Adequate	Validated	Appropriate	Clear	Moderate
Salmabadi et al. (2016)	Correlational	Adequate	Validated	Appropriate	Clear	Moderate
Ünal-Aydın et al. (2020)	Cross-sectional	Adequate	Validated	Appropriate	Clear	Moderate
Ajele et al. (2021)	Cross-sectional	Adequate	Validated	Appropriate	Clear	High
Saini & Seema (2021)	Cross-sectional	Adequate	Validated	Appropriate	Clear	Moderate
Singh & Gupta (2021)	Cross-sectional	Adequate	Validated	Appropriate	Clear	Moderate
Varghese & Sharma (2021)	Cross-sectional	Adequate	Validated	Appropriate	Clear	Moderate
Alshebami et al. (2023)	Cross-sectional	Adequate	Validated	Appropriate	Clear	Moderate
Awad Ibrahim et al. (2023)	Correlational	Adequate	Validated	Appropriate	Clear	High
Cai et al. (2023)	Time-lagged	Adequate	Validated	Appropriate	Clear	High
Kusuma et al. (2023)	Correlational	Limited	Validated	Appropriate	Clear	Moderate
Parkinson & Smith (2023)	Cross-sectional	Adequate	Validated	Appropriate	Clear	Moderate
Akshara et al. (2024)	Cross-sectional	Adequate	Validated	Appropriate	Clear	High
Afzal et al. (2025)	Cross-sectional	Adequate	Validated	Appropriate	Clear	High
Arora & Chauhan (2025)	Correlational	Limited	Validated	Appropriate	Clear	Moderate
Sedighi & Khoshkhatti (2025)	Correlational	Adequate	Validated	Appropriate	Clear	Moderate

whereas spiritual intelligence may represent the cognitive capacity through which individuals interpret experience in terms of meaning and purpose. The consistent positive associations observed across studies suggest that mindfulness may be closely linked to cognitive processes involved in engaging with spiritual and existential concerns. In particular, present-centered awareness may be associated with greater capacity for reflective and non-judgmental consideration of questions related to meaning and purpose (Agarwal and Mishra, 2016; Ünal-Aydın et al., 2020).

The relationship identified in the present review may be further interpreted within established theoretical frameworks. Garland's Mindfulness-to-Meaning Theory proposes that mindful awareness promotes cognitive reappraisal and meaning construction by sustaining attentional engagement with present experience. From this perspective, mindfulness may establish the cognitive conditions that support the reflective processes associated with spiritual intelligence, particularly those implicated in existential reflection and meaning-oriented cognition. Similarly, within existential psychology, Frankl's emphasis on the human capacity for meaning-making positions reflective awareness as central to the interpretation of life experiences. Within this framework, spiritual intelligence may represent a cognitive capacity supporting meaning construction, whereas mindfulness may provide the attentional and regulatory processes through which such reflection becomes possible.

Taken together, the findings of the reviewed studies suggest that mindfulness may function as an attentional foundation for the reflective processes associated with spiritual intelligence. As such, mindfulness may enable individuals to engage more deliberately with existential ques-

tions and value-based interpretations of experience, processes that are central to established conceptualizations of spiritual intelligence.

These findings further suggest that the association between mindfulness and spiritual intelligence is evident across a wide range of applied contexts, including educational, organizational, healthcare, and community settings. However, close examination reveals that the strength and nature of this relationship vary as a function of sample characteristics. In populations navigating significant life transitions or chronic stressors, such as healthcare professionals during the COVID-19 pandemic, individuals with chronic illnesses, or divorced women, the association appeared more pronounced (e.g., Sedighi and Khoshkhatti, 2025). One possible interpretation is that under conditions of heightened psychological demand, individuals may rely more heavily on reflective and meaning-oriented cognitive processes. In such contexts, mindfulness may support the awareness necessary for these processes, while spiritual intelligence may contribute to the interpretation of challenging experiences. In contrast, among general student or community samples, the relationship may reflect a relatively stable association between attentional awareness and personal meaning orientation, rather than a context-specific adaptive response.

Variability in the magnitude of reported associations (effect sizes) across studies appears to be influenced primarily by methodological differences and measurement approaches. The selection of psychometric instruments significantly influenced the granularity of observed findings. For instance, studies employing the multidimensional FFMQ often reported more differentiated patterns of association than those using the unidimensional MAAS. This difference may reflect the capacity of multidimensional instru-

ments to capture distinct components of mindfulness that relate differently to aspects of spiritual intelligence. Specifically, the observing and non-reactivity facets were reported in several studies as showing stronger associations with measures of spiritual intelligence, likely because they facilitate reflective awareness and cognitive openness, processes that conceptually overlap with the existential reflection and meaning-oriented thinking measured by instruments such as the SISRI-24. Furthermore, the magnitude of reported associations was often higher in studies utilizing culturally adapted instruments (e.g., SIS-MK or ISIS). This pattern may indicate that measures reflecting culturally meaningful conceptions of spirituality are more sensitive to the cognitive processes associated with mindfulness.

Importantly, the general pattern of positive association was observed across studies of varying methodological quality, which provides some support for the robustness of the reported relationship. Nonetheless, stronger conclusions will require evidence from methodologically rigorous longitudinal and intervention-based studies.

Despite these limitations, the overall consistency of findings across culturally diverse samples strengthens confidence in the observed association. The inclusion of studies from multiple regions, including South Asia, East Asia, the Middle East, Africa, and Western contexts, suggests that the association between mindfulness and spiritual intelligence is not culturally specific. Rather, the convergence of findings across distinct cultural settings indicates that the association between mindful awareness and meaning-oriented cognition may represent a broadly observable psychological pattern, notwithstanding cultural variation in the specific expressions of spirituality.

The findings of this review support the view that mindfulness and spiritual intelligence are systematically related constructs within contemporary psychological research. The available evidence indicates that higher levels of mindfulness are consistently associated with higher levels of spiritual intelligence, although the available studies do not yet elucidate the causal mechanisms underlying this relationship. Future research employing longitudinal and intervention-based designs are warranted to determine whether mindfulness contributes to the development of spiritual intelligence, whether spiritual intelligence mediates the psychological effects of mindfulness, or whether both constructs reflect parallel processes associated with reflective awareness and meaning construction.

The findings of this review also carry implications for applied contexts in which mindfulness-based approaches are widely implemented. In clinical settings, mindfulness-based interventions are frequently employed to support individuals experiencing psychological distress, chronic illness, or major life transitions. The observed association between mindfulness and spiritual intelligence suggests that such practices may also facilitate reflective processes related to meaning-making and existential understanding.

Consequently, mindfulness-based programs may indirectly support aspects of spiritual intelligence by strengthening attentional awareness and promoting reflective engagement with experience.

In educational and organizational settings, the integration of structured mindfulness practices may contribute not only to attentional regulation and emotional balance, but also to the development of reflective capacities associated with meaning orientation and value clarification. At the same time, an important practical question concerns whether interventions should explicitly incorporate components targeting spiritual intelligence, or whether the cultivation of mindfulness alone is sufficient to support these processes. The current body of evidence does not yet provide a definitive answer, highlighting the need for intervention-based research addressing this question directly.

Future research should move beyond correlational designs to examine potential causal mechanisms linking mindfulness and spiritual intelligence. A particularly promising direction would be to investigate whether participation in established mindfulness-based interventions, such as Mindfulness-Based Stress Reduction (MBSR), produces measurable changes in spiritual intelligence over time. Such studies could further examine whether gains in spiritual intelligence mediate the effects of mindfulness training on psychological outcomes, such as well-being, resilience, or stress-related coping.

Future research should also examine whether specific facets of mindfulness are differentially associated with particular dimensions of spiritual intelligence. For example, future studies could test whether facets such as observing or non-reactivity are more strongly related to existential reflection or meaning-oriented cognition. Longitudinal and cross-cultural studies may further clarify whether the relationship between mindfulness and spiritual intelligence varies across cultural contexts or professional populations characterized by differing levels of psychological demands.

4.1 Testable Hypotheses for Future Research

Based on the patterns identified across the reviewed studies, several testable hypotheses may be formulated for future empirical research. First, higher levels of mindfulness are expected to be positively associated with higher levels of spiritual intelligence across different populations. Second, specific facets of mindfulness, as assessed by multidimensional instruments, may demonstrate differential associations with distinct dimensions of spiritual intelligence. Third, the magnitude of the association between mindfulness and spiritual intelligence may vary depending on the measurement approach employed, particularly between unidimensional and multidimensional scales. Finally, the strength of this association may differ across populations characterized by varying levels of psychological or contextual demands.

4.2 Limitations

The findings of this review should be interpreted in light of several limitations inherent to the available body of evidence. First, the majority of the included studies employed cross-sectional or correlational designs. As a result, the directionality of the relationship between mindfulness and spiritual intelligence cannot be determined, and causal interpretations remain limited. Second, variation in measurement instruments across studies may have influenced the magnitude of reported associations. The scales used to assess both mindfulness and spiritual intelligence differed in their conceptual focus and dimensional structure. Such measurement heterogeneity limits the direct comparability of findings across studies.

Third, the methodological quality of the included studies was variable. Although most studies were rated as presenting moderate methodological quality, several relied on relatively small samples and self-report measures, which may introduce potential sources of bias. Finally, the synthesis was restricted to quantitative studies published in the English language and indexed within the selected databases. Relevant studies published in other languages or formats may therefore not have been captured.

Taken together, these limitations should be considered when interpreting the consistency of the reported association between mindfulness and spiritual intelligence.

5. Conclusions

This systematic review provides a comprehensive synthesis of quantitative evidence on the relationship between mindfulness and spiritual intelligence. Across all included studies, a consistent positive association between the two constructs was observed, irrespective of population, cultural context, or measurement approach.

The findings indicate that mindfulness and spiritual intelligence are related yet distinct psychological constructs that may jointly contribute to adaptive functioning and psychological well-being. Nevertheless, the predominance of cross-sectional designs and the heterogeneity of measurement instruments limit conclusions regarding causality and underlying mechanisms.

Future research would benefit from greater methodological consistency, increased use of longitudinal and time-lagged designs, and more explicit conceptual integration of mindfulness and spiritual intelligence within unified theoretical frameworks. Such advances would contribute to a more precise understanding of how these constructs interact and their respective roles in psychological adaptation.

Availability of Data and Materials

All data supporting the findings of this study are derived from the published articles included in the systematic review. Extracted data are available from the corresponding author upon reasonable request.

Author Contributions

AAld conceptualized the study, developed the original research idea, and served as the project director. AAld the overall design of the systematic review, supervised all methodological stages, coordinated the review process, contributed to data screening and extraction, interpreted the findings, and drafted the manuscript. CS and JL contributed to literature screening, data extraction, data checking, and organization of extracted information, and participated in the revision of the manuscript. AAlh contributed to data screening, data verification, synthesis support, and critical revision of the manuscript. All authors contributed to editorial changes in the manuscript. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

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The authors declare no conflicts of interest.

Declaration of AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work, the authors used ChatGPT-5.5 to check spelling and grammar. After using this tool, the authors carefully reviewed and edited the manuscript and take full responsibility for the content of the publication.

Supplementary Material

Supplementary material associated with this article can be found, in the online version, at <https://doi.org/10.31083/BP51046>.

References

- Afzal M, Aziz Z, Altaf Z. Impact of Spiritual Intelligence on Academic Achievement among University Students of AJK: Mediating Role of Mindfulness. *Pakistan Social Sciences Review*. 2025; 9: 114–126.
- Agarwal S, Mishra PC. Relationship between mindfulness and spiritual intelligence among bank employees. *Indian Journal of Positive Psychology*. 2016; 7: 356–358.
- Ajele WK, Oladejo TA, Akanni AA, Babalola OB. Spiritual intelligence, mindfulness, emotional dysregulation, depression relationship with mental well-being among persons with diabetes during COVID-19 pandemic. *Journal of Diabetes and*

- Metabolic Disorders. 2021; 20: 1705–1714. <https://doi.org/10.1007/s40200-021-00927-8>
- Akshara, Kumari K, Ranjan S, Kumar P. Modelling emotional intelligence and spiritual intelligence on burnout: Mediating role of mindfulness. *African Journal of Biomedical Research*. 2024; 27: 763–773.
- Alshebami AS, Alholiby MS, Elshaer IA, Sobaih AEE, Al Marri SH. Examining the Relationship between Green Mindfulness, Spiritual Intelligence, and Environmental Self Identity: Unveiling the Path to Green Entrepreneurial Intention. *Administrative Sciences*. 2023; 13: 226. <https://doi.org/10.3390/admsci13100226>
- Arora K, Chauhan A. Mindful Connections: Exploring the Relationship Between Meditation, Creativity, and Spiritual Intelligence in Young Adults. *International Journal of Interdisciplinary Approaches in Psychology*. 2025; 3: 1641–1650.
- Awad Ibrahim M, Eweida R, Abd-el-Kader E. Mindfulness, Spiritual Intelligence and Mental Health among Nursing Faculty Members. *Alexandria Scientific Nursing Journal*. 2023; 25: 49–62. <https://doi.org/10.21608/asalexu.2023.318218>
- Baer R, Crane C, Miller E, Kuyken W. Doing no harm in mindfulness-based programs: Conceptual issues and empirical findings. *Clinical Psychology Review*. 2019; 71: 101–114. <https://doi.org/10.1016/j.cpr.2019.01.001>
- Cai B, Chen Y, Ayub A. “Quiet the Mind, and the Soul Will Speak”! Exploring the Boundary Effects of Green Mindfulness and Spiritual Intelligence on University Students’ Green Entrepreneurial Intention–Behavior Link. *Sustainability*. 2023; 15: 3895. <https://doi.org/10.3390/su15053895>
- Chems-Maarif R, Cavanagh K, Baer R, Gu J, Strauss C. Defining Mindfulness: A Review of Existing Definitions and Suggested Refinements. *Mindfulness*. 2025; 16: 1–20. <https://doi.org/10.1007/s12671-024-02507-2>
- Creswell JD. Mindfulness Interventions. *Annual Review of Psychology*. 2017; 68: 491–516. <https://doi.org/10.1146/annurev-psych-042716-051139>
- Fidelis A, Moreira AC, Vitória A. Multiple perspectives of spiritual intelligence: A systematic literature review. *Social Sciences & Humanities Open*. 2024; 9: 100879. <https://doi.org/10.1016/j.ssaho.2024.100879>
- Garland EL, Farb NA, Goldin PR, Fredrickson BL. The Mindfulness-to-Meaning Theory: Extensions, Applications, and Challenges at the Attention–Appraisal–Emotion Interface. *Psychological Inquiry*. 2015; 26: 377–387. <https://doi.org/10.1080/1047840x.2015.1092493>
- Goldberg SB, Riordan KM, Sun S, Davidson RJ. The Empirical Status of Mindfulness-Based Interventions: A Systematic Review of 44 Meta-Analyses of Randomized Controlled Trials. *Perspectives on Psychological Science : a Journal of the Association for Psychological Science*. 2022; 17: 108–130. <https://doi.org/10.1177/1745691620968771>
- Gu J, Strauss C, Crane C, Barnhofer T, Karl A, Cavanagh K, et al. Examining the factor structure of the 39-item and 15-item versions of the Five Facet Mindfulness Questionnaire before and after mindfulness-based cognitive therapy for people with recurrent depression. *Psychological Assessment*. 2016; 28: 791–802. <https://doi.org/10.1037/pas0000263>
- Jenaabadi H. The role of spiritual intelligence and mindfulness in predicting death anxiety among students at Zahedan Faculty of Nursing (Iran). *Health, Spirituality and Medical Ethics*. 2018; 5: 2–8.
- Khoury B, Sharma M, Rush SE, Fournier C. Mindfulness-based stress reduction for healthy individuals: A meta-analysis. *Journal of Psychosomatic Research*. 2015; 78: 519–528. <https://doi.org/10.1016/j.jpsychores.2015.03.009>
- Kusuma C, Saputri VAM, Kasrah R, Yudhawati I, Gautama SA. The Practice of Mindful Communication Brings the Strong Effect on Spiritual Intelligence of School Students. *Journal of Communication, Religious, and Social Sciences (JoCRSS)*. 2023; 1: 35–46. <https://doi.org/10.60046/jocrss.v1i1.8>
- Lindsay EK, Creswell JD. Mindfulness, acceptance, and emotion regulation: perspectives from Monitor and Acceptance Theory (MAT). *Current Opinion in Psychology*. 2019; 28: 120–125. <https://doi.org/10.1016/j.copsyc.2018.12.004>
- Maloney S, Kock M, Slaghekke Y, Radley L, Lopez-Montoyo A, Montero-Marin J, et al. Target mechanisms of mindfulness-based programmes and practices: a scoping review. *BMJ Mental Health*. 2024; 27: e300955. <https://doi.org/10.1136/bmjment-2023-300955>
- Ünal-Aydın P, Arslan Y, Aydın O. Assessing the Predictor Roles of Mindfulness and Spiritual Intelligence for Depressive and Anxiety Symptoms. *Spiritual Psychology and Counseling*. 2020; 5: 273–285. <https://doi.org/10.37898/spc.2020.5.3.103>
- Parkinson TD, Smith SD. A cross-sectional analysis of yoga experience on variables associated with psychological well-being. *Frontiers in Psychology*. 2023; 13: 999130. <https://doi.org/10.3389/fpsyg.2022.999130>
- Pinto CT, Guedes L, Pinto S, Nunes R. Spiritual intelligence: a scoping review on the gateway to mental health. *Global Health Action*. 2024; 17: 2362310. <https://doi.org/10.1080/16549716.2024.2362310>
- Saini G, Seema. Ramification of mindfulness, subjective vitality on spiritual intelligence and impeding effect of stress in professionals during Covid-19. *Journal of Statistics and Management Systems*. 2021; 24: 193–208. <https://doi.org/10.1080/09720510.2020.1833451>
- Salmasbadi M, Khamesan A, Usefinezhad A, Shekhipoor M. The mediating role of spiritual intelligent in relationship of mindfulness and resilience. *Health, Spirituality and Medical Ethics*. 2016; 3: 18–24.
- Sedighi F, Khoshkhatti N. Investigating the Correlation between Spiritual Intelligence and Self-Compassion with the Mediation of Social Adjustment in Divorced Women. *Women’s Health Bulletin*. 2025; 12: 109–118. <https://doi.org/10.30476/whb.2025.104630.1324>
- Shapiro S, Siegel R, Neff KD. Paradoxes of mindfulness. *Mindfulness*. 2018; 9: 1693–1701. <https://doi.org/10.1007/s12671-018-0957-5>
- Singh D, Gupta K. Spiritual intelligence and mindfulness as predictors of life satisfaction among youth of Jammu and

- Kashmir. *International Journal of Applied Research*. 2021; 7: 252–255. <https://www.doi.org/10.22271/allresearch.2021.v7.i7d.8772>
- Sumantry D, Stewart KE. Meditation, Mindfulness, and Attention: a Meta-analysis. *Mindfulness*. 2021; 12: 1332–1349. <https://doi.org/10.1007/s12671-021-01593-w>
- Van Dam NT, van Vugt MK, Vago DR, Schmalzl L, Saron CD, Olendzki A, et al. Mind the Hype: A Critical Evaluation and Prescriptive Agenda for Research on Mindfulness and Meditation. *Perspectives on Psychological Science : a Journal of the Association for Psychological Science*. 2018; 13: 36–61. <https://doi.org/10.1177/1745691617709589>
- Varghese PJ, Sharma SS. Depression Among Adolescents in Relation to Spiritual Intelligence and Mindfulness. *MIER Journal of Educational Studies Trends & Practices*. 2021; 72–81. [https://doi.org/10.52634/mier/2021/v11/i1\(a\)spl/1778](https://doi.org/10.52634/mier/2021/v11/i1(a)spl/1778)