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Research Article

## Adaptation of the Employee Spirituality Scale into Turkish: A Study on Healthcare Workers

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## Abstract

This study aimed to adapt the Employee Spirituality Scale to Turkish culture for healthcare professionals. A total of 230 healthcare workers participated in the adaptation of the scale, which comprises 24 items. The research data were collected face-to-face with a questionnaire that included demographic characteristics, the Employee Spirituality Scale, and the Spiritual Orientation Scale, Construct validity was analyzed using exploratory and confirmatory factor analyses. The two-factor structure of the Employee Spirituality Scale was confirmed in the Turkish sample and showed acceptable fit values. Because of CFA, 2 items were removed from the scale because they did not fit. For criterion validity, the Pearson Correlation Coefficient between the scale and the Spiritual Orientation Scale was calculated, and a significant positive result was obtained. This study demonstrated that the Turkish version of the Employee Spirituality Scale is a valid and reliable measurement tool for health care workers to assess the various dimensions of human spirituality that give individuals a sense of guidance, facilitate finding meaning and purpose in one's tasks, enable them to overcome their weaknesses and limitations in the workplace, and assess various dimensions of human spirituality as a relationship with a higher power.

## Keywords:

Scale adaptation • Health worker • Spirituality • Reliability • Validity

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## Introduction

A human being is an entity with biological, psychological, social, and spiritual dimensions. There is a constant interaction between the individual's biological and psychosocial needs. Therefore, physical problems may cause pathological changes in other areas. Likewise, effects in the emotional and spiritual spheres can cause pathological problems. Therefore, in the field of health, evaluating patients using only a medical approach may not be sufficient for understanding the disease. It is emphasized that the physical, social, emotional, economic, cultural, and spiritual aspects of the individual should be addressed with a holistic approach (Boztilki & Ardıc, 2017; Korkut Bayındır & Biçer, 2019).

Spirituality can be considered a sense of meaning and purpose in life (Ramaswamy et al., 2023). According to Canda et al. (2004), it is also possible to characterize it as people's relationships and beliefs with the universe/creator, themselves, others, and nature. Discovering the meaning and purpose of life and believing in a higher power than oneself enables people to be resilient and hopeful against difficulties and hardships. Being hopeful is everyone's spiritual need, and everyone's faith, albeit with different values, will be a guide in the context of hope and meaning (Aydın, 2009; Macit & Karaman, 2019). Spirituality is also a transcendent power that gives meaning to people's lives and helps them form their beliefs and values (Uzelli Yılmaz et al., 2019).

A relationship with a higher power or God that offers direction makes finding meaning and purpose in one's work easier. It enables one to overcome obstacles and limits at work, referred to as employee spirituality. This relationship serves as a matrix for the development of attitudes for believers who care about the interests of the employer, an absence of a desire for revenge in the event of harm, and a matrix for bonding with colleagues and the organization. This relationship may be the source of a nonreligious person's good attitude toward their co-workers and other secular ideals assimilated during the course of their personal growth, primary or secondary socialization, or later phases of individual formation (Wnuk, 2022).

The importance of measuring spirituality in Turkey has begun to be recognized recently. When the literature is examined, some scales related to spirituality aim to determine the spiritual support perceptions of healthcare professionals (Kavas & Kavas, 2014), to evaluate the spiritual orientations of individuals (Kasapoğlu, 2016), and to determine the process of understanding and living their lives (Ekşi & Kardaş, 2017). There are also scales that focus more on the field of care, such as spiritual caregiving (İpek Çoban et al., 2017) and spiritual care competence (Daghan et al., 2019). However, no spirituality scale focuses on employee spirituality, and no spirituality scale has been adopted for healthcare professionals. For many people, spirituality is a force that helps them find meaning despite illness and death.

Spirituality is important not only for patients but also for healthcare professionals (Dalle Ave & Sulmasy, 2021).

It is undoubtedly a challenging process for healthcare professionals to provide care to patients. Caring for others' physical and mental health directly or indirectly affects caregivers. Constant exposure to anxiety-inducing situations such as illness, pain, injury, and death can cause mental disorders such as stress and burnout in employees (Kuchinka, 2021). The consequences of burnout can directly affect mental, physical, and behavioural health and cause a significant decrease in quality of life, inadequate care provided to patients, and decreased performance of healthcare professionals. Spirituality is a necessary and effective method for dealing with challenging problems (De Diego-Cordero et al., 2022).

Illness experience is among the challenging situations in life. Health professionals have important roles in helping individuals cope with this difficult experience and supporting them. In this respect, healthcare professionals must gain awareness about spirituality to provide support to individuals (Hiçdurmaz & Öz, 2013).

Since healthcare professionals have to deal with the workload, constant illness, and pain, long working hours, and emotionally challenging situations, it is critical for them to maintain their spiritual and emotional health. In this context, using the employee spirituality scale with healthcare professionals is valuable for understanding their spiritual needs and providing support for these needs. This scale allows healthcare institutions to better understand the spiritual needs of their employees and develop programs to address these needs, thereby increasing the well-being of both employees and patients. In light of all this information, the aim of this study was to adapt the Employee Spirituality Scale by Wnuk (2022) into Turkish for healthcare professionals and to evaluate its psychometric properties.

## Method

## **Participants**

The study population consisted of healthcare professionals working in Mardin Training and Research Hospital and Kızıltepe State Hospital between 05.12.2023 and 15.12.2023. The study sample consisted of 230 healthcare professionals who volunteered to participate. In scale adaptation studies, the sample size should be between 2 and 10 times the number of scale items (Kline, 1994). In this study, the number of scale items was 24, and we aimed to reach 240 people, which is 10 times the number of items. Due to voluntary participation and complete completion of the scales, 230 healthcare workers were included in the study.

 Table 1

 Socio-demographic Characteristics of Participants

Socio-demographic Characteristics	Variables	N	%
Gender	Male	144	62,6
	Woman	86	37,4
Education	Health Vocational High School	19	8,3
	Associate Degree	30	13,0
	Bachelor's degree	148	64,3
	Postgraduate	33	14,3
Marital Status	Married	115	50,0
	Single	115	50,0
Profession	Doctor	43	18,7
	Nursing	76	33,0
	Midwife	46	20,0
	Laboratory Technician	33	14,3
	X-ray Technician	32	13,9
Work Experience	1-5 years	114	49,6
	6-10 years	66	28,6
	11-15 years	33	14,3
	16-20 years	13	5,6
	20+	4	1,9
	Total	230	100%

The socio-demographic characteristics of the health workers are presented in Table 1. Of the participants, 144 were male (62.6%) and 86 were female (37.4%). The average age of the participants was 30.80 years. Of the sample group, 50% were single, 64.3% graduated from a university, 33% were nurses, and 20% were midwives, and the average time spent in the profession was 6.86 years.

## Measures

**Socio-Demographic Information Form.** Personal and professional questions, such as gender, marital status, age, education level, occupation, and seniority, were asked to determine the demographic characteristics of the participants.

**Employee Spirituality Scale (ESS).** The ESS developed by Wnuk (2022) is a scale designed to measure the spirituality of employees in Polish companies. The 24-item scale has two factors: "Relationship to Higher Power (God)" and 'Attitude towards Workmates and Employer'. Each question was rated on a 5-point Likert scale. The scale had a maximum score of 120 and a minimum score of 24. The internal consistency reliability factor (Cronbach's alpha) for the entire scale was .94, the "Relationship to Higher Power (God)" subscale was .98, and the "Attitude towards Workmates and Employer" subscale was .91.

The Spiritual Orientation Scale (SOS). The sixteen-item measure was created by Kasapoğlu (2016) to evaluate people's spiritual orientation. The scale prepared as

a single factor can explain 47.59% of the total variation. The items were ranked on a 1-7 scale from "strongly disagree" to "strongly agree". Cronbach's reliability alpha for the original scale was calculated as .84. The internal consistency coefficient in this study was 97.

## **Process**

First, Marcin Wnuk provided adaption permission for the translation of the ESS into Turkish via email. For the language validity of the scale, three academics and two English teachers who speak Turkish and English fluently translated the English form into Turkish. Three experts who are fluent in both Turkish and English conducted interviews to limit the forms of the scales that the experts translated into Turkish to a format. Two proficient English-speaking specialists were handed the Turkish form, which they translated back into English. Following this translation, it was noted that the scale's Turkish translation closely resembled its original English counterpart. Next, the scale's final application form was made. After the creation of the scale, the data collection phase started after obtaining permission from the Mardin Non-Interventional Ethics Committee and institutional permissions. The researchers visited the hospital, where the volunteers worked in person to get the data. The participants were apprised of the study's objectives and scope, methodology, and the inclusion of an informed consent form in the questionnaire during the data collection phase. The administration of all forms took approximately 10-15 minutes.

Turkish versions of ESS and SOS were administered to the participants to examine the psychometric properties. First, the construct validity of the scale was examined using Exploratory Factor Analysis (EFA).

Confirmatory Factor Analysis (CFA) was then used to verify whether the obtained construct was valid or not. Moreover, the validity of comparable criterion validity values was investigated. Cronbach's alpha coefficient was examined for reliability. In addition, the lower 27% and upper 27% groups were formed according to the total test scores. SPSS and AMOS software were used for data analysis.

## **Findings**

## **Construct Validity**

In the study on the construct validity of the scale, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were utilized. The EFA results indicated a Kaiser-Meyer-Olkin (KMO) value of .94, and Bartlett's test  $\chi^2$  value was 5959.252 (p< .001). These results suggest that the outcomes of the KMO and Bartlett's test are significant. Consequently, we conclude that the dataset is suitable for EFA.

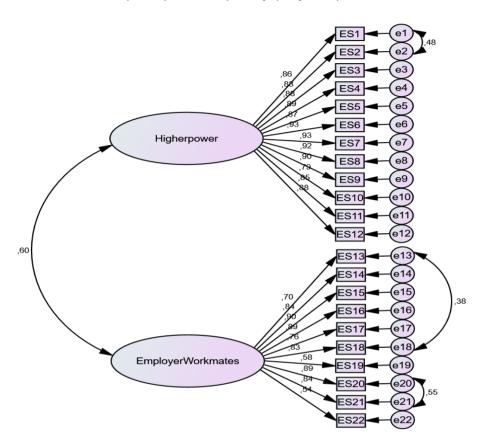
It was ensured that the factor loadings of the items should be at least .30, and the difference between items with sufficient loadings on two different factors should be .10 and above. In the context of the specified criteria, 24 items and two dimensions were formed in the factor analysis process. The total variance explained by the scale was 69.37%. The factor loadings of the items ranged from .32 to .96.

CFA was performed to determine if the Turkish ESS version adheres to the original scale's structure. Accordingly, the degrees of freedom of the chi-square value ( $\chi$ 2/df), goodness-of-fit index (GFI), normed fit index (NFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA) were calculated. Table 2 presents the fit indices for ESS.

**Table 2**Fit Indices for the ESS

Observed Fit Indices	Fit Indices Obtained for ESS	Compliance Indices of the Modified ESS Version
χ2/df	3.616	3.00
GFI	0.755	0.81
NFI	0.854	0.90
IFI	0.890	0.93
CFI	0.889	0.93
RMSEA	0,107	0.09

The 22-item Confirmatory Factor Analysis results are presented in Figure 1. As a result of CFA, 2 items (items 23 and 24) were removed from the scale because they did not fit. Procedures were carried out between ES1 and ES2, ES13 and ES18, and ES20 and ES21 within the scope of modification suggestions, and it was determined that they gave acceptable fits (Schermelleh-Engel et al., 2003). The most important reason for item covariance is the semantic overlap of the items. Both items "I believe that my Higher Power (for example, God) influences the course of my professional career" (ES1) and "My Higher Power (for example, God) has an influence on the choices I make at work" (ES2) focuses on the effects of one's spiritual beliefs in one's work life. The items "I am convinced that every employee deserves respect regardless of his or her duties" (ES13) and "I have respect for every employee, regardless of the position he or she holds" (ES18) both express the belief that any employee should be respected regardless of the nature of their job. The high covariance between these items indicates that they both share basically the same value and belief. The covariance between the items "I am understanding towards my workmates" (ES20) and "I am able to notice and appreciate other employees' effort' (ES21) indicates that the items reflect a common theme of social relations and work culture in the workplace.



**Figure 1.**Modified two-factor model of the Employee Spirituality Scale

## **Criterion Validity**

Validity based on the ESS criterion was examined by calculating Pearson correlations with the Turkish version of the SOS. Significant and positive correlations were found between the ESS and the SOS (r=.704, p<.01). Significant and positive correlations were also found between the sub-dimensions of the ESS (Relationship to Higher Power (God): r=.734, p<.01 and Attitude towards Workmates and Employer: r=.487, p<.01).

## Item Analysis

To evaluate item discrimination in the ESS, a comparison between the top 27% and bottom 27% groups was examined. The independent sample test was calculated to determine the mean difference in item scores between the upper 27% and lower 27% groups. As a result of the analysis, there was a significant difference between the total scores and the lower 27% and upper 27% groups (p<0.05). In another sense, the total score of the scale distinguished individuals into lower and upper groups.

## **Reliability Study**

Within the scope of the reliability study of the ESS, Cronbach's alpha internal consistency coefficient was calculated. The scale's Cronbach's alpha coefficient in this investigation was determined to be .97 (Relationship to Higher Power (God) .98, Attitude towards Workmates and Employer .94). Accordingly, it can be concluded that the reliability of the adapted scale was excellent (De Vellis, 2014).

## Discussion

In this study, reliability and validity studies were conducted to adapt the Employee Spirituality Scale, originally developed by Wnuk (2022), to Turkish healthcare professionals. Although various measurement tools can be used in the field of spirituality in Turkey (Çoban et al., 2017; Kasapoğlu, 2015; Kavas & Kavas, 2014), it is important to adapt a tool that will both determine employee spirituality and measure the spirituality of healthcare professionals.

From a human resource management perspective, spirituality enhances well-being in the workplace. Spirituality aids workers in finding the meaning and purpose of their work from a philosophical standpoint. It also helps workers build a feeling of community and connection with co-workers from an interpersonal one (Wnuk, 2022). In this respect, the adapted scale has a structure that can be used by Turkey's employees and managers. In addition, this tool can also assess healthcare workers' relationships with their work life and higher power to monitor their spiritual activities.

Exploratory and confirmatory factor analyses were conducted to examine the construct validity of the ESS. It can be concluded that the ESS has acceptable fit indices (Engel et al., 2003), and the original two-factor structure of the scale was confirmed. When the criterion validity was examined, the relationship between ESS and SOS was found to be significantly positive. In addition, item-total correlations of the lower and upper 27 percentiles were examined in the analysis of the items in the ESS. For the reliability analysis of the scale, Cronbach's alpha was calculated as .97, which is very similar to that of the original study ( $\alpha = .94$ ). Accordingly, it can be concluded that the reliability of the adapted scale was excellent (DeVellis, 2014).

In conclusion, the Employee Spirituality Scale is a two-dimensional scale consisting of 22 items and is a valid and reliable tool for healthcare professionals in the Turkish context. Studies have demonstrated that developing personal spirituality for healthcare workers has benefits for both themselves and the patients they care for (Boero et al., 2005; Ross et al., 2016). However, since spirituality is an abstract concept, it can be difficult to measure. This scale will help determine how much importance healthcare professionals attach to their spirituality, how they give meaning to spirituality, and what role spirituality plays in their lives. Using

the employee spirituality scale with healthcare professionals is an important tool to help them become healthy and balanced in their professional and personal lives. This scale can improve the overall well-being of both employees and patients by allowing healthcare institutions to better understand the spiritual needs of their employees and develop programs to address these needs. It is believed that academics, healthcare professionals, and managers working in the fields of health and spirituality can benefit from this scale.

## Limitations and Recommendations

This study has several limitations, including its cross-sectional design. Another limitation is that reliability and validity studies were not conducted. The lack of a linguistic equivalence study was also a limitation. To increase the generalizability and consistency of the findings, more diverse groups can participate in further validity and reliability studies, such as test-retest reliability or convergent-divergent validity.

This study was adapted for healthcare professionals. Future studies can be evaluated among workers in different fields and cultural contexts. In addition, the relationship between the EES scores and the scores of different scales was examined.

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*Ethical approval.* The study was approved by the Mardin Artuklu University Non-Interventional Ethics Committee (Approval no: 2023/12-37). This study conforms to the ethical guidelines of the 1975 Declaration of Helsinki.

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Research Article

# Touching the Loss and Creating a New Sense of Being in Clay Field Therapy: A Longitudinal Phenomenological Research

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## Abstract

Clay Field Therapy is a trauma-informed Sensorimotor Art Therapy rooted in haptic perception. It emphasizes the tactile relationship between the individual's hands and materials, providing a non-verbal avenue for deep therapeutic processing. The combination of three fundamental materials creates Clay Field: a rectangular wooden box filled with smooth clay and warm water. This longitudinal phenomenological study aims to examine the experiences of individuals undergoing Clay Field Therapy to process complex grief. The participant group consists of four women, aged between 30 and 45, who sought Clay Field Therapy due to their unique experiences of loss and grief. Data was collected through participant-led, in-depth, process-oriented, and semi-structured interviews conducted after the first and twelfth Clay Field sessions of each participant. Longitudinal Interpretative Phenomenological Analysis was employed to explore in detail how participants attributed meaning to their experiences, changes, and transformations during Clay Field Therapy. Four superordinate themes emerged from the analysis of data: beyond words, from nothingness towards existence, from tangible experiences towards a transformative spiritual experience, and a comprehensive sense of being. Clay Field Therapy facilitates not only the resolution of the grief process but also enables profound existential work and spiritual growth. This process, in which individuals reconstruct the meaning of life through their tactile encounters in the Clay Field, has been conceptualized as "Embodied Reflection."

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Longitudinal interpretative phenomenological analysis • Clay Field Therapy • Complicated grief • Sensorimotor Art Therapy • Expressive Art Therapy • Haptic perception • Embodiment • Embodied reflection.

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## Introduction

Clay Field Therapy was founded by Heinz Deuser fifty years ago and has continued to evolve since then. It encompasses a multidimensional perspective that integrates ancient and traditional resources, phenomenological philosophy, and modern psychology and neuroscience (Başoğlu Yavuz, 2023; Elbrecht, 2012, 2018). While drawing from a variety of theoretical frameworks, including Gestalt, analytic, object relations theories, and developmental psychology, Clay Field Therapy is not merely a therapeutic technique that combines various theories; rather, it is a unique psychotherapeutic approach centered on touch and haptic perception. Clay Field is a trauma-informed sensorimotor art therapy that has become increasingly widespread in application with both adults and children, particularly in Europe and Australia.

The Clay Field consists of a combination of three materials, which distinguishes it from clay therapy: a rectangular wooden box measuring 36 x 42 x 3 cm, approximately 15 kg of clay that completely fills the wooden box, and warm water in a large oval bowl. While the use of these materials may exhibit variability on a case-by-case basis and across different sessions, these three primary materials are essential components (Başoğlu Yavuz, 2023; Elbrecht, 2012, 2018; Elbrecht & Antcliff, 2014).

The clay, or earth, serves as an ancient repository of meanings that vary according to culture and beliefs but generally presents a sacred significance. Prior to monotheistic religions, it has been represented as the "mother earth" and a layer housing the afterlife or the demonic within (Jütte, 2008; Van De Castle, 1994). From the Old Testament to the Quran, it holds a creationist role, as humanity was formed from the earth and would return to it. Clay has been employed in a variety of cultures as a medium for spiritual or healing purposes, as well as in certain societies for divination, the creation of charms, and magical practices (Henley, 2002; Hinz, 2009; Sherwood, 2004; Sholt, Gavron, & Israel, 2006; Van De Castle, 1994). Since ancient times, humans have externalized their inner worlds and deities through sculptures, reliefs, and totems, immortalizing their memories and significant figures through monuments (Grant, 2017; Krauss, 2021).

Clay possesses distinct characteristics, including volume, texture, scent, and weight, which can transform when it interacts with elements such as water and air. When individuals engage with clay, it can respond by warming, softening, hardening, taking various forms, being held, squeezed, molded, grasped, embraced, or preserved. Clay is, therefore, regarded as one of the most suitable materials for art therapy, particularly in facilitating inter-relational experiences (Henley, 1991, 2002).

Clay Field Therapy cannot be conducted without the wooden box. The significance attributed to the box is unique to an individual's tactile relationship. For instance, the box can serve as a place, a ground, inner space, boundaries, the world, and so on.

In Clay Field Therapy, water is considered the opposite of clay and perceived as a balancing material due to water's soft, transparent, calming, sensory-stimulating, fluid, and purifying qualities. Although warm water is primarily preferred in Clay Field Therapy, its temperature can be adjusted according to the individuals' needs (Başoğlu Yavuz, 2023; Elbrecht, 2012, 2018).

Clay Field Therapy is also a form of expressive art therapy approach; however, it differs by focusing on the process of hands and haptic perception. In other words, expressive art therapies are typically characterized by an emphasis on what hands create and the symbolic outcomes of the process. In contrast, the focus of Clay Field Therapy does not center on the creation of a particular object. Instead, it is concerned with how the hands engage with the materials, the process of tactile relationship with the materials, and the sensory-perceptual encounter of the skin (Başoğlu Yavuz, 2023; Elbrecht, 2012, 2018).

## Spiritual and Psychological Aspects of the Hands and Haptic Perception

Throughout history, hands have held a prominent place in traditional medicine, art, philosophy, and theology (Ben Ayed, 2014; Fulkerson, 2011; Merleau-Ponty, 1979; Nancy, 2020; Josipovici, 1997; Jütte, 2008; Segal, N. 2009). In ancient Vedic texts, Chinese medicine, and Ayurveda, the skin and hands have been regarded as a map representing other bodily systems, indicators of health or illness, and reflections of one's state of mind, serving as pathways to healing. The earliest systematic use of hand gestures can be traced back to Egyptian hieroglyphs and the Mudras found in Asian paintings and sculptures, as well as the epics of Mahabharata and Bhagavad Gita (Easwaran, 2007; Rajagopalachari, 2018). The word "Mudra" refers to hand gestures that convey various meanings, intentions, and spiritual messages. Derived from Sanskrit, the term Mudra embodies notions of happiness, vitality, joy, and caring (Bhattacharyya, 1958). The specific positioning and contact of the palm and fingers also signify the sensory-perceptual dimension of Mudra. Mudras not only serve as a non-verbal form of communication or self-expression beyond words but also reflect inner contemplations. The iconography of hand gestures, from Ancient Greece to Rome and continuing into today's Christianity and Islam, possesses a universal characteristic that may exhibit similarities or differences depending on geography, history, and culture (Van Straten, 2007).

According to Husserl (2000), the founder of phenomenological philosophy and psychology, the skin provides a distinct phenomenological space through the *double sensation* quality of touch, as touching implies being touched. Merleau-Ponty (1979), one of the most influential existentialists in phenomenological psychology, asserted that the exploration of the invisible and the unveiling of the implicit universe can only be achieved through tactile or haptic experiences, thus "the skin is Existence" (p. 182).

In the embryo, the sense of touch begins to develop much earlier than all other senses, starting at approximately the ninth week (Hepper, 2008). The skin is the most sensitive and largest organ that entirely envelops the body from the inside out. It provides a space for other organs and delineates boundaries, engaging in a relationship with the external world. (Andersen & Guerrero, 2008; Anzieu, 2016; Fulkerson, 2011; Hepper, 2008; Hsiao & Yau, 2008). Haptic perception encompasses tactile sensation, kinesthetic sensation, and proprioception (Andersen & Guerrero, 2008; Hepper, 2008; Overliet et al., 2008). In other words, haptic perception involves the skin, the musculoskeletal system, joints, connective tissues, and the vestibular system, contributing to functions related to movement, balance, body awareness, and pain sensation. Haptic perception, therefore, serves as the foundational sensory framework for investigating various facets of human existence, including the experiences of space and time, inter-subjectivity, and one's positioning within the world.

A baby's sense of attachment and trust can primarily be internalized through skin contact and tactile relationships. Psychoanalytic, especially object relations theory, identifies the skin with the preverbal structure and emphasizes the crucial role of touch in the first representations of self and others (Anzieu, 2016; Bion, 2014, 2020; Klein, 1997; Segal, 2009). The experience of love, violence, intimacy, and sexuality is primarily facilitated through touch, not only in the preverbal period but also in subsequent stages of life. The communication of these emotions and desires continues to be expressed through gestures and body language. The skin, thereby, is considered a social, relational, and emotional organ and a psychological system in its own right (Wilson, 1998).

In Clay Field Therapy, the clients are encouraged to follow their hands and to reflect on their bodily sensations. The role of the therapist is to be able to read the hands and to offer a conscious gaze to the client rather than an instructor who determines what they need to do. Thus, the therapists accompany along the journey, where individuals working in the Clay Field can safely engage in their experiential discoveries. When working with adults, the clients are invited to close their eyes in order to facilitate an in-depth exploration guided by the senses, impulses, needs, and intuitions rather than conscious conditionings (Basoğlu Yavuz, 2023; Elbrecht, 2012).

## Complicated Grief and Loss as a Psychological and Spiritual Phenomenon

Complicated grief is a phenomenon observed in 10-20% of individuals and is often associated with traumatic loss such as multiple losses, witnessing a difficult dying process, unresolved grief from prior losses, lack of support systems, or lack of faith (Caroff, 2002; Enez, 2018; Shear et al., 2013; Pies, 2012). It can manifest in various forms, such as prolonged grief reactions that persist over extended periods, individuals who suppress and delay their intense grief response to avoid the pain of

loss, or those who are unaware of the patterns that disrupt their lives as a result of their loss (Baker, 2021; Caroff, 2002; Enez, 2018; Shear et al., 2013; Pies, 2012).

Freud (1957) posited that individuals suffer from grieving due to their internal attachment to the persons that they have lost and that the aim of mourning is to be detached from them. As a consequence of the grief process, the ego can eventually be liberated from its previous attachments and becomes capable of forming new attachments with living individuals (Baker, 2021; Freud, 1957). On the other hand, existentialists perceive death and grief as much broader and deeper concepts than ego functions or narcissistic injury. Therefore, death and loss are one of the main issues of existential analysis. (May, 1994).

Heidegger (2001) delineates human existence as being "thrown" into the world and questions the place of death in the experience of anxiety and other emotions. He argues that if we disregard death, our reflection upon life will remain superficial and incomplete (Heidegger, 2001). He asserts that the reality of death introduces a dimension of temporality to existence in the world. Despite the relational nature of life, death confronts individuals with the experience of loneliness. The temporal boundaries of an individual's existence, along with those of their immediate environment, are inherently finite. The duration of this temporal period is not subject to individual prediction. Sartre (1943) argues that in the inter-subjective world, *Being* cannot be considered independently of *Nothingness*. He contends that individuals' perceptions of the world are shaped by the presence or absence of others, given that the world does not belong to the individual. Therefore, lost objects are as significant as present ones (Sartre, 1943, 1966).

For existential analysts, anxiety does not arise from the conflict of drives as suggested by psychoanalysis, but rather from the inevitability of death, creating a sense of despair and existential conflicts. According to Rollo May (1994), this anxiety is the fundamental source of human creativity. The finitude of life, the constraints of time, and loss can enable individuals to view life from a broader perspective, moving beyond their personal narratives. Death and loss can also initiate the search for meaning and provide individuals with a source for living a meaningful life (May 1994).

Jungian analysts also agree with existential analysts that Freud's theories on mourning provide only a partial understanding of loss. Jung (1999) proposes that when individuals face loss, the unconscious may facilitate new adaptations, leading to the emergence of a transcendent function. He suggests that grief holds the potential to transcend ordinary experiences and awaken individuals to their spiritual essence rather than merely being a source of emotional distress or trauma. For Jungian analysts, the mystery surrounding death presents an opportunity for individuals to delve into spiritual realms, and embracing grief can lead to soul growth (Jung, 1999).

Recent studies also demonstrate that the individuals' spiritual experiences facilitate them to cope with their loss (Biancalani et al., 2022; Doka, 2002).

## **Study Aim**

The study presented here is formulated based on the following considerations. There is a considerable body of study on the use of art and expressive therapies for grief processing and on the spiritual dimensions of art therapy (Kırca, 2019); however, few of them present research that offers a detailed examination of the process. It is also important to remember that art psychotherapies and expressive therapies represent an umbrella of various modalities, and Clay Field Therapy is a sensorimotor art therapy with its unique system and structure (Başoğlu Yavuz, 2023; Elbrecht, 2012). Again, although there are numerous philosophical, spiritual, and psychological sources emphasizing the importance of skin, touch, and haptic perception, studies directly addressing these as therapeutic phenomena are quite limited. Hence, this paper may be the first longitudinal phenomenological research on grief processing in Clay Field Therapy and one of the first studies to investigate in detail the haptic and tactile experiences as spiritual and existential phenomena in psychotherapy.

This study presents an in-depth analysis of the experiences of individuals undergoing Clay Field Therapy due to specific losses. The research presented here aims to answer questions about how individuals attribute meaning to their experiences in Clay Field Therapy, what changes occur during the process, how these changes manifest, and what are the underlying causes of these changes within the context of the spanning time and experiential encounters within Clay Field Therapy. It employs Longitudinal Interpretative Phenomenological Analysis (LIPA) to elucidate the nuances of the Clay Field Therapy process, prioritizing individuals' own reflections on their experiences and *bracketing* any theoretical constructs or preconceptions.

## Method

Interpretative Phenomenological Analysis (IPA) is focused on individuals' subjective experiences and is built upon three core principles: phenomenology, idiography, and hermeneutics (Smith, 2004). It suggests that individuals are meaning-making, self-interpretative, and inter-subjective beings, so an IPA researcher is dedicated to the detailed and in-depth examination of the first-hand experience (Smith, 2004; Smith et al., 2009). IPA also requires bracketing from the theories or prior knowledge about the phenomenon and researchers' self-reflection on their preconceptions (Cooper et al., 2012; Smith, 2004; Smith et al., 2009). Thus, the study begins with a comprehensive research question rather than positing a hypothesis.

IPA incorporates double hermeneutics, indicating a dynamic interplay between researchers interpreting participants and participants interpreting their own experiences.

In IPA studies, data is collected through semi-structural or non-structural interviews and idiographic inquiry. The idiographic inquiry focuses on experiential narratives as well as the existential concerns of the participants. IPA is a highly recommended method, especially for the examination of new and complex phenomena in psychology, and it is the most widely used qualitative research method in current clinical psychology and psychotherapy studies (Smith, 2004, 2011; Smith et al., 2009).

Longitudinal Interpretative Phenomenological Analysis (LIPA) is employed in studies that investigate how an experience undergoes changes and transformations over a specific period. LIPA adheres to the fundamental principles of IPA. On the other hand, it places a particular emphasis on the hermeneutic principle, the evolving nature of interpretation within time and context (McCoy, 2017). It, therefore, differs from IPA in certain aspects, including data collection and analysis. In the domain of clinical psychology research, the IPA suggests a sample size of three to eight participants. However, for longitudinal studies, a smaller number of participants is recommended to allow for the examination of detailed aspects of the process. (McCoy, 2017; Smith, 2011; Smith et al., 2009; Thomson & McLeod, 2015). In LIPA studies, data is gathered through two or more interviews, providing access to both prospective and retrospective accounts of experience (McCoy, 2017). Besides, data analysis involves a more extensive process compared to IPA since it necessitates comparisons not only between cases but also within each case. The research presented here has been designed with the consideration for quality and validity assessments associated with LIPA (Farr & Nizza, 2019; Farr et al., 2021; Smith, 2011; Thomson & McLeod, 2015).

## **Study Population**

Five Clay Field Therapy clients were recruited for this study. Participation was voluntary, and participants were free to withdraw at any point during the course of the research. The study presented here was conducted with four participants, as one participant dropped out. All participants were females from the middle socioeconomic class, and they were working at the time the study took place. The age range was 30 to 45 years old (Table 1).

**Table 1**Demographic Information of the Participants

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Participant'	's Sex	Age	Type of Loss
Pseudonym	1		
Deniz	Female	30	Mother's death due to a medical condition.
Elif	Female	36	Death of most relatives due to an earthquake.
Esra	Female	40	Father's death in an accident.
Sena	Female	45	First, the mother's death following a prolonged severe illness.
			Later, the father's unexpected death due to a medical condition.

The participants were selected for their unique inner turmoil stemming from a specific loss experience and complicated grief, and they were in Clay Field Therapy to

address these issues. They represent individual cases of creative psychotherapy process that operates through skin sense and haptic perception. All of them had a history of talk therapy. However, none of them had any previous Clay Field Therapy experience.

Two participants (Deniz and Sena) initiated Clay Field Therapy after more than fifteen years of experiencing the loss, while the other two participants (Elif and Esra) began therapy within the first one and a half years following their respective losses. All identifying information was altered, and pseudonyms were used to protect participants' confidentiality.

## **Data Collection Tools**

Following the principles of qualitative studies, data were collected by semistructured, one-to-one, and participant-led interviews with open-ended and neutral questions. Prior to commencing the interviews, a schedule containing topics relevant to the research question was prepared (Table 2).

Table 2
The Interview Schedule

Key Questions	Prompts
What brought you to Clay Field Therapy?	-How has the loss you experienced affected you? -What were your expectations from Clay Field Therapy?
Can you tell me about your experience in the Clay Field?	-What did you feel when you first touched the Clay Field? -What did you experience during the first session? -What did you experience during the last session?
How do you evaluate the process you went through in the Clay Field?	-How do you interpret what you experienced? -What do you recall about your touches during your time in the Clay Field? -How did this contact/ touch make you feel? -What does this movement mean to you?
What stands out to you when you reflect on your sense of self, life, or perception before and after Clay Field Therapy?	-How/why do you think these transformations occurred? -What do these transformations mean to you?

Being different from a structured questionnaire, the interview schedule was used as a guide for the interviewer to engage in an in-depth dialogue with the participants so that the questions were modified according to the participants' authentic language and personal experiences. All interviews were recorded by a voice recorder, with the permission of the participants.

## **Procedure**

This study was conducted following the ethical approval from Istanbul Galata University Ethical Committee, Turkey (Approval Date: 22<sup>nd</sup> of October, 2024 Approval Number: E-77300296-050.04-13149) and was adhered to the tenets of the Declaration of Helsinki and the ethical considerations in qualitative research (Cieurzo & Keitel, 1999). The researcher explained to the participant that the aim of

this research was to encourage the participants to speak in their own voice and witness their unique experience of grief processing in Clay Field Therapy. The participants have also been informed that both the records and transcripts will be permitted for use solely by the researcher, who will be responsible for preserving their anonymity in every aspect. The researcher clearly indicated that the participants had all the rights to retrieve their consent, with no explanations needed. The interviews commenced after participants read and signed detailed information written in the consent form.

The timing and frequency of data collection were planned according to the methodological recommendations of LIPA (Farr & Nizza, 2019; Farr et al., 2021; McCoy, 2017). The first interview took place following the participants' first Clay Field Therapy session, while the second interview was conducted after the participants' twelfth Clay Field Therapy session. The rationale was to facilitate the participants in recounting their experiences within both the first and twelfth sessions, as well as between sessions. This also aims to open up space for participants to reflect on the changes and transformations that they undergo during the process and to engage in both retrospective and prospective interpretations.

Taking into account the requirements of qualitative studies (Cieurzo & Keitel, 1999; Cooper et al., 2012), the choice of the location for the interviews was left to the participants' preferences, and the interviews proceeded in the office where Clay Field Therapy took place. The audio recordings were transcribed by the researcher in the original language, Turkish, and served as raw data for the analysis.

## Analysis

Data analysis proceeded following the six stages recommended for IPA and LIPA (Farr & Nizza, 2019; Farr et al., 2021; Smith, 2004, 2011; Smith et al., 2009). The researcher continued to take reflection notes throughout the entire process, including before, during, and after the interviews and analysis. It is important to note that each participant's recounting was analyzed individually. In other words, the analysis of the second, third, and fourth cases commenced after completing the analysis of the previous case.

The first stage of data analysis involved reading and re-reading the transcript. The initial readings were performed with the aid of audio recordings to develop familiarity with the text and check the accuracy of the transcripts. Meanwhile, the researcher recorded initial impressions and comments in the research journal. Subsequent readings continued with the line-by-line analysis of the transcript, where the researcher marked descriptive, linguistic, and conceptual comments on the text. Once the analysis of the participant's first interview was completed, the researcher moved on to the second interview and repeated the same steps. The initial themes,

reflecting the participant's unique process, emerged through the identification of interrelated concepts between the two texts.

After analyzing the first participant's data, the same procedure was applied to the others. Finally, a comparative analysis of the individual findings was conducted with sensitivity to the divergence and convergence between cases. Through the abstraction of themes that were common and relevant across all participants, the superordinate and subordinate themes emerged.

## **Findings**

- 1. Beyond words:
  - Words don't come easy
  - Skin speaks more than words
- 2. From nothingness towards existence:
  - Touching the nothingness
  - · Holding loved-ones and being touched
- 3. From tangible experience to a transformative spiritual experience:
  - · Intuitive destruction and recreation
  - A transcendent experience
- 4. A comprehensive sense of being

The findings are supported by the quotations from participants. These were written in English by the researcher, who was sensitive to the participant's own linguistic characteristics. The quotations presented here have been selected based on their ability to illustrate the themes most clearly and demonstrate the participants' diverse experiences.

T1 (the transcript of the first interview) and T2 (the transcript of the second interview) indicate which interview the extract is taken from. Pseudonyms were used, and all identifying information was changed to protect anonymity.

## Beyond words

The longitudinal nature of this study captured experiential changes by presenting the different steps that participants had gone through. The first superordinate theme provides essential information about participants' unique loss experience and their intention in Clay Field Therapy, aiming to elucidate the contextual meanings of their narratives. This theme thereby serves as a focal point of other superordinate themes.

It is also important to note that these details were elicited from the interviews, such as responses to questions like "What brought you to Clay Field Therapy?" or their reflections linking the tactile relationship at the Clay Field to their lives.

## Words don't come easy

Deniz lost her mother when she was a teenager. She underwent extended talk therapy, used medication, and attempted self-healing through body-focused therapies and reading self-help books. Despite experiencing improvements in various aspects, she expressed that she always felt "setbacks", a constant sense of "meaningless", "emptiness," and feeling "lost". Deniz mentioned that she had recently recognized the residues of loss in her relationships and that she was in Clay Field Therapy as she was reluctant to "talk and analyze" anymore.

Sena lost her mother when she was a teenager and, a few years later, her father. She recounted that she went to the extent of denying it ever happened, even did not mention her loss experiences to her closest ones. Due to "unbearable nature of living in constant meaningless" and "numbness", she sought psychotherapy. She expressed that her "inability to contact with [her] emotions" in talk therapy led her to start Clay Field Therapy.

Esra recounted that she withdrew from life and became completely isolated after the loss of her father so that isolation led her to "become aware of many things that [she] had not noticed before." However, she began to fear "losing her mind" recently because she could not make sense of what she was experiencing; she therefore sought therapy. Despite deriving significant benefits from previous talk therapy sessions, she expressed that she was "no longer the same person" and she was reluctant to engage in a dialogue even with a therapist, as she feared that she would "loose something again" and "being tamed" when she puts her experiences into words. She stated that she wanted to give a try to Clay Field Therapy due to its non-verbal nature. Elif lost almost all of her relatives and closest-ones in the earthquake. She mentioned that she had attended talk therapy for a while, but every time she verbalized her feelings, she felt even more overwhelmed, "finding it more painful," and she "couldn't remember some memories or didn't want to remember them". She practiced some body-focused therapeutic approaches, as she was experiencing intense physical symptoms, "but they only provided temporary relief". She expressed that she was "exhausted of constantly feeling angry or tired or broken into pieces" and "pretending to cling to life while actually not finding a place for [her] self," so she decided to try Clay Field Therapy.

Despite the significantly different loss narratives of each participant, they all feel disconnected both from life and themselves. They seem to be trapped in meaninglessness, emptiness, and profound helplessness. For participants, the loss they experience seems to be beyond words, constituting a complex and profound phenomenon.

## Skin speaks more than words

The participants recounted that they had struggled to perceive the language of hands, what the skin communicates with materials, and the voice of the body in the first session. However, They clearly pointed out the insufficiency and superficiality of words by using the expressions like "artificial" "disconnected" "losing its sense", "becomes mundane" "sort of insincerity" "incomplete", compared to genuineness and deepness of the touching. This distinction was also evident from the participants' attempts to define their experiences in Clay Field Therapy, especially during the first interview:

Words might capture a part of the feeling, but I can't convey the entirety of that feeling. I feel like I can't explain it or put it into the exact words.... skin definitely speaks more than my words. (Deniz, T1).

As the participants gradually deepened in the Clay Field Therapy, they realized that the movements of their hands and tactile sensations encompassed their entire bodies. In this context, the participants underlined the difference between experiencing and narrating or imagining.

I cried a lot. Um... but overall, it was really hard for me to ask myself how I felt and get an answer. I mean, I didn't really feel much, or maybe I did feel something, but when I asked myself, I couldn't get an answer, so it was difficult to do that, to express it, or to try to understand it on my own... It's like I was missing the sense of touch for a long time. (Deniz, T1). Thank goodness there's a space like this, because there are things we really can't express with words... It's just too shallow to translate verbally, translate to words, in talk therapy. Clay Field is something deeper! It's like being in that child's body again. (Deniz, T2).

Moreover, participants emphasized that the tactile relationship with the clay field led them to experience "preverbal" encounters and brought forth memories, even those they were not consciously aware of:

While talking, maybe, you know, I would mention it or describe it, I don't know, but it would trigger something, maybe. I was swaying in the field, and in that movement, lots of lots of things happened. I probably wouldn't sway like this by talking... Something spontaneous came up there... At that moment, it hit me! I could connect that swaying to my childhood... I've forgotten it but there it came to me that I used to have this swaying thing in bed when I couldn't sleep... in my infancy, in my childhood... I used to sway when I was a child, I swayed there in the same way... It's quite intense emotions, something I've never known before. (Sena, T2).

Touch has definitely something that the talking does not. Because things unconsciously come out without I even notice it. It's like, what might take a very long time to come out through talking, can come out much faster....It touches a much more non-verbal or pre-verbal place, it 'touches'! Honestly, overall, I mostly felt childlike things. I mean... I felt things that I wouldn't be able to express if I was a child. So, there are definitely things that are not in words. (Elif, T2).

While the participants' hands were engaging in a diverse dialogue with the materials, their skin sense and haptic perception served as an "amplifier" that transformed the abstract content left beyond the words into a tangible extract of their inner world:

There was a different version of me at every moment. I was in so different states. You know... my mood, were very different. Um... so, it's like the clay somehow amplifies what's inside... I think this is much deeper. I mean, today I realized that it felt much deeper to me than talking. (Esra, T1).

I guess in the first interview, I said that clay field was amplifying what has already been there. It really does, and it continued that way. So, if there's something, it brings it out in a bigger form and throws it out, I mean lets it out. It's not something inside anymore, such as a struggle, a discomfort.. Clay takes it from there, and shows it by magnifying like, 'Here it is!' also take it away or remove it. (Esra, T2).

I can describe you my experiences by imagining the clay as a person. And within it, there's a little pebble, and what the hands naturally feel lets you say, 'There's something here!', 'Something has emerged!'. But when you pick it up and examine it in your hands, and then put it back, well, it becomes just a part of the clay. Maybe it has dried up a bit. Let's say you moisten it a bit and knead it with the rest of the clay. Now you know it's there, but it's not something that get stuck in your hands anymore. It's just a part of the whole it's just something that has been experienced. I believe it plays a role in not making sense to that experience as a separate or only or traumatic or embarrassing thing in your life. It becomes like, 'Yes I've felt this way, this has happened, but along with the other things'. Maybe it's a kind of acceptance. (Elif, T2).

The participants' sense of uncontrollability, despair, chaos, disconnection and anxiety stemming from an unnamed content, was replaced by a sense of relief, attunement, control and safety derived from experiencing an embodied and expressive alternative. Thus, they appear to found some responses to their intention of being in Clay Field Therapy.

## From nothingness towards existence

This superordinate theme presents how the participants encountered their conflicts and negotiated on their loss, within their hands. The different stages of this process are described in the subordinate themes "touching the nothingness" (emerged predominantly from the fist interviews) and "holding the loved ones and being touched" (emerged from both first and second interview).

## **Touching the nothingness**

The participants emphasized their shock at experiencing their own stories so vividly and profoundly, even in the very first session. They described how the specific hand movements put their inner conflicts on the stage:

I did something there, but then I thought, 'What am I going to do with this thing?' On one hand, I need to protect it. But when I protect it, I can't move. So, I decided to break it into pieces and felt terrible again. It's something I want to protect but can't, something I don't know how to protect... In general, I try to protect everything. Yes, that's probably the summary of my life, trying to preserve but not being able to, trying to move on and not being able to... (Sena, T1).

It felt like I was harming the clay when I tried to grasp a part of it. It wasn't like holding it; it was more like being torn away, but there wasn't really a place to hold onto. Even without holding anything, I could still be torn away... I wet the clay when it felt hard, but when it's wet, this time it slips through my fingers, and I can't hold it. When it slips away, I lose all control, I guess. It's slipping through my fingers, I can't hold it, I can't hold onto it! (Elif, T1).

The "nothingness", "emptiness" "darkness", and "loss" that they encountered in the meeting of their hands with the clay field, seems to bring their fears to the surface, in the rawest form:

When I dug into the clay a bit and split it open, the space inside seemed incredibly deep, almost like it went on for miles. I remember saying 'black hole!' at that moment. Where did 'black hole' come from all of a sudden! I can't recall ever saying something like that before, using that word for anything. It hurt when I touched. Yes, 'black hole.' It's like I've had this thing for years, you know? Like, even when everything's going fine, when I don't have any problems, there's this part in my brain that's like a black hole. It always says everything is meaningless and empty. That's the black hole in the clay. (Deniz, T1).

When I closed my eyes and started touching, I went to some really deep places, got lost. It felt like I was in a struggle with the clay, reminding me of things in my life that I need to deal with... So, it took me to a very suffocating place. It became a place where I felt lost in deep, deep depths. That profound emptiness, where the struggle took me, that nothingness scared me. Then I opened my eyes; I can't say I felt much better, but at least I felt a bit more relieved when I opened my eyes. I could at least see where I was. (Esra, T1).

The intensity of their initial experience in the Clay Field Therapy was clearly evident in the participants, as reflected in their stillness, vocal tone also, bodily and facial expressions during the first interview. The participants expressed that, although they did not reach a resolution in the first session, they ended it emotionally safer, more stable and regulated:

I laughed, then suddenly remembered and cried. Now, I feel kind of tired. I feel like I've experienced these emotions very intensely. There's a slight dizziness. Well, my energy has dropped a bit. (Sena, T1).

I came in with feelings of wanting to harm someone, either myself or someone else. I had a severe headache. Um... I wasn't in a state of thinking sanely. Um... and I was extremely angry, I mean very, very angry... I started crying and feeling very sad at the beginning, as I live reluctantly. I mean, I started without wanting to do anything... Then I tried to relax myself a bit more to release my emotions. Because when you're angry, you're keeping your emotions inside the same way. And when I played with the clay, everything, both aggression and sadness, like I said, came out... But overall, it was very difficult to ask myself how I was feeling and get an answer... Still, it changed in a positive direction, like I said, I had a headache, and my headache went away. I calmed down a bit more. The desire to harm things disappeared. (Elif, T1).

I remember that after all that chaos, I remember that I put my hands in the water. It was like I got in the water. Warm water. Being in there, and playing in the warm water, made me calm. Yes, that was where I've been calmer. (Esra, T1).

## Holding the loved ones and being touched again

In the initial interview, the participants reflected on the changes in their experiences during the first Clay Field session. In the second interview, on the other hand, they not only described their experiences in the twelfth session, but also gave a detailed account of the transformative experiences that had occurred in the intervening sessions. In this manner, it has become possible to illustrate the nuances of how the grief processing underwent transformation within the distinct tactile relationships established by the participants with the clay field.

The participants seem to gradually surrender to their grief, paralleling to surrendering to the tactile sensations that made them feel out of control in the initial sessions. As it enables them to "project" their inner world to Clay Field, they appear to allow themselves to engage in a process of acceptance wherein they could explicitly experience their longings that they had been attempting to suppress:

Towards the end of the session,... With that swinging thing I stretched my arms out and put one on top of the other... with the feelings in that swinging thing... A swing was hanging on a tree and a child is swinging there. That brought me where my dad used to make swings... it's all about death. Pain, losses... oh... my desire to be a child. My desire to be my father's daughter. My need to share with my dad. Their absence and the fact that they would never be here anymore. These are the things. I always feel like something is missing." (Sena, T1).

I could never say that I loved, that I was angry. That I was sad. That I was happy. Always a censor, yes, "censor" is the right word! I never knew what I felt, because of that censor, because I had always ignored that feeling. Longing. I never said that I missed... I never said that I missed so much. I've always ignored that I miss my mom and dad, that I miss them a lot. (Sena, T2).

The participants appear to be reconnected with their loved ones, through their interactions with the Clay Field materials. The participants' description of this

experience is presented in various relational forms, including the qualities of skincontact and body motion and, the spatial and temporal representations:

At that point where I covered my hand with clay, I remember how it gave me a very motherly feeling. I mean, when I covered my hands with clay, it felt really good. Like a blanket, you know... it felt like I put a warm vest on my back. It's like my hand was giving care to the other. And that made me feel like my mom did something. It was as if I was receiving compassion from my mom. (Deniz, T1.)

Ah, I remember the tunnel! I mean, the session where I unintentionally made a tunnel! It was the 3rd or 4th session. I was doing something in the Clay Field, and then I created that tunnel. I remember making one side of it the sea and the other side the mountains. Then, as I, my hands and elbows passed through in between them. That feeling suddenly came, it was beautiful. I realized that there was actually a motif of our last family trip in it. With my dad, mountains and roads, I always felt safe. Adventure. (Esra, T2).

Then we held each other. When I held the clay, it didn't let go of me. It was very shocking. I don't know how to explain it, but it felt like, 'Even if you let go, I'll still be here'. When I held it and it didn't let go, I don't know, it's really hard to describe, like 'I don't disappear when you let go'. You know, it was like your hand stays in that holding position even when you part ways, I guess. And it was something that made me feel safe... It was the moment when I held onto and could stay, the moment I felt peace. It was like reaching calmness similar to relaxation after crying, and I hadn't even thought about it until you asked just now. (Elif, T1).

In the last two or three sessions, for example, I felt the sensation of sliding, it was like being on a slide. Like a child, I slid inside the clay rhythmically. In the background, there was also a slide, a scene of slide was coming in front of my eyes at the same time. It was the slide from my childhood. So, I experienced both its momentum with my hands and, well, doing that again, the feeling of running, those sensations, I lived them all. It felt like it gave me something, hmm, like a game, and the clay was soothing. Those rhythmic movements, at the edge of the box, dancing like that, playing, and I'm really surprised. It's quite strange; I don't do such things. I mean, I wanted to embrace it. I wanted to hug it. I mean, it's just a box and clay. So, imagine someone like me wanting to hug it. (Sena, T2).

From the participants' responses in the second interview, it's clear that the haptic experience within clay field has evolved to a reflective interplay between their hands and the materials. The Clay Field, hereby represents for them a storyteller that enable them to make sense of their inner world:

Everything that was in my mind, all the chaos, they were projected in there. At first, making it tangible felt good. Then, it didn't feel good; I felt overwhelmed." (Esra, T1).

Then, well, I was able to get into it. When I buried my hands under it, it was like I made a bit more peace there. It was already sort of a miraculous session! That was the session where everything inside was synchronized with the clay. From there, they started to catch up with each other. It was... maybe the next session when I created the cave. There, a bit more, you know, the inner cave and the one in the clay sort of overlapped. It slowly turned into something, maybe the inside shaped the clay, and the clay shaped the inside. The all melted in

each other. And next session, I think I finished the next session with earthly shapes! And that were, I mean, the sessions where the inside was harmonized with the outside. It's like a story of gradually making peace with the clay and internalizing it I realized that I could bring the inside out and transform it. That was the most touching thing for me. (Esra, T2).

I put whatever I had into the clay field, as if I let it all there. I projected into it everything that I couldn't verbalize I can say that the clay understood me better than I did. (Deniz, T1).

Because there are things happening inside of me and continue to happen. But the clay is more like something outside. The box, the water, they are all outside. You don't see, you don't know beforehand; things just happen through touch and feelings. It's very strange. The clay field is now like an external world that I can interpret, like a connection to the external world. So, it contributed in that way, I could realize that. An external world that I can interpret. An inner world that I can interpret. There's now an external world that I can shape and interpret. Both of them, both inner and external. (Deniz, T2).

This reflective relationship appears to facilitate the participants to "find out some parts of" their loved ones within themselves, with the "freedom" to experience different feelings than pain. Clay field thereby seems to represent a space wherein the "nothingness" turns into the existence under the skin:

That session made me feel like I was in my mother's embrace. It transformed into something like we were in each other's embrace. Now, I can calm myself down just like my mother used to. In daily life too. It's as if I've found some parts of my mother within myself, like they were always been there. Or, like, I have this maternal feeling, motherly things or motherhood. I can show myself kindness, some compassion. (Deniz, T2).

So, in that session, as I poured water into the clay field and started working with my hands, moving around, suddenly, a memory about my dad came to me. There was something very vivid about my dad. When I was a child, we went on a vacation, and there was a pool with a cave-like entrance. And at the exits, water used to flow down from above. I was there with my dad, and there was this sense of adventure we shared, it was fun, something beautiful. The words or memories that I wouldn't normally associate with my dad. The most striking part of that moment for me was the possibility of having a fun and beautiful memory with my dad and the freedom to remember it! Because I had suppressed it a lot, I guess, and my dad always seemed sad to me. If he's feeling bad or he's gone then I can't be good. Apparently, I can be good. And I had to digest it. What I did, what I felt in clay field, made me realize that the suppression was preventing me from living. It allowed me to release some of those suppressed feelings. When I say more curious, I mean like, 'Oooh what is that?!', 'let's explore it!'. It's like feeling something different from 'I haven't tried' or 'I can't try' or 'I can't do it.' (Sena, T2).

As the participants' haptic perception shifted from what they did not have to what they did have, their feelings of guilt, loneliness, and helplessness seem to be faded away, giving way to a sense of gratitude and acceptance:

When I pulled the clay towards myself, it felt like I was digging through earthquake ruins Just waiting under the wreckage for someone to help me, and not being able to rescue those who were still there was my great helplessness... When I pulled my hands out from under the clay, put them on the surface of the box, it felt like I was getting out from the wreckage. My hand helping my hand gave me the feeling that 'Oh, I can help myself.' It created the sense of 'I am here!'... I also felt I was like holding to something else! It's like feeling more solid.... There's no need for me to tear myself apart like I'm the guilty one because I survived. I'm just sharing the same pain with them. (Elif, T2).

Clay Field seems to provide the participants a safe space to release their vulnerable feelings. Moreover, their new experiences of touching and being touched, embraced, and held appear to assist them in developing a growing feelings of safety, peace, compassion, and joy, as well as a sense of confidence and control.

## From tangible experience to a transformative spiritual experience:

This superordinate theme illustrates how the participants' deepening intuitive processes in the Clay Field also served as a gateway to a spiritual experience. The key components of participants' changing experiences are described in two inter-related subordinate themes: an intuitive destruction and recreation and, a transcendent experience.

## An intuitive destruction and recreation

As demonstrated in the first superordinate theme, participants initially projected their fears of loss onto the Clay Field, in their early sessions. Despite their intentions, they struggled to engage with their emotions and found it difficult to let go of their thoughts. However, participants expressed that throughout the process of Clay Field Therapy, they gradually began to "follow the hands," "follow the rhythm of the hands" "yield to the impulses," and loosen the control:

I remember, in the initial sessions, there was tension in me, a lot of tension. And when I was touching the clay, I was setting goals, like 'I'm going to push this out now, yes, or I'm going to place this thing in the top right corner of the clay,'. Goal-oriented, that's my life, that's me, I was living it right there. I remember the tension in my face, the tension in my back, it was like I was doing it with such a rage... But in the last sessions, I followed my hands, the rhythm, the sensations in my hands. I didn't know where my hand was leading me. There was no goal. Yes, doing it without a goal, like 'let's see what happens in the moment?'... Doing it without a goal, I mean, doing something based on what I felt, an attempt to capture the sensation that the clay was giving me. (Sena, T2).

When my eyes are closed, I feel more in the moment. I mean, I feel like I've let go more and I feel more in control. When I open my eyes, uncontrollable things enter... Seeing is like an illusion compared to touching. What you feel doesn't always match what you see. But by touching, I can yield to the impulses. (Elif, T2).

Alongside their hands' "intuitive" and "spontaneous movements," the participants' courage of destruction has progressively developed. The pleasure that participants

had derived from destroying and recreating in the Clay Field was clearly evident in their enthusiasm when they were describing these experiences during the second interview:

There was chaos there, at first. I tried to do something, but it was like a voic in my head saying 'let it stay here, don't disturb it, let it stay here, don't mess it up.' It's like my brain was more in control... At times, I made intuitive movements. These were very brief moments. For example, I pierced the clay. No shape emerged from it, but the expressive quality was much more valuable for me. (Deniz, T1)

I've noticed that I go deeper into it, feel more, especially towards the end of the sessions... So, when I follow the rhythm of my hands, more satisfying results emerge I broke it as I wanted, dismantled it, put it back together, turned the box, moistened the clay or took it out. It's like there was always a sense of 'I can't' that tied my hands and arms, and this gradually turned into 'I can!' in every session. (Deniz, T2).

In the initial sessions, the clay felt like something I had to do, but then I made peace with it. However, the box felt very restrictive and something I had not other choice but to expose it. I mean, I had to stay here. It felt like I had to do something here, not just stay with it! What it reminded me of were the environments and situations I've encountered in my life, like there is one and only way of being for me But after that session, these feelings dissolved. After being able to push the clay out, after being able to place it somewhere else, that sense of being captured or obligated have dissolved. Then, as I was able to use the box in different ways, the relationship with the clay and the box began to change. 'Oh! If I can't do something here, I can put it there.' ... I turned the box upside down, 'Oh! There's not just one thing that needs to be endured; I can change it'. That creates an incredible sense of freedom. That freedom continued and I kept destroying and creating. Oh.. my arms were so strong! I was very strong. I destroyed and created, destroyed and recreated. I created my own space I created my universe! (Esra, T2).

This tangible process of creative destruction within the Clay Field appears to have led the participants to deconstruct and reconstruct their sense of self and the meanings of their own lives. This transformation seems to involve a shift from the sense of helplessness to the sense of control, from a perception as a victim to competency, freedom and self- validation.

# A transcendent experience

The participants emphasized that the later stages of Clay Field Therapy process no longer revolved around their parents or losses. It seems that after experiencing fulfillment in working on their past, the participants' intention shifted to broader existential issues in the Clay Field. It is evident from participant's descriptions in the second interview that they engaged in a transcendent experience through their haptic perception at the Clay Field, in their own unique way.

As previously mentioned, during the first interview, Esra expressed a profound fear of losing her sanity due to the contradictions and fragmentation in her perception of life and sense of self. Nevertheless, in the second interview, she recounted a transformative experience where she felt as though she had "died, lived, and died again," and created her own "unified world." It appears that she cultivated a profound sense of completeness, belonging, and joyfulness throughout her unique transcendent journey:

It was like a continuation of the previous session. I had ended the previous session with a kind of death. And next session was about after death. In the earlier session, I was born, lived, died, lived and died again. In the next one, I shattered the external world, everything physically existing outside. After that, I created things and then I shattered them too. That part was like life an afterlife, beyond world. Then everything became new, came together in my 'unified world.' I was so excited, and at the same time, a relaxation spread throughout my entire body. I felt a sense of freedom in my legs, my lower back, my entire spine. So, I can say it was a relaxation mixed with freedom that spread through my whole body. (Esra, T2).

Sena characterized her haptic experiences in Clay Field therapy as akin to a "trance", that initially frightened her but into which she gradually became more deeply immersed. As a rational and materialistic individual who had not previously attributed significance to alternative forms of experience, she appears to be profoundly astonished by the novel sensations she encountered that she could define only by spiritual expressions rather than worldly or emotional explanations:

You know, I used to say I don't believe in things like this, whether it's meditation, therapy, or playing with clay and expecting something to happen I remember saying, 'I feel like I'm in a trance' while I was doing something with my hands in that session. At first, I was horrified; I thought I was going to lose myself. But then, I just let myself go into that trance! It was really amazing! Oh, and I yawned constantly during the sessions, unstoppable yawning! Oh, I said, 'bad spirits are coming out.'! I don't usually use expressions like that. I don't know, maybe it was the old residues or the feelings that were holding me back, came out. But it was different from just expressing, discharging some feelings. It was like cleansing, purifying the soul. I know it sounds crazy. Honestly, I can't even believe myself when I talk about it. But after those yawns, everything became so different... A freedom, I've never felt before. (Sena, T2).

Deniz and Sena identified their experiences with naturalistic representations. Deniz explained that she was grounded and "spread" like "the roots of a tree" and underscored the intensity of her perception by drawing attention to the "sharp sensation" in her ankle and highlighting its distinction from previous meditation experiences. Elif, on the other hand, recounted how the cave that her hands spontaneously created, transported her "to sacred place" wherein she experienced a "pure, genuine and overflowing joy":

A few sessions ago, it was like this incredibly uplifting experience! I felt really amazing that day! What I was doing there had turned into a mountain without me even realizing it. I hadn't made a mountain; it just emerged. And then, I had carved out the bottom of that mountain,

creating a cave. I even put water inside. It became a place of both shade and uninterrupted scenery, a safe haven. I had created something really beautiful! And while I was playing with water inside the cave, it had turned into a sacred place. My hands were playing in the water like a child, but it wasn't childlike. If you ask what's the difference, it's childlike in the sense of being far from childishness. It was pure, genuine, overflowing joy! A state of elation. That feeling dominated through me entire day, and the next days! And you know what? It was just magnificent! When I remember it, I smile a lot, and I feel the same way again. What I did with the clay doesn't really matter because I think what's important is the feeling I got. And I got that feeling so strongly! And... I'm so happy right now when I remember it! I'm really happy; I feel like the tears are welling up in my eyes. (Elif, T2).

What was happening there wasn't about my mom, dad, or things that happened to me anymore. I think it all started in that session... My hands were under the clay, my fingers spread out like they were sticking to the bottom of the box. There, I felt like I was a tree with roots spreading everywhere. But this rooting was so unique! It was very different from the tree grounding in meditation or yoga. My ankle! My goodness, can you feel your ankle like that? It was such a sharp sensation!... It became like an anchor for me. I mean, even during the day, when I felt a bit lost or like I was going into the darkness, I could instantly find that sensation in my ankle. (Deniz, T2).

Despite the diversity of experiences reported by the participants, a commonality emerged in their embodied feelings of enthusiasm, serenity and a sense of being grounded, a deeper contact with life as well. This profound experience within the Clay Field seems to permeated into their lives.

# A comprehensive sense of being

This superordinate theme primarily emerged from the extracts relating to the second interviews. The participants underlined that the perception of their "existence in the hands" was predominant, especially in the last sessions. This unique sense of being alive seems to evoke in them a profound feeling of enthusiasm and admiration:

I carried my existence to the fingertips. It was feeling my existence in the hands, in my palms. (Deniz, T2). I felt my heartbeat right in my hands! (Sena, T2).

I felt my presence in my whole body, my veins, my bones. (Esra,T2).

In those movements there, I'm active, there's resistance in the clay, the weight of the box. That activity, that energy! It's like my muscles in my body came to life. I started to feel my arms, the muscles in my arms, 'Oh, they are here!' It's like the awakening of areas in the body that you never normally feel. It's not just about finding who I am in an abstract sense, but it's more about being a 'living me'. I mean, not the 'me' who questions life from the outside, not the one who doesn't know what to do and feels lost. It's a 'me' who exists in life, in motion, independent of what it's doing. From that perspective, it's a satisfying feeling! (Elif, T2).

The participants recounted how their experiences of "becoming a whole" with the materials evolved into a feeling "wholeness within" themselves. Their feelings of

loss and numbness thereby seem to be transformed into an embodied sense of their presence:

The wholeness I mean, in the sense of all coming together, maybe that's why I feel it in my belly today. Therefore, feeling it in my gut, in my core, means a lot of selfhood to me. That's why I felt very unified with everything today. (Deniz, T2).

I was there as a whole... Holding the box like this with my arms feels comforting. It's like I'm holding it as a whole, in sync with what's inside. From my arms to my legs, from head to toe, I felt the wholeness within myself. So even when I feel bad, it's like my feet are grounded better. Or when I feel like my wholeness has been damaged, even when I fall into a familiar bad feeling, I still feel a bit more in control. (Esra, T2).

Participants' responses in the second interview revealed that their individual tactile relationship with the Clay Field not only influenced how they perceived themselves, but also led them to reflect on their relationship with the world. The participant's expressions, such as 'a comprehensive perception', 'my place in the world', 'seeing life with curious eyes', appear to represent their changing perspective on life:

The clay touched my face, my hair was in the clay, I hugged the box, wrapped myself in it. And while doing that, I felt at peace, I was happy, you could say. Maybe it was happiness. It was a peaceful kind of happiness... I mean, I had said I'm not curious about nature. But when I opened my eyes at the end of that session and looked around, I noticed the plum tree outside. And as I thought, 'Wow, those plums look really nice!" suddenly I stopped. 'Wait, did you just say the plum tree is beautiful?' Nature, for me, was like, 'If it's a tree, it's a tree, if it's green, it's green, that's it, why make a big deal out of it? Same difference.' But now I felt this peace. I would have hugged the tree... It's like seeing the world with more curious eyes now. (Sena, T2).

My works there became about more macro things, I mean a world bigger than me, wars, life... It wasn't just about my life today; it felt like something broader, more encompassing. And for example, in the past few weeks, I've realized that individual events don't really matter all that much... Because events are not under control, I can't control them. Something will always happen anyway. 'What matters is not managing events but managing your perspective.' I've been reading these things for years, trying to apply them to myself, but it hasn't worked for me. It was very different there in the field. I don't know how to explain it; I felt it to my core. I experienced that comprehensive perception in a different dimension. I felt it deeply like in my bones. (Deniz, T2).

I think I've been working on my existence in general. The existence of my emotions, the existence of my body, um... the existence of my thoughts, and also my existence in the world. Overall, my existence. I believe I' worked on these. My place in the world... Sometimes because of the tranquility it provided, I remember saying, 'I'm going to faint, what is this?' It was so beautiful! I felt like I was above the clouds. I don't know what it means to be in the clouds, but I can describe it that way. Or we can say, it's like lying on your back and flowing with the waves in the middle of the sea. It could be described that way. It made me feel like I was within everything. (Elif, T2).

The participants' senses of "meaninglessness" and "emptiness" appear to have moved towards an account of increasing appreciation of being alive. Moreover, by experiencing the possibility of finding "security within insecurity" at the Clay Field, they seem to develop an acceptance of the indefinite and impermanent nature of life, rather than perceiving it as a threat that they need to control:

In the last session in the clay field, I felt like I was in the universe wherein everything was uncertain. But the most exciting part was that it was both a universe for me and beyond me. I wasn't afraid; it was more like an adventure. It was something I didn't know, but at the same time, it felt like I knew something with my feelings and intuitions. I remember standing right in the middle of it. Completely centered. In fact, now that I think about it, I've wanted to go on a journey for a long time, but I've been afraid of leaving things behind me, or loosing what left for me. Now, it's like I'm ready for that journey, and I even want to hit the road as soon as possible. (Esra, T2).

My dominant feeling at the beginning of clay field therapy was helplessness and insecurity. I didn't know what to do with the clay and the stuffs in there, my eyes were closed. But then, it was like I experienced a different kind of security, finding security within the insecurity... The lives of the most precious people in my life could end in just a few minutes. It could end with a single grain of rice. So, feeling safe within the insecurity, at least feeling secure somewhere in me, was essential. You can't escape from death or evil. The earthquakes, diseases can catch us in any moment. Things we know could happen to us. It could happen, yes, I know, but I don't always have the energy to keep my eyes open, to stay awake as if something could happen at any moment... And if I do that, then when that evil happens, I don't have the energy to deal with it. It's a bigger helplessness then. Seeing in the Clay Field that I could deal with what's in my hands, that I could handle it without calculating beforehand, made me feel really good, like using my energy wisely. (Elif, T2).

The participants' account of their intuitive and spiritual experiences in Clay Field Therapy seems to be turned into an existential inquiry that they construed more comprehensive meanings of life and death. They were also able to extend the new sensations and emotions they discovered during the therapy process into their daily lives.

#### Discussion

The present study explores the experiences of clients undergoing Clay Field Therapy to address their inner conflicts arising from specific losses. This LIPA study elucidates how individuals' experiences and meaning- making processes have evolved throughout their tactile engagement in the Clay Field. Data were collected through semi-structured and in-depth interviews conducted after the first and twelfth Clay Field Therapy sessions, and four interrelated superordinate themes emerged from participants' narratives, including: Beyond words; From nothingness towards existence; From tangible experience towards transformative spiritual experience; A comprehensive sense of being. The subordinate themes provide a thorough examination of the process, with findings substantiated by excerpts from the interviews conducted for this study.

Despite the uniqueness of individual's haptic experiences, the emergent themes show that the process in Clay Field Therapy evolves along a similar pathway. The first superordinate theme, "Beyond words", represents a branch of this pathway where participants externalized their initial conflicts onto the clay field materials and gradually became able to reflect on their psychological world by transmuting abstract content into tangible experiences.

The second superordinate theme, "From nothingness towards finding the existence within", illustrates the stage wherein "touching the nothingness" with their barehands allowed them to experience their losses directly in here and now rather than attempting to analyze some past narrative. The participants did not only remember the nurturing moments that they shared with their beloved-ones but, but also highlighted that they vividly lived these throughout *touching and being touched* (Husserl, 2000) in the Clay Field. They could thereby experience the regeneration of joyfulness, curiosity, confidence, and enthusiasm, as well as the feelings of being held, safe, and secure. This stage can also be interpreted as processing the internal attachment to the objects that they lost and the relational representations (Baker, 2021; Freud, 1957). On the other hand, being different from psychoanalysis, Clay Field Therapy does not appear to be primarily a representational work; however, it seems to provide individuals a space where they can "touch the invisible" (Merleu- Ponty, 1979), and feel the existence of their beloved-ones under the skin.

It is evident from the participants' narratives that this embodied feeling of fulfillment served as a gateway to a deepening intuitive journey and encouraged them to engage in a process of creative destruction without a fear of loosing their self- control. Clearly, for them, the later stages of Clay Field Therapy present an engagement in a transcendent experience rather than solely addressing their losses and sufferings. The third superordinate theme, thereby, "From tangible experience towards transformative spiritual experience," shows that Clay Field Therapy can also offer individuals to transcend their everyday experiences and awaken their spiritual essence.

The fourth theme, "A comprehensive sense of being", emerged from participants' accounts of their haptic experiences in Clay Field Therapy, where they construed new meanings of life and death. Examining the final theme alongside the first theme reveals that participants developed unique responses to their initial inquiries and distinct existential dilemmas, including the liberation of love, appreciation of life, "feeling the existence in the hands", contemplating on their "position in the world," suppressing the conventional issues and evolving a "comprehensive perception" of life, feeling the "wholeness" within self and the worlds, contemplating impermanent and unpredictable nature in life and, "finding security in insecurity."

The findings indicate that the Clay Field Therapy process facilitates the resolution of complicated grief and traumatic elements of loss, while initiating an existential journey for the individual simultaneously. Clay Field appears to be a touch therapy wherein the existential and spiritual meanings of both skin (Ben Ayed, 2014; Bhattacharyya, 1958; Easwaran, 2007; Fulkerson, 2011; Husserl, 2000; Josipovici, 1997; Jütte, 2008; Merleau-Ponty, 1979; Nancy, 2020; Rajagopalachari, 2018; Segal, N. 2009; Wilson, 1998) and grief (Heidegger, 2001; Jung, 1999; May 1994; Sartre, 1943) transcend theoretical discussions, manifesting in individuals' first-handed real-life psychotherapeutic experiences. In other words, in the context of Clay Field's practice, a phenomenological space is offered wherein the sensitivity of the skin and the guidance of haptic perception can facilitate individuals' engagement with the profound layers of loss that often elude verbal articulation (Anzieu, 2016; Bion, 2014). This engagement, characterized by an embodied transcendent experience, is believed to foster the development of creativity in the hands, thereby enabling the construction of a novel sense of self and a redefined meaning of life. This can be described with a new concept, 'Embodied Reflection,' drawing on the language of phenomenological and existential philosophy.

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Research Article

# Islamic Psychological Therapy Interventions Applied by Mental Health Practitioners: A Qualitative Study

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#### Abstract

Not only is normal functioning like thinking, feeling, or being impaired by psychological problems, but also an individual's social, cultural, existential, and spiritual functioning, all of which need to be addressed. Incorporating religious and spiritual considerations into evidence-based practices should be an iterative process in therapy, particularly when treating practicing Muslim patients. This qualitative study uses a thematic analysis of semi-structured interviews to investigate and identify Islamically-oriented treatment approaches applied by Bosnian mental health professionals in their own practice. A total of 11 mental health professionals (N = 11) were recruited for this study. Results indicate that participants mostly use the Qur'an, the Sunnah, and religious practices such as remembrance, repentance, and gratitude as therapy interventions with practicing Muslims, as well as an open, nonjudgmental, and individualized approach in order to generate self-awareness and psychological, behavioral, and spiritual changes in clients. Such an approach, as reported, results in clients (re)turning to Allah and facilitates the reduction of unhealthy habits. The study also reveals specific issues and needs mental health practitioners reported facing while working with religious Muslim clients.

Keywords:

Religion  $\bullet$  Spirituality  $\bullet$  Therapy interventions  $\bullet$  Mental health  $\bullet$  Bosnia and

Herzegovina

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#### Introduction

A specific set of values and concepts encompass the lives of religious Muslims, who generally adhere to their faith. Religious Muslims' adherence to specific religious standards guides their psychosocial functioning, development, and decision-making; determining their life goals and affecting their psychological and spiritual wellbeing. According to the Islamic understanding, as established by some studies, the cause of a client's distress often stems from a misinterpretation, misrepresentation, or misuse of Islamic teachings (Badri, 2014; Rothman, 2021). To effectively alleviate and treat distress and/or present symptoms and complaints in Muslim clients, clinicians must ensure that the psychological approach used is informed by their set of values and concepts (Martinez et al., 2007; Worthington et al., 2011) and incorporates the Islamic theological worldview. Furthermore, treatment should be aimed at correcting the client's misunderstanding through education based on guidance from the scholarly tradition of Islamic knowledge (Badri, 2014) and addressing client spirituality. Applying the Western or secular method of psychotherapy to Muslim religious patients generally yields little or limited effectiveness since it tends to undermine essential Islamic beliefs, ethics, or even laws (Abu-Raiya & Pargament, 2010; Skinner, 2010) that Muslims strictly abide by or adhere to.

Certain religiously-oriented therapies have the most positive effect on treatment (Martinez et al., 2007; Worthington et al., 2011) with clients who are more religiously committed or whose symptoms and treatment goals intertwine with religion. Studies show that religious patients often look for specialists who share their religious affiliation, as they prefer therapeutic techniques that are compliant with their value system (Weld & Eriksen, 2007). Although studies indicate that clients prefer their religious or spiritual issues to be addressed in treatment (Harris, Randolph & Gordon, 2016; Post & Wade, 2014; Shafranske, 2016), numerous authors demonstrate that religion and spirituality are often entirely ignored in training or only marginally covered (Mintert et al., 2020; Pearce et al., 2019; Scott et al., 2016). However, it is suggested that therapists make efforts to adapt therapeutic approaches to fit within the religious perspectives of their clients' (Anderson et al., 2015). Religious or spiritual concerns may occasionally be pertinent to the reason a client seeks therapy. Additionally, such concerns may contribute to conflict or distress for a client.

Even though studies show that spirituality and religion are important aspects of an individual's resilience and ways of coping with trauma and stress (Abdul-Hamid, 2011; Abdul-Hamid & Hughes, 2015; Dein, 2006) and are protective factors for mental health disorders caused by traumatic events (Dervic et al., 2006; Hasanović & Pajević, 2010, 2011, 2013, 2014; Hipolito, et al., 2014; Meadows et al., 2005; Moreira-Almeida, et al., 2006; Pajević et al., 2005, 2017), they are both still not considered and addressed by all clinicians.

Bosnian clinicians and mental health professionals have already made some progress in this aspect (Hasanović et al., 2011; Hasanović et al., 2017; Hasanović & Pajević, 2010; Hasanović & Pajević, 2013; Hasanović & Pajevic, 2015; Hasanović et al., 2021) by incorporating certain religious principles in their practice in order to address their clients' needs. However, to the best of our knowledge, no study has explored the religious psychotherapy interventions applied by religiously-sensitive therapists from Bosnia and Herzegovina or their effects so far.

# **Purpose**

The purpose of this study is to investigate religiously-oriented approaches and principles of psychotherapy grounded in an Islamic paradigm as well as their perceived effects by Bosnian mental health professionals in their own public or private practice.

#### Method

# Research Design

A qualitative research method was used as it can provide compelling insights into the Islamically oriented approaches and principles used by mental health practitioners who participated in this study.

#### Sample and Sampling

Initially, 18 participants were contacted. However, 11 agreed to participate in the study. Participants ranged in age from 34 to 64 years (Mage= 47.09), with seven women and four men, all of whom identify as practicing Muslims. The purposeful sampling technique was used to reach mental health professionals who, relative to their own understanding, practice therapy using an Islamic orientation. Researchers consider that the participants practice therapy within an Islamic orientation for the reason that they have published on this topic previously or have appeared in different local media discussing the topic. The sociodemographic variables taken into consideration were gender, age, profession, and therapeutic orientation (or modality). As can be seen in Table 1, all respondents (except for two) received training in the form of a Western therapeutic modality or technique. Participants voluntarily participated in the study without receiving any material compensation. Before the interview started, participants were informed about the purpose of the study, verbally provided consent to participate, and were assured of confidentiality.

 Table 1

 Sociodemographic characteristics of participants.

Participant Code	Gender	Age	Profession	Therapeutic Orientation/modality
1.A	Female	57	Psychologist-pedagogue	Psychodynamic, EMDR
2.B	Male	35	Psychologist-theologian Specialized in in Islamic law	None
3.C	Female	37	Arabic language teacher	Neurolinguistic Programing-NLP
<b>4.D</b>	Male	64	Psychiatrist	Psychodynamics, EMDR
5.E.	Female	43	Psychologist	Systemic family
6.F	Female	49	Psychologist	Psychodynamics and EMDR/ first level
7.G	Female	38	Psychologist	Systemic family and schema therapy
8.H	Male	44	Psychologist	None
9.I	Male	63	Psychiatrist	Psychodynamics
10.J	Female	49	Psychologist	Psychodynamics first level, EMDR
11.K	Female	39	Psychologist	Systemic family

# Data collection tool and procedure

Researchers' theoretical orientations and personal experiences affect the way they see the world and interpret different phenomena. Being a practicing Muslim therapist could have some influence on research findings and interpretations. The researchers created a semi-structured interview protocol with five open-ended questions. A semistructured interview for data collection was used since it enables digression from the main theme, and the complexity of the studied subject can be better researched by investigating certain participants' experiences and the meanings they attach to them without the limitations necessarily imposed by the structured interview (Howitt, 2019). To conduct this study, the authors collaborated with a team of experienced researchers and created a semi-structured interview guide after conducting a literature review and drawing from personal insights and experiences on the topic. The interviews were conducted by the first author and consisted of four questions (see Table 2), lasting from 18 to 65 minutes. The interviews took place between June and August, 2022. All interviews were conducted online via the Viber platform in the Bosnian language, audio recorded, and transcribed verbatim by the first author. Only two interviews were interrupted due to a poor internet connection, but successfully resumed afterwards.

Table 2.
Interview guide.

- 1. Please elaborate on the type of Islamically-grounded principles/interventions you use in your practice.
- 2. Please elaborate on how you perceive the effect of applying an Islamically-grounded approach to your work with clients.
- 3. Is there anything else that you feel like you need to say regarding applying an Islamically-oriented therapy intervention in practice?
- 4. Is there anything else you wish to add that the interviewer forgot to ask but that you find important to say?

The semi-structured interview method allows researchers to investigate multiple complex research questions. It provides qualitative knowledge of a complicated event

on its own, as opposed to quantitative studies that measure average parameters across a sample group. A sample size of 8–12 participants is usually needed for this strategy, which involves the participants individually interacting with the interviewer in an iterative manner (Adams, 2015). As a result, these interviews enable the participant and the interviewer to communicate in both directions. They offer the interviewer a chance to learn more about the subjects by giving them the answers to their questions as well as the context in which they were given. These interviews also permit deviations from the primary theme, which facilitates a more thorough examination of the subject's intricacy. Moreover, with this method, researchers are not limited by the rigid structure of a standard interview and can instead explore people's experiences and the subjective interpretations they attach to them (Seidman, 2006).

All necessary study steps have been recorded in order to uphold the quality of this qualitative study's standards. The investigators aimed to retain an impartial stance throughout the interview and analysis processes. To ensure rigor and trustworthiness, member checking was performed, whereby the authors shared the study's findings and conclusions with some respondents from whom the data was originally obtained (Hadi & Closs, 2016). The study protocol has been approved by the Ethics Committee of the International University Sarajevo (protocol number IUS-REC-01-1893/2021).

#### **Data Analysis**

Thematic Analysis (TA) is an appropriate and powerful method to use when seeking to understand a set of experiences, thoughts, or behaviors across a dataset (Braun & Clarke, 2012), and it is designed to search for common or shared meanings. Hence, TA was used to glean participants' subjective meanings and an understanding of Islamically-grounded approaches and principles in therapy. Although it is not possible to provide completely standardized guidelines regarding performing TA, it is important to establish it as a method and not a loose label attached to simple studies that codify data (Howitt, 2019, p. 150). The central processes involved in TA, according to Howitt and Cramer (2017), are transcription, analytic effort, and theme identification. TA was performed using the six-phase method, as exemplified by Nowell et al. (2017), and was carried out in the following order to identify the relevant themes: (a) familiarizing, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report. Below, we describe each of the thematic analysis process steps.

# **Thematic Analysis Analytical Process**

Becoming familiar with the data. This process began with preparing the story, transcribing
the data, reading it multiple times, and making notes on the first ideas. At this point, many
notions and ideas occurred in several bulk sentences that needed to be analyzed.

- Generating initial codes. This process involved systematically tagging noteworthy
  aspects of the data throughout the full data collection and compiling information
  pertinent to each code. More than fifty codes were identified at this stage.
- 3. Searching for themes. All pertinent data was assembled for each subject. Additionally, codes were organized into possible themes. In this phase, the researchers categorized and contrasted codes, or meaning units, from each interview.
- 4. *Reviewing themes*. The data was examined for the purpose of looking for new themes, producing a thematic analysis, and determining whether the themes related to the coded extracts and the complete data collection.
- 5. *Defining and naming the themes*. To improve the details of each theme and the overall story that the analysis conveyed, further analysis was carried out in order to create precise names and definitions for every subject.
- 6. *Producing the report.* This phase involved choosing vivid and engaging extract examples, analyzing a final selection of extracts, and connecting the analysis to the research question, objective, and previously examined literature.

The formation of several categories resulted in three overarching categories that best embrace and explain the studied phenomenon: Islamically-oriented therapy interventions (IOTI), the effects of using IOTI, and the therapists' issues and needs related to applying IOTI. The findings were then contrasted with the existing body of literature.

#### Results

The following results are arranged according to the three main categories:

- I. Islamically oriented therapy interventions (IOTI). This category is further explicated through three subcategories: using the Qur'an and Sunnah, Islamic rituals like dhikr, salah, tawbah and gratitude, as therapy interventions with practicing Muslims, and an open and nonjudgmental way to approach all the clients.
- II. Participants' perceptions of the impact of IOTI. This category is further explicated through IOTI, helping which helps clients to (re)turn to Allah and leave unhealthy habits.
- III. The practicing IOTI issues. This category is further explicated by differentiating between spiritual/religious and psychological problems and Ruqyah treatment. All categories and subcategories are explained, and pertinent examples are provided where necessary.

# Islamically-oriented therapy interventions (IOTI): The Qur'an and Sunnah as IOTI

Since all participants reported having not only practicing and nonpracticing Muslims but also non-Muslim clients, they reported considering this factor and designing their therapy approach accordingly. In working with practicing Muslim clients, most participants reported using Qur'anic verses, stories of the prophets mentioned in the Quran, as well as the Sunnah of the Prophet Muhammed to address Muslim clients' needs, which help them gain new insights, and reshape their thought processes and attitudes towards themselves, others, and Allah.

For example, one participant said: "According to my understanding, I offer practicing Muslim clients' Islamic resources by citing hadith and events from the Prophet's life, ayahs, and Islamic principles originating from the Qur'an and Sunnah as universal human values. That usually evokes spiritual wellness and brings relief to my clients" (1.A., age 57).

Another participant claimed: "First, I ask patients if they believe in God; if so, I ask them if they practice religious rituals; and if so, I inquire more. I discover many believers feel guilty because they do not practice religion regularly and present common misconceptions like 'I am a sinner, there is no hope for me, and Allah will not forgive me.' We explore this in detail, and then I relativize all that to them by citing an ayah about Allah's promised forgiveness and His mercy. Teach them not to add to their suffering but to resolve their suffering" (4. D., age 64).

A third participant stated: "When I notice—based on clients' presenting problems—that they can benefit from ayahs and examples from the Prophet's life or hadith, I use the Qur'an and hadith to help them make cognitive changes and restructure their mindset. I do this only when I notice that they can use and benefit from that intervention or reach a point of personal introspection, reexamination, and satisfaction that produces positive results" (5. E., age 43).

Some participants also talk about tailoring their treatment interventions and approach to clients' presenting problems and symptoms, their (mis)understandings, and their (mis)conceptions of their responsibility and role within the family/community.

To illustrate, one participant claimed: "I notice lots of clients who come with misconceptions about themselves as not being good Muslims because they are in psychological distress or diagnosed with psychiatric disorders; they believe practicing Muslims cannot be depressed or in distress. So, sometimes I spend several sessions with them doing psychoeducation about the core concepts regarding what it means to be a human being (insan), what the Qur'an and the Prophet Muhammad said about the insan as the one who forgets and sins, why Allah created the insan (to serve Him), the insan's sinful and fallible nature, and the shaytan's role in people's lives. That

helps clients normalize their condition and gets them to the stage of using their faith and religious practices as resources and positive coping strategies. I suggest they do tawbah and istighfar, read or do morning and evening dhikr, and perform salah regularly. This helps them change their condition and move in a positive direction to the point where many confess that they finally feel good and enjoy doing ibadah, unlike before when it was just an automatic act" (10. J., age, 49).

Other participants reach for their own self-acquired knowledge about Islam and Islamic principles that they learned in Islamic high school (madrasa), but admit that they need more in terms of knowledge: "So, I integrate all my knowledge—mostly knowledge from Madrasa—and rely on my intuition to determine what would be useful to the clients. I use Qur'anic verses, stories, and narratives from the Qur'an and the Prophet's life—even the life of Sahaba—depending on the clients presenting problems. It turns out to be very beneficial" (7. G., age 38).

Some participants also emphasize positivism or positive orientation stemming from the Qur'an in their approach and talk about teaching clients about the importance and benefits of using beautiful language and words in relation to others. One participant reported, "Many people use bad words in daily life. We should prompt people to remember and use nice words, which are mentioned in the Qur'an: 'Beautiful words are like a beautiful tree, whose branches (Greek, dendrites) always give fruits.' This was practiced by our Prophet , so I tell my clients that we should all follow his example and tell them about the psychophysiological impact of such an act. This produces good results." (4. D., age 64).

#### Islamic Rituals as IOTI with Muslim Clients

Some participants address the role of sin in client wellbeing and the need to repent and practice gratitude, not only for support and motivation but also for mental processing and individual progress. They also highlight other practices such as the reading and rehearsing of the Qur'an, the performance of salah or prayer for the purpose of restoring peace in the mind and heart, the improvement and betterment of oneself, and the acceptance and acknowledgment of one's fallibility as a human being who has the opportunity to choose to change.

For example, one participant claimed: "I share with my clients that there are certain ayahs, or surahs, in the Qur'an that when people read and think about them or repeat or rehearse them, they feel ease (that is, some sort of meditation), in addition to salah, as a complex way of human worship and ibadah. I suggest my clients read the Qur'an—God's words—because such an act helps clients and people in general instill relaxation and peace and results in behaviors that restore peace in the heart and mind" (4. D., age 64).

Another participant claimed, "I believe many problems are related to people's sins. The Qur'an is the ultimate cure, so I suggest to clients that they read the Qur'an and pray regularly because that will help them stop sinning. As Allah s.w.t. explained in the Qur'an, such practice produces wellbeing" (2. B., age 35).

A third elaborated: "When clients report feeling guilty because of their sins and their belief that God will not forgive them, I relativize that to them and talk to them about Allah's promised forgiveness. As Allah s.w.t. says: "If you have sins as much as sea foam, Allah will forgive you if you sincerely repent." And I always remind them of the part "In the name of Allah, the Most Merciful, the Most Compassionate (Ar-Rahman, Ar-Raheem). I tell them that in invocation—when reading the Qur'an, when doing anything and everything—to intend it in the name and with the name of Allah, the Most Merciful, the Most Compassionate, who is forgiving and will forgive. I support repentance in my patients, guide them to the point where they can say to themselves, 'I understand that I have sinned, but I will not leave it at that. I will repent, and I want to fix and correct myself; change myself for the better.' Because they sin, many believers think Allah will not forgive them, so I help them reconstruct that error and talk about Allah's mercy and forgiveness first and foremost. This results in huge cognitive and body relief on the clients' behalf' (4. D., age 64).

A fourth participant reported, "Many Muslims are presented with misconceptions, so if diagnosed with depression, a believer feels like a nonbeliever, feels that Allah s.w.t. does not love him or her, and feels that she or he is not allowed to turn to Allah because of that. This is a paradox because the cure is with Allah s.w.t. only and nowhere else. So, there is some sort of chaos and havoc—internal conflict—in the patient. On the one hand, he or she wants and needs that connection with Allah, wants and needs to be good and be loved by Allah s.w.t., and on the other hand, feels that that does not belong to him or her and that he or she does not have a chance or opportunity for that. Addressing and resolving these issues—internal conflicts—by reconstructing and discrediting these beliefs and misconceptions results in great relief for the client" (3. C., age 37).

Another said, "Along with conventional therapy, I suggest to my clients that they focus on and perform ibadat (salah), tawbah, istigfar, tawwakul, and dhikr so they feel supported and motivated when they face tribulations and problems in life" (6. F., age 49).

One mentioned using gratitude as a therapy technique, "I remind my patients of gratitude, being grateful to Allah s.w.t. all the time, and reminding people of God's goodness. I tell them to list tribulations. 'Yes, tribulations are there, but practice gratitude every day, and you will see there are a lot of things we should be grateful for.' Practicing gratitude is very beneficial for psychological and spiritual wellbeing" (2. B, age 35).

# An Open and Nonjudgmental Approach to Clients

Since participants acknowledged having non-Muslim clients, some reported calling them to choose to connect with the Higher Power in order to ease their suffering, but while doing so, they reported being nonjudgmental and approaching each client very sensitively by using appropriate terminology.

The following participant said, "If clients are not believers, I tell them: 'You have the possibility—if you change your values from secular to religious—you have the possibility to connect with the Lord of the Universe, with an Exalted or Higher Power (as is said in English), so it will be easier for you to live life and endure all that life inevitably brings" (4. D., age 64).

Another claimed, "I do not use Islamic or Arabic terminology with clients who are not believers or not practicing. So, instead of iman, for example, I refer to heart, so I tell my clients: 'Check out what is in your heart. What fills and overwhelms your heart, good or bad?' Then we work on filling the heart with good stuff—anything that clients report working for them" (3. C., age 37).

Another respondent stated, "I am very open. I show total acceptance and warmth to all my clients, regardless of their orientation, nonjudgmentally. I do not impose anything on them but inquire about that which helps them restore relaxation, peace of mind, and heart, and we practice that." (1. A., age 57).

# Participant Perception of the Effect of IOTI

Understanding how IOTI has been perceived can be further explained through two themes that have been observed: (1) IOTI and clients (re)turn to Allah and (2) IOTI and clients leaving unhealthy habits.

#### IOTI and Clients (Re)turn to Allah

A client's positive or negative conception of Allah or God is an important factor in his or her wellbeing. Mental health practitioners reported the presence of major misconceptions about Allah. When a therapist addresses these misconceptions and reconstrues them with clients—particularly with clients who perceive Allah as a Being who only punishes—it improves clients' well-being.

As stated by the following respondent, "I start from the point that the Qur'an has answers for any issue. Lots of people have the wrong perception about Allah, as some Bogeyman (babaroga) just waiting to punish people for their bad deeds. So they are afraid, they resist, they think believers must not be feeling bad, and they are not allowed to be unwell. Addressing these misconceptions and reconstructing and discrediting these negative faulty beliefs results in the clients' (re)turn to Allah s.w.t. in such a profound way that there is no better reward for a therapist" (3. C., age 37).

# **IOTI and Leaving Unhealthy Habits**

All respondents reported positive outcomes of using IOTI. They claim that both they and their clients perceive and experience the benefits of using such an approach, to the point that some reported that their clients left unhealthy and harmful habits like alcohol.

"I have lots of people/patients who stop using alcohol and other substances, quit smoking, and report their relationships improving after we address their religious and spiritual needs in therapy. People come to their senses. They say, 'I am a believer and want to share my issues with you only (because you are also a believer and practicing Muslim). I do not trust others.' They find something their soul was searching for. In my approach, I only ask for the soul to come to its senses, contrary to the secular understanding, which focuses on materialism and a material understanding of the meaning and purpose of life" (4. D., age 64).

# The Practicing IOTI Issues

The practicing IOTI issues category was further explicated through two subcategories: (1) differentiating between spiritual/religious and psychological problems, and (2) Ruqyah treatment.

# Differentiating Between Spiritual/Religious and Psychological Problems

The participants reported having clients with reported spiritual or religious (sihr or black magic-related) problems and their doubts related to identifying, diagnosing, and treating such problems. Some also reported that their clients inquired about Ruqyah (reciting certain Qur'anic verses) as a treatment method:

"So, how do we know and distinguish between a pure spiritual or religious issue or problem and a psychological one? We need some guidelines on this" (8. H., age 44).

"We do not know how to recognize and identify psychological problems related to sihr. And also, we do not know who is certified in our community to treat this kind of problem efficiently; we need this information" (5. E., age 43).

# Ruqya Treatment

"I have a personal dilemma with clients who come and confess that they have sihr-related problems and receive Ruqyah treatment while they seek psychotherapy services from me. I am in doubt and confused. Should I accept the person as a client or wait until he or she finishes that type of treatment first? Are they contraindicative or not? What presenting symptoms and problems are the result of sihr, and which are purely psychological? How do I go about doing this?" (10. J., age 49).

#### Discussion

The participants in this study are all, except for one, Bosnian mental health professionals with a secular educational background, practicing Muslim psychologists and psychiatrists who, as they have reported, practice and hold Islam close to their hearts. Since studies show that religion and spirituality are often overlooked in training (Mintert et al., 2020; Pearce et al., 2019; Scott et al., 2016), making it challenging to address and focus on these topics in therapy (Scott et al., 2016), the findings presented here are the result of participants own personal effort and conscience to offer the best possible care and create sensitivity to their clients' needs.

Research shows that religiosity, both in the framework of external actions and as a belief, leads to an improvement in psychological well-being (Khashab et al., 2015). Addressing clients' religious needs in therapy seems crucial, particularly when working with devout and highly religious clients. The participants in this study reported using Islamically-oriented therapy interventions with practicing Muslims, such as the Qur'an and the Sunnah as well as Islamic rituals like dhikr, salah, repentance, gratitude, and an open and nonjudgmental approach to clients, to foster therapeutic success.

When they work on their issues and challenges, Muslims from around the world frequently consult the Qur'an and the Sunnah for guidance and aid (Owens et al., 2023). The Qur'an and the Sunnah can serve as a form of psychoeducation for Muslim clients. Our participants mostly reported using Qur'anic verses, narratives, and stories, as well as the Sunnah, to generate insight and increase self-awareness, both of which produce behavioral and cognitive changes in their clients. This confirms findings in a previous study that the Qur'an and the Sunnah foster physical, moral, intellectual, emotional, social, and spiritual resilience, offering unique ideas, remedies, and solutions to various contemporary mental health challenges not addressed by mainstream conventional Western psychology and psychiatry (Hassan, 2021). Additionally, like other studies, this study has found that the Qur'an can be read, recited, memorized, or listened to as a means of reducing stress, anxiety, and depression while also improving quality of life and coping (Owens, 2023).

Some participants discussed addressing the false or distorted beliefs of clients as well as feelings of unworthiness of Allah's mercy due to their sins. They also discussed understanding clients' feelings of guilt and depression from an Islamically-oriented therapy framework as well as dealing with such feelings by instructing clients to do dhikr, perform salah, repent (tawbah), and practice gratitude. These confirm previous findings that dhikr, as a special form of spiritual remedy presented through the repetition of prescribed prayer, is a spiritually-oriented therapy intervention (Haque & Keshavarzi, 2014). This repetitive practice of dhikr, along with reflection

and remembrance of God, aligns with mindfulness practices and interventions. Additional studies show that mindfulness interventions, similar to dhikr in their focus on presence and contemplation, were effective in reducing symptoms of anxiety and depression (Hofmann & Gomez, 2017) and reducing multiple negative dimensions of psychological stress (Goyal et al., 2014). Performing salah or praying along with reading, memorizing, and listening to the Qur'an helps reduce anxiety, depression, and stress and improve coping skills and quality of life (Owens et al., 2023).

Sin is understood to be a natural component of human nature and a factor that prevents spiritual growth. Hence, within the framework of Islamic psychology, tawbah is an essential component of practice, which includes questioning and confronting beliefs and actions that are against the Shari'ah (Rassool, 2021). Along with tawbah, another vital Islamic practice and virtue is gratitude. Islam holds that two essential virtues—shukr (or gratitude) and sabr (or patience)—provide a recipe for a happy life for Muslims (Pasha-Zaidi et al., 2021).

Studies show that Islamic rituals play a constructive role in developing the personality of the believer, encourage a disciplined lifestyle, and play a part in increasing self-control, reducing daily life stress and depression (Tahir & Zubairi, 2019), and improving overall mental and physical health (Uyun et al., 2019).

Interestingly, we notice that participants reported differentiating their IOT approach based on the client's background because they work with practicing and non-practicing Muslim and non-Muslim clients. Most participants confirmed that their practicing Muslim clients seek professional help from them because they are practicing Muslims themselves and have a reputation for referring to Islam while working with clients. Hence, our respondents reported being free to use the Qur'an and the Prophet's tradition to help practicing Muslim patients deal with problems.

At the same time, they reported being particularly open and non-judgmental while treating non-practicing Muslims and other patients. Of course, this is part of relational ethics, and professionals should be aware that a therapist's ethical values will not always match those of his or her clients. However, as a part of relational ethics in therapeutic practices, it is not the therapist's place to judge whether a given behavior is good or bad for the person but rather to facilitate reflection and exploration of the client's process (Gergen, 2015). This is exactly what our participants reported doing: applying an individualized approach to their clients and addressing religious and non-religious client needs.

Similar to our study findings, studies in Iran show that applying spiritual therapy (particularly stories, verses of the Qur'an, prayer, sacred texts, God images, and forgiveness) has a positive effect on the treatment of conduct disorder (Mohammadi

et al., 2017). Moreover, spiritual therapy seems to be efficient even in the treatment of gender dysphoria (Mohammadi et al., 2021).

In regard to the perceived effects of IOTI, participants reported that IOTI helps patients (re)turn to Allah and help leave unhealthy habits such as drinking alcohol; additionally, they reported needing help to understand how to differentiate between spiritual, religious, and psychological problems.

According to an Islamic psychological paradigm, the majority of heart and soul illnesses are caused by a person's disconnection from God (Ghazali, 1986, as cited by Rothman, 2021), while other illnesses are viewed as hardships/trials, or tribulations that a person must endure in order to purify their soul and may not actually be curable. Like many traditional healing systems, Islamically-oriented therapists work under the assumption that God is the only one who can truly heal someone and change his or her heart (Moodley & West, 2005; Rothman, 2021); therapists only serve as a channel for such a relationship with God (Rothman, 2021). Our participants reported using IOTI for this purpose exactly as their reports demonstrate clients (re)turn to Allah.

IOTI, as reported by the participants, also facilitates leaving unhealthy habits like smoking and using drugs. While it does not expressly forbid smoking, the Qur'an does offer behavioral guidelines, such as not using intoxicants, so teaching or reminding clients about this can be beneficial to Muslims. Unhealthy habits such as smoking, drinking, or using drugs often start as coping mechanisms in the face of certain adversities. Research from Malaysia shows that reading healing verses provides peace for drug addicts and enables them to live in peace (Ismail et al., 2018). As our participants reported, IOTI helps clients develop their spirituality, find meaning, and reconnect with Allah and their true nature. All of this might serve as a relief from the stress found in their lives and, hence, strengthen their spirituality and aid them in leaving unhealthy habits. Similar to our findings, studies show that spirituality, or religiosity, helps lessen the suffering caused by adversity as it fortifies one's inner being, promotes optimism, and heightens one's level of bodily, mental, and spiritual cleanliness (Sudan, 2019).

In relation to the issues they face while applying IOT, participants reported difficulties related to understanding and differentiating between spiritual/religious and psychological problems and symptoms, particularly when clients either admit receiving some form of Ruqyah treatment or inquire about it. Ruqyah (incantation) in Islam includes the recitation of the Qur'ān, seeking refuge in Allah, remembrance, and supplications, all of which are used as a means of treating sickness(es) and other problems as sources of healing. The main purpose of Ruqyah is to treat and cure the evil eye, the possession of jinn, envy, and black magic, while keeping in mind that the essence is to place full trust, reliance, and dependence only on Allah, the source of all healing and cure (Rassool, 2023).

Rasool (2023) also claims that "scholars advise Muslims who are sick, whether that is spiritual (mental) illness such as anxiety and depression or physical illness such as various kinds of pain, to hasten first of all to treat the problem with Ruqyah as prescribed in Shari'ah" (p. 171). Performing Ruqyah, or visiting a person who reads the Qur'an, as a form of alternative religious treatment, primarily for spiritual but also psychological and even physical illnesses, is a very popular practice in Bosnia. Although there is no corroboration from studies, our findings suggest that clients' experiences indicate that they believe mental health issues are caused by jinn or other spiritual forces, leading them to naturally resort to Ruqyah as their first form of treatment. Similar findings are also found among South Asian Muslims in the UK who believe in the existence of jinn, black magic, and the evil eye, deducing that these could cause physical and mental health problems, which further lead them to resort to Qur'anic healers for treatment (Dein & Illaiee, 2013; Khalifa et al., 2011; Littlwood & Dein, 2013).

Indeed, for Muslim health practitioners, it is important to not only acknowledge the presence of religious or spiritual (sihr-related) problems but also be able to distinguish them from psychological or psychiatric ones, in order to offer efficient treatment. While there is a suggestion that the category of "religious and spiritual problems" could be added to the ICD (Abdul Hamid, 2011), this category already appears in the DSM-V (APA, 2013) as a V Code, identifying additional issues that may be useful to clinicians in documenting underlying pathology. Hence, when religion or spirituality are causing problems in the client's functioning, the diagnosis of a religious or spiritual problem occurs (Prusak, 2016). Examples of religious or spiritual problems in the DSM include "distressing experiences that involve loss or questioning of faith, problems associated with conversion to a new faith, or issues of other spiritual values" (APA, 2013, as cited in Harris et al., 2019, p. 96).

Further exemplification of sihr-related issues is necessary in terms of proper symptoms, duration, and diagnostic tools, as well as concurring evaluations made by clinical psychologists (clinicians) and experienced and trained spiritual (Ruqyah) healers, in order to classify these phenomena under other issues of spiritual values. The outcome could be three categories of problems presented: mental disorders, religious or spiritual problems, and a subcategory of purely 'sihr-related' religious problems. Again, we emphasize that this should be a collaborative process between mental health practitioners and religious healers in order to properly diagnose and treat varying problems.

Various factors contribute to the popularity of this treatment practice in B&H, including the secularization of knowledge and social sciences over more than a century, the relative global novelty of the Islamization project and Islamic psychology, and the

delayed educational institutionalization of psychology as a science in Bosnia, which has been intensive and relatively recent (Smajić & Draganović, 2021). For a long time, practicing Muslim Bosnian clients sought and received help for their psychological and spiritual problems from imams, the ulema (Islamic scholars), or others offering Islamic healing, not only because they believed that they could help them, but also because they knew they would accept and not judge them for their beliefs. Furthermore, the local Muslim scholars in B&H sometimes mistakenly associate psychological science with the antireligious views of Freud and pseudoscience (Smajić & Draganović, 2021), which resulted in the assumption that psychotherapists would not engage with their religious values in an informed and open way. Consequently, many Muslims either refuse to seek professional help or seek help solely from Islamic scholars and imams. Similar statements about Muslims not seeking professional help for this reason are seen in Rothman and Coyle's (2020) findings.

Notwithstanding its public appeal, we wish to underscore that mainstream Muslim scholarship does not espouse the notion that certain mental health afflictions are attributable to jinn or black magic, nor does it endorse any actions based on such beliefs. Correspondingly, the Prophet advises those affected by magic to follow protective methods and avoid charlatans and exorcists; hence, it would be appropriate for individuals who believe they have been subjected to magic and have psychological problems to consult a doctor or psychiatrist (Sabry & Vohra, 2013). Also, the Turkish Presidency of Religious Affairs (2018) fervently advocates for psychiatric and psychological interventions as the foremost course of action in such circumstances, all the while cautioning against the dangers of potential scams and charlatanism.

#### Conclusion

Our findings show that this group of Bosnian mental health practitioners are religiously sensitive and incorporate Islamic teachings and terms into a Western therapy modality when working with clients. Referring to the Qur'an and the Sunnah; narrating stories of the prophets mentioned in the Qur'an or the life and experience of the Prophet Muhammad; reminding clients to perform prayer, do tawbah, practice dhikr and gratitude; all help practicing Muslim clients not only reframe their cognitions and align better with their faith and true nature and (re)turn to Allah, but also reframe and accept themselves, leave smoking habits, and even use drugs. These study results can serve as a solid reference for the specific IOTI applied by Bosnian Muslim mental health practitioners in private or public practice. This study revealed specific issues the participants, as practicing Muslim therapists, face while working with clients. The findings contribute to the existing literature on the significance of incorporating spirituality or religiosity while working with devout clients and can serve as the groundwork for future studies after addressing study limitations.

#### Limitations

This study has some limitations, primarily related to the sampling, sample size, and analysis method. Although thematic analysis is flexible, this flexibility can lead to inconsistency and a lack of coherence when developing themes derived from the research data. Hence, generalization is possible for this population only. Future research, possibly using a mixed-methods approach, should consider and address these limitations in order to provide better results. Additionally, it should be noted that the researchers' theoretical orientations and personal experiences may have affected the way they see the world and hence interpreted the studied phenomena. Being a practicing Muslim therapist could have some influence on research findings and interpretation.

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Data from this study is available upon reasonable request from the corresponding author.

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Review Article

# A New Evidence-Based Spirituality Framework for Mental Health Practitioners: A Concept Analysis and Integrative Review

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#### Abstract

This paper presents a new evidence-based spirituality framework aimed to assist counselors, psychologists, and other mental health professionals to effectively integrate spirituality into their clinical practice, thereby improving the mental health outcomes of their clients, reducing their excessive workloads during the current global mental health crisis, and leading to better client care. Using an integrative literature review of the relevant empirical and theoretical findings, taking a scientist-practitioner stance and an applied clinical perspective, the paper legitimizes the science of spirituality and its benefits for mental health. Based on a concept analysis of the literature, findings yielded a holistic and evidence-based conceptual framework comprising the attributes, antecedents, practices, mental health-related outcomes, corresponding mechanisms of action, and potential harms of spirituality. In doing so, the paper responds to calls in the literature to effectively integrate spirituality into clinical practice; for more nuanced research on the role of spirituality in mental health; for the development of holistic, person-centered, evidence-based spiritual therapies to improve client outcomes and reduce clinician burnout; for the teaching of spiritual competencies in mental health graduate training programs; and more training of practitioners.

#### Keywords:

Spirituality • Global mental health crisis • Spiritual practices •

Neuro-spirituality • Spiritual neuroscience

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#### Introduction

The "spirituality revolution" (Tacey, 2004, p. 1) in the last 30 years has spawned expanding research on the psychology of religion and spirituality. This advancement has included the development of spiritual well-being measures (Eksi & Kardas, 2017; Moberg, 1984; Paloutzian & Ellison, 1982); the integration of spirituality into counseling or psychotherapy (Johnson, 2013; Koc, 2024; Sperry & Mansager, 2007); and the emergence of religion-and-spirituality-oriented therapies (Mangione & Plante, 2024), also referred to as spirituality-based interventions (Cook, 2015), spirituality-based counseling (İşbilen & Mehmedoğlu, 2022), or spiritually integrated psychotherapies (Currier et al., 2024). These therapeutic approaches incorporate mindfulness, meditation, and yoga (Currier et al., 2024; Mangione & Plante, 2024), which, despite being rooted in ancient Eastern teachings (Kabat-Zinn, 2013) or religions like mystical contemplative traditions within Christianity (Trammel, 2017), are secular in nature. The use of such practices may result from the "transreligious learning paths" or "trajectories" (Husgafvel & Utriainen, 2023, p. 1) of counselors, psychologists, or other mental health professionals (MHPs) to supplement their academic education. Hence, MHPs can use these practices with their clients, even those without religious or spiritual affiliations (Plante, 2024).

Growing research evidence supports the mental health (MH) benefits of spirituality-based interventions in clinical practice (Cook, 2015; Pečečnik & Gostečnik, 2022). These interventions are commonly used in psychiatric nursing (Clark & Emerson, 2021), palliative care (Kang et al., 2023), and the treatment of individuals with HIV/AIDS (Cotton et al., 2006), cancer (Kang et al., 2023), substance use disorders and addiction (Galanter et al., 2021; İşbilen & Mehmedoğlu, 2022); and more recently, internet addiction (Yıldırım, 2023). Additionally, a recent study has highlighted the mediating role of spiritual well-being in overall psychological health (Tunç & Ümmet, 2024).

People with spiritual beliefs tend to have lower rates of depression, suicide, addiction, and loneliness (Gallup, 2023). Kaufman and Rosmarin (2024) encourage clinicians to consider the assessment and the potential inclusion of spirituality in the treatment of alcohol use disorder and post-traumatic stress disorder (PTSD). Further, according to Kopacz et al. (2016), spiritual well-being is a protective effect against suicidal behavior. Moreover, a recent multi-level meta-analysis of randomized controlled trials (Bouwhuis-Van Keulen et al., 2024) found that religion and spirituality therapies are more effective than regular therapies, particularly for depression, and typically lead to improvement within the first month (Currier et al., 2024). In sum, as Pargament (2023) puts it, "Today, there is a compelling evidence-based rationale for integrating religion and spirituality into psychological practice" (p. 216).

#### The Current Global Mental Health Crisis

The world is experiencing a MH crisis (Fleming, 2021; Sotillos, 2024), despite global efforts to mitigate it (Patel et al., 2023). By 2030, MH disorders are estimated to cost US\$16 trillion (London & Varnum, 2019). MH is one of the most neglected areas of healthcare, impacting 1 billion people worldwide. Each year, alcohol misuse accounts for 3 million deaths, and one death by suicide occurs every 40 seconds (World Health Organization, 2020).

Further, new forms of non-substance addiction—such as addiction to the internet or digital addiction—have emerged in recent times (Reichert et al., 2021). Consequently, the demand for MH care services has skyrocketed, putting these services in crisis mode in many developed countries (Salicru, 2022). In turn, MHPs are overwhelmed with excessive workloads, poor work-life balance, and emotional exhaustion, putting their clients' care at risk. For example, in 2022, 45% of psychologists in the United States reported feeling burned out (Lin et al., 2023).

# The Gap

Despite the evidence highlighted above, general mainstream MH care—with existing MH services available to the general population—has not yet fully achieved the integration of spirituality in MH treatment. Clinical practice remains dominated by a biomedical model that ignores spiritual well-being (Chen & VanderWeele, 2020; Mapaling & Naidu, 2023; Wong & Laird, 2023). In addition, most MHPs lack the time, knowledge, skills, and confidence to have spirituality-related conversations with their clients (Pargament, 2023). According to Kumar (2023), a majority of MHPs continue to treat religion and spirituality as synonymous and view it as archaic, unscientific, and having little value for MH care. Kaufman and Rosmarin (2024) attribute this neglect of spirituality in MH care to erroneous assumptions and misconceptions of the construct. In the current context, where there is a pressing need to address this global MH crisis, responses to this problem are inadequate and insufficient (World Health Organization, 2022). Hence, a different approach to delivering MH services is urgently required (Radfar et al., 2021; Shidhaye, 2023; Stringer, 2024; Wong & Laird, 2023). The disregard or underutilization of spirituality in MH care constitutes a vast untapped potential and a significant gap.

# **Study Aims and Research Questions**

This study aims to address the above-discussed gap by answering the following five research questions:

**RQ1**: What are the most common defining attributes of spirituality?

**RQ2**: What are the antecedents of spirituality?

**RQ3**: What are the most common and effective spiritual practices?

**RQ4**: What are the underlying mechanisms and MH outcomes of spiritual practices?

**RQ5**: Does spirituality have any harmful effects? If so, how can these be mitigated?

# Significance of the Study

The current global MH crisis is posing unprecedented challenges. The dominant medical MH care model cannot meet the current demand and must be replaced with more innovative and practical solutions (Gruber et al., 2021). This paper develops a holistic, evidence-based spirituality framework that will benefit MHPs and their clients. The paper also responds to calls in the literature to effectively integrate spirituality into clinical practice and for more nuanced research on the role of spirituality in MH care (Aldwin et al., 2014; Halbreich, 2024); for the development of holistic, personcentered, evidence-based spiritual therapies to improve client outcomes and reduce clinician burnout (Bouwhuis-Van Keulen et al., 2024; Plante, 2024; Puchalski et al., 2014); for the teaching of religion and spirituality competencies in MH graduate training programs (Pearce et al., 2024); and more training of practitioners (Pargament, 2023).

#### Method

An innovative hybrid method combining integrative literature review and concept analysis (Gartner et al., 2022) was conducted to synthesize the empirical and theoretical literature (quantitative, qualitative, and mixed-method studies) to obtain a deep understanding of spirituality and MH. Concept analysis (CA) is a method that aims to identify and clarify the defining attributes and structural components of complex, multidimensional constructs (Walker & Avant, 2019; Wynn, 2024). Walker and Avant's (2019) CA method entails identifying the attributes (characteristics), antecedents (context or preconditions), and consequents (outcomes) of a concept. Hence, it was chosen to investigate the research questions of this study.

The integrative literature review (ILR, Broome, 2000) is a research method (Snyder, 2019) that incorporates both experimental and nonexperimental studies, "which enhance a holistic understanding of the topic of interest" (Whittemore & Knafl, 2005, p. 552). ILRs enable researchers to obtain a fine-grained understanding of a phenomenon by analyzing, synthesizing, and reconceptualizing the extant literature (Broome, 2000). According to de Souza et al. (2010), an ILR constitutes the "most comprehensive methodological approach of reviews" and is "a unique tool in healthcare for it synthesizes investigations available on the given topic and guides practice based on scientific knowledge" (p. 103). Similarly, Cronin and

George (2023) contend that ILRs "are a unique vehicle for synthesizing existing knowledge" (p. 169), and Younas et al. (2022) assert that ILRs "are invaluable for synthesizing literature to guide practice" (p. 1124). By combining theoretical and empirical studies, ILRs can be used to review theories, define concepts, and provide evidence (de Souza et al., 2010); to unpack and advance the current knowledge about an evolving phenomenon (Cronin & George, 2023; Snyder, 2019); and to generate new perspectives and insights (Elsbach & van Knippenberg, 2020; Torraco, 2016).

The ILR in this study was informed by Torraco's (2016) guidelines and followed Whittemore and Knafl's (2005) five phases of updated methodology: problem identification, literature search, data evaluation, data analysis, and presentation of results. The review included full-text, peer-reviewed academic articles (literature reviews, meta-analyses, and qualitative and quantitative studies), scholarly books, gray literature, and official reports on the definition, dimensions, antecedents, practices, outcomes and mechanisms of action, and potentially harmful effects of spirituality. Articles on intercessory prayer or distance healing were excluded. All articles were in English, except one that was in Spanish. No date restrictions were applied to the search strategy.

The PsycINFO, PubMed, and Google Scholar databases were used to conduct the search. The search terms were "spirituality," "definition of spirituality," "antecedents of spirituality," "spiritual practices," spiritual processes," "spirituality and mental health," "spirituality and mental health outcomes," "spirituality, mental health outcomes, and mechanism of change," and "harmful/negative effects of spirituality." The initial search yielded 375 publications. After all duplicates were removed and a quality assessment conducted, 187 final publications were selected from PsycINFO (n = 103), PubMed (n = 55), Google Scholar (n = 24), and official websites (n = 5). They included 180 scholarly publications from 1900 to 2024 (133 journal articles, of which 12 were systematic reviews of meta-analyses and randomized controlled trials, 27 book chapters, and 20 books), two official research reports, and five official online publications.

Findings were summarized using a narrative approach and large tables to complement—not duplicate—the main text content (Cloutier & Ravasi, 2021). The rationale for making this choice is particularly relevant to qualitative research (Miles & Huberman, 1994). First, as one of their most important and valuable functions, tables help manage and organize large amounts of data generally generated through qualitative research (Cloutier & Ravasi, 2021). In fact, tables "help bring order into an otherwise vast and chaotic mass of data" (Cloutier & Ravasi, 2021, p. 115), thus enabling the researcher to communicate findings and insights in a parsimonious and understandable manner. Second, tables are time and space-effective because they help readers understand the results thoroughly and break the monotonous task of reading text by engaging and sustaining readers' interest (Divecha, 2023).

This approach is in line with Miles and Huberman's (1994) observation that "extended, unreduced text alone is a weak and cumbersome form of display ... because it is disperse over many pages and is not easy to see as a whole" (p. 91). In other words, by heightening the visualization mode, tables enable readers to access information at one glance (Younas & Ali, 2021) or for "exploratory eyeballing" (Miles & Huberman, 1994, p. 93). Third, tables are practical for condensing data, facilitating comparison, and enhancing readability, making it easy for readers to find and grasp the contents quickly while enhancing data comprehension and interpretation (Thomas, 2021). This includes detecting similarities, differences, patterns, themes, and trends (Miles & Huberman, 1994). Finally, as Golden-Biddle and Locke (2007) highlight, qualitative research is about "showing" rather than "telling" readers about the data.

#### Literature Review

Conceptions of spirituality vary depending on cultural, religious, and philosophical traditions and academic perspectives taken. Hence, no universal consensual definition of spirituality exists (Koenig, 2012). This section clarifies the differences between religion and spirituality. It extracts the main attributes of spirituality from nine groups of evolutionary philosophical and psychological traditions and theories that, while offering their unique perspective, tend to converge, overlap, integrate, and build on each other.

# Religion and Spirituality: Is There a Difference?

Historically, the words "religion" and "spirituality" were used interchangeably (Culliford, 2002); however, they have been treated as distinct constructs in recent decades (Pargament et al., 2013). Religion has been defined as an organized belief system characterized by institutional membership, dogma, rules, rituals, ceremonies, and obedience to a god, with trained clergy acting as formal leaders (Heelas, 2002). Spirituality is broader and more inclusive, with personal, reflective, and introspective attributions of meaning, purpose, and practices based on meditation and personal devotion rather than the collective worship of a higher power (Cohen & Neuberg, 2019; Pargament et al., 2013). However, some authors caution against exaggerating the differences between religion and spirituality (de Brito Sena et al., 2021), using value judgments based on a superiority hierarchy (Selvam, 2013), and using polarizing terms such as "individual vs institutional" or "good vs bad" (Hill et al., 2000, pp. 63–64). Jeserich et al. (2023) propose that religion and spirituality are not dichotomous but lie on a continuum.

#### **Evolution of Spirituality**

Conceptions of spirituality vary depending on the cultural, religious, philosophical, or academic context. Therefore, no universal definition of spirituality exists. This section

extracts the main attributes of spirituality from nine philosophical and psychological perspectives. These attributes converge, overlap, and build on each other.

Existentialism emerged in the mid-20th century with the work of philosophers such as Kierkegaard, Nietzsche, Husserl, Buber, Tillich, and Heidegger, who posed questions about purpose, identity, authenticity, and meaning (Frankl, 1967; James, 1902; Wong, 2017). Such philosophers considered the experience of life, suffering, guilt, fear, despair, freedom, responsibility, and moral conscience as spiritual (Frank, 1967). Hence, 'existential' is a synonym for 'spiritual' when addressing such questions, and, like phenomenology, existentialism proposes that human consciousness is always connected to the world. The humanistic phenomenology perspective of spirituality is rooted in James' (1902) seminal work on religious experience and forerunner of humanistic psychology, and subsequently in Maslow's (1943) theory of human motivation. Not surprisingly, existential principles gave rise to existential-phenomenological and humanistic-existential psychology, logotherapy (Frankl, 1967), and various types of meaning-centered therapy/counseling (Wong, 2017). These approaches align with Jung's (1938) notion of individuation (attaining wholeness through spiritual growth) and Maslow's (1962) concepts of selfactualization and peak experiences. These themes re-emerged with the transpersonal and positive psychology movements.

Transpersonal, spiritual, or 'scientific' transpersonal psychology relates to the scientific study of transpersonal phenomena (Ferrer, 2014), emphasizing human potential and transcendent states of consciousness (Lajoie & Shapiro, 1992). It emerged in the 1960s and 1970s, and is rooted in James' (1902) work on the psychology of religious experience and Jung's (1959) related concepts of archetypes and the collective unconscious. Transpersonal psychology includes five main themes: (1) states of consciousness; (2) highest or ultimate potential; (3) beyond ego or personal self; (4) transcendence; and (5) spirituality (Lajoie & Shapiro, 1992).

Positive psychology emerged in the 1990s with a return to humanistic psychology theories. It is based on the premise that spiritual and psychological well-being can be achieved through the expression of 24 universal "character strengths" (Peterson & Seligman, 2004), which contribute to human flourishing (Seligman et al., 2005). Positive psychology also includes Csikszentmihalyi's (2014) construct of flow—"the holistic sensation present when we act with total involvement" (p. 136), which shares features of Maslow's (1962) concept of peak experiences.

The adult development perspective contends that spirituality plays an important role in psychological maturity in the second half of adulthood (Boyatzis et al., 2006; Kallio, 2015). Therefore, spiritual development is conceptualized as a core developmental process across the lifespan, and spiritual growth is a positive outcome

of the maturation process. These notions are consistent with Jung's (1938) assertion that as individuals become more aware of their mortality in midlife, they begin to explore the spiritual aspects of themselves.

Historically, considerable psychiatric care has been provided within a religious or spiritual context (Cook, 2022). Current contributions to psychiatry confirm that state-of-the-art clinical psychiatry aims to provide treatment of individuals with mental conditions within a comprehensive approach by integrating social and spiritual dimensions (Huber & Schneeberger, 2020). Similarly, recent advances in health psychology have developed additional measures to evaluate spirituality, and new frameworks in healthcare have been proposed for a better understanding of spirituality as an important aspect of research (de Brito Sena et al., 2021).

Research in neuroscience (Beauregard & O'Leary, 2007; Rim et al., 2019; Rosmarin et al., 2022) and consciousness (Jeanmonod, 2011; Walach et al., 2011; Walton, 2017) has generated hard data and given rise to the science of spirituality (Knight, 2023; Miller, 2024; Preston et al., 2023), and neurospirituality (Jonas, 2011; Rubia Vila, 2014). The fascinating science of neurospirituality, neurotheology, or spiritual neuroscience demonstrates the neurophysiological effects of religious and spiritual practices with the use of brain imaging techniques (Aaen-Stockdale, 2012; Jonas, 2011; Newberg, 2016; Rim et al., 2019; Rosmarin et al., 2022), generating new models of human spiritual experience (Miller, 2024). This emerging research integrates disciplines such as psychology, philosophy, spirituality, and religion into a unified system of science that describes the multidimensional nature of the universe and humankind. Consciousness research has linked spirituality to interconnectedness and prosocial behaviors, enhancing meaning and well-being in religious and nonreligious people (Saad et al., 2022). According to Jeanmonod (2011), "the concept of consciousness is omnipresent in the fields of neuroscience, quantum physics, philosophy and spirituality" (p. 75).

Surprisingly, the quantum theory perspective offers the most integrated and numinous explanation of spirituality. Quantum theory emerged in the early 1920s with Einstein's theories of relativity, representing a paradigm shift that deeply challenged Cartesian and Newtonian physics, the pillars of modern science (Ferrer, 2020). Quantum physics studies energy and matter at the subatomic level, claiming that no absolute separation between seemingly disparate things exists. This assertion is known as "the quantum principle of entanglement" (Walton, 2017, p. 21), which proposes that the distinction between 'objectivity' and 'subjectivity' is human-made. In a similar vein, Ponte and Schäfer (2013) assert that quantum physics demonstrates "the interconnectedness of all things . . . and the connection of our minds with a cosmic mind" (p. 602). Schäfer (2013) calls quantum physics "the psychology of the

universe" (p. 6), asserting that it "has taken science right into the middle of historic traditions of spirituality" (p. 21). This claim aligns with a postmaterialist model of consciousness (Beauregard et al., 2014; Brabant, 2016) and Jung's (1959) notion that the human psyche is guided by a collective unconscious (Ponte & Schäfer, 2013). As Canova (2023) puts it, the term 'quantum spirituality' represents "the merging of modern science and ancient wisdom" (p. 7). The following section complements this review by summarizing all findings.

# **Findings**

As alluded to in the method section, findings are summarized using a narrative approach and large tables, mostly used to complement rather than duplicate the literature review

# **Defining Attributes of Spirituality**

While spirituality lacks a universal definition, scholars agree that it is a multidimensional construct (Moberg, 2002). As noted by Paloutzian and Park (2005), "definitional issues do not need to impede progress in the field" (p. 16), and "single-strand definitions are inadequate to the current demands for theoretical sophistication" (p. 32). Therefore, CA was used to identify the main defining attributes and sub-attributes of spirituality in the literature (e.g., transcendence, search for the transcendent, connectedness). Table 1 displays seven clusters containing the most common defining attributes of spirituality, addressing RQ1.

#### **Antecedents of Spirituality**

The antecedents of spirituality constitute the context, preconditions, and internal or external factors that precede, initiate, or shape individuals' spiritual beliefs, experiences, and practices (e.g., spiritual awareness, desire, faith, and hope). Table 2 shows the 19 most common antecedents in the literature, addressing RQ2.

# **Spiritual Practices**

Spiritual practices are the ways in which spirituality is expressed (Puchalski et al., 2014), whether individual and private or social and public. Mindfulness and meditation are by far the most popular and researched spiritual practices. Mindfulness is a state of hyperawareness of one's internal and external experiences (pleasant or unpleasant) in the present moment from a place of curiosity, acceptance, nonjudgment, and self-empathy (Brown et al., 2007; Davis & Hayes, 2011). It is rooted in Eastern traditions and is generally associated with meditation, yoga, tai chi, or qigong (Martin, 2018). Meditation is a self-induced state of consciousness in which wakefulness and deep

relaxation coexist, influencing neural, autonomic, psychological, and behavioral functions (Kiran et al., 2011). Table 3 shows the 22 most common spiritual practices in the literature, addressing RQ3.

# Mental Health Benefits and Underlying Mechanisms of Spiritual Practices

The effects of spiritual practices can be measured using physiological markers such as brain activity or cortisol levels. Numerous studies report a positive link between spiritual practices and psychological well-being (Aggarwal et al., 2023; Garssen et al., 2021). Mindfulness-based interventions (MBIs), for example, have been shown to reduce symptoms of depression, anxiety, stress, insomnia, addiction, attention deficit hyperactivity disorder, suicidal ideation, eating disorders, schizophrenia, bipolar disorder, psychosis, dementia, and PTSD (Davis et al., 2019; Lucchetti et al., 2021; Magan & Yadav, 2022; Mosqueiro et al., 2020; Oman & Lukoff, 2018; Swinton, 2001; Zhang et al., 2021). MBIs can also enhance attentional and emotional regulation (Kabat-Zinn, 2013).

The physiological mechanisms underlying the beneficial effects of MBIs can be examined using neuroimaging techniques such as functional magnetic resonance imaging, electroencephalography (Fox et al., 2014), single photon emission computed tomography, and positron emission tomography (Newberg, 2014). MBIs activate certain areas of the brain (Newberg & Iversen, 2003), stimulate the release of neurotransmitters and hormones, balance the autonomic nervous system (Jindal et al., 2013), and assist in epigenetic and telomere regulation, mitigating aging and agerelated pathologies (Shen et al., 2020). Table 4 groups the benefits of MBIs into four broad categories—emotional regulation, decreased reactivity and increased cognitive flexibility, and interpersonal and intrapersonal benefits (Davis & Hayes, 2011)—and outlines their corresponding mechanisms of change, addressing RQ4.

# **Potential Harms and Prevention Strategies**

Religious and spiritual practices may also have dark or destructive aspects (Zinnbauer & Pargament, 2005), such as ethical pitfalls related to a lack of respect respect (Plante, 2007). On balance, however, they have been found to influence MH positively (Cook & Moreira-Almeida, 2021). Table 5 presents the potentially harmful effects of spiritual practices and preventive strategies, addressing RQ5.

RQ1: Attributes and Sub-Attributes of Spirituality (Seven Clusters)  Attributes and sub-attributes Summary points and sources	Table 1	
Attributes and sub-attributes Summary points and sources	RQ1: Attributes and Sub-Attri	butes of Spirituality (Seven Clusters)
	Attributes and sub-attributes	Summary points and sources
(Self-transcendence)  Sacred  Holism  force, nature, universe, or mystery; Frankl, 1985; Hill & Pargament, 2003; Holism  Higher power  Spirit/soul  Meaning/purpose  Holism  force, nature, universe, or mystery; Frankl, 1985; Hill & Pargament, 2003; Holism  Transcending the self and everyday life beyond the ego and suffering (Pargament, 2013; Walach, 2017).  Self-transcendence is the experience of self beyond identity and ego boundar ies. It derives a heightened sense of meaning and connectedness with other and the world (Frankl, 1985).  Belongs to the spirit or soul and is immaterial or intangible. Spirit is an external transcendent or internal animating force (Zinnbauer & Pargament, 2005).  The soul is the inner depth of being or true self (Fukuyama et al., 2014).  Linked to existential questions related to the meaning and purpose of life Meaning relates to the need to perceive life—especially suffering—as worth.	(Self-transcendence)	<ul> <li>Transcending the self and everyday life beyond the ego and suffering (Pargament, 2013; Walach, 2017).</li> <li>Self-transcendence is the experience of self beyond identity and ego boundaries. It derives a heightened sense of meaning and connectedness with others and the world (Frankl, 1985).</li> <li>Belongs to the spirit or soul and is immaterial or intangible. Spirit is an external transcendent or internal animating force (Zinnbauer &amp; Pargament, 2005). The soul is the inner depth of being or true self (Fukuyama et al., 2014).</li> </ul>

and personal growth (Miller, 2024).

# Search for the transcen- • dent

- Journey/quest
- Enlightenment
- Becoming
- Self-actualization
- Inner potential
- Individuation
- of reductionism (Beauregard et al., 2014). The search for the transcendent involves a journey or quest to discover, maintain, or transform one's relationship with the sacred; free oneself from attachment and self-imprisonment; and seek meaning, purpose, and enlightenment - the phenomena involving a significant change of consciousness regarding the self. Consciousness is the quality or state of awareness (Lajoie & Shapiro, 1992; Maslow, 1962).

seeking meaning beyond material possessions by pursuing self-improvement

Holism aligns with post-materialism and quantum science and is the opposite

- Struggle, change, and transformation are key (Hill & Pargament, 2003; Pargament et al., 2013). In other words, the experiences and learnings acquired during the journey are more important than the outcome.
- The process of becoming is dynamic, nonlinear, and continuous, involving conscious decisions and intentional actions (Mayseless & Russo-Netzer, 2017).
- Self-actualization is fulfilling one's inner potential and becoming the best version of oneself (Maslow, 1962).
- Individuation is a process of self-discovery, growth, and transformation to discover one's true self, leading to a deep sense of fulfillment and inner peace (Jung, 1938).

#### Connectedness

- Social connectedness
- Fulfillment of existential goals
- Self-actualization
- Wholeness
- Transformation
- Peak experience
- Flow

- Connectedness means connecting with the self, others, nature, the sacred, or a higher power, which provides meaning and purpose in life (Martsolf & Mickley, 1998; Meraviglia, 1999; Puchalski et al., 2014; Weathers et al., 2016).
- A means of fulfilling one's existential goals (finding meaning, interconnections, and wholeness; Zinnbauer & Pargament, 2005).
- Self-actualization is fulfilling one's inner potential by living creatively and using one's potential (Maslow, 1962). It is not perfection but a state of mind in which problems, relationships, and needs are approached with acceptance and understanding.
- Wholeness relates to the invisible realm in which everything is connected; one's longing for wholeness is the source of one's spiritual needs (Schäfer, 2013). Human wholeness entails body, instincts, heart, mind, and consciousness (Ferrer, 2014).
- Transformation involves a profound change in how individuals relate to the sacred (Shults & Sandage, 2006).
- Peak experiences are transcendent moments of heightened sense of wonder, awe, ecstasy, elation, joy, inner peace, harmony, and connectedness to others (Maslow, 1962).
- Flow occurs when a person is totally immersed in an activity, resulting in a transcendence of ego and consequent psychic integration with metapersonal systems (e.g., nature, the cosmos, or humanity as a whole; Csikszentmihalyi, 2014).

# Table 1 RQ1: Attributes and Sub-Attributes of Spirituality (Seven Clusters)

_	Attributes and sub-attributes Summary points and sources			
4	Self-reflection and meta- cognition	<ul> <li>Spirituality requires reflecting on one's purpose and identity. While the capacity for self-consciousness is necessary for spirituality, it is insuffi- cient. Spirituality involves awareness of one's existence and the ability to analyze one's thinking and learning processes (metacognition; Ho &amp; Ho, 2007).</li> </ul>		
5	Character strengths  Values/virtues  Authentic living  Positive emotions  Thriving/flourishing  Happiness  Good life  Well-being  Positive narrative identity	<ul> <li>Embedding positive values or virtues (e.g., forgiveness, gratitude, compassion) in all aspects of life and living authentically are key to thriving and flourishing, positive emotions, psychological well-being, and a meaningful, happy, and satisfying life (Ford et al., 2023; Fredrickson, 2023 Peterson &amp; Seligman, 2004; Puchalski et al., 2014; Seligman et al., 2005)</li> <li>Happiness and a good life result from eudaemonia (living according to one's true spiritual self) rather than hedonism (self-indulgence or pleasure-seeking). Therefore, spiritual fulfillment is more important than material or sensual gratification (Ho &amp; Ho, 2007).</li> <li>Spirituality underlies meaning, virtue development, expression, and self-transcendence (King et al., 2020; McAdams, 2006).</li> <li>Character strengths are cross-culturally universal (Peterson &amp; Seligman 200).</li> <li>Narrative identity (or self-concept) is an individual's internalized and evolving life story about who one is, how one came to be, and who one is becoming (McAdams, 2006; McAdams &amp; McLean, 2013).</li> </ul>		
6	Cultural and social context	<ul> <li>Spirituality and religion have existed in every human culture (Piedmont, 2005).</li> <li>Cultural and social contexts and language determine how religion and spirituality are conceptualized, operationalized, and measured (MacDonald et al., 2015; Zinnbauer &amp; Pargament, 2005).</li> <li>Transcultural commonalities include valuing human life, love of humanity, and pursuing inner peace and truth (Ho &amp; Ho, 2007).</li> </ul>		
7	Multifaceted, holistic, and interdisciplinary approach	• Spirituality is multifaceted and holistic, as it relates to affective, biological, cognitive, cultural, moral, relational, personality, self-identity, social, and global phenomena (Hill & Pargament, 2003; Ho & Ho, 2007; Mayseless & Russo-Netzer, 2017). Hence, a multilevel interdisciplinary approach is necessary to avoid the pitfalls of reductionism (Zinnbauer & Pargament, 2005).		

 Table 2

 RQ2: 19 Antecedents of Spirituality

An	tecedent	Brief description and sources	
1	Spiritual awareness	Gaining spiritual knowledge and understanding of meaning and purpose through reflection, introspection, and deliberation (Jaberi et al., 2019; Weathers et al., 2016; Withers et al., 2017).	
2	Awareness of spiritual needs	Conscious awareness of one's connection with self, others, the environment, a higher power, God, life force, or the greater universe (Tavares et al., 2022).	
3	Awareness of spiritual resources	Conscious awareness of the support available from God, a higher power family members, friends, or healthcare professionals (Jaberi et al., 2019) Yeşilçinar et al., 2018).	
4	Capacity for transcendence	Ability to exceed everyday limits by surpassing physical, temporal, and cognitiv boundaries. Depends on the context (biosocial conditions, developmental stage demographics, key life events) and background, such as worldview, life philosophy, personal beliefs, and sociocultural, mental, emotional, and behavioral factor (Ellison & Fan, 2008; Jaberi et al., 2019; Konichezky et al., 2024).	
5	Desire	Intense yearning to initiate the spiritual journey (Weathers et al., 2016; With ers et al., 2017).	
6	Faith	Personal values and beliefs (not limited to religion) that guide one's thought and actions in finding meaning and purpose in life (Lalani, 2020).	
7	Family of origin	Spirituality may grow best in an ongoing open exchange with one's parents (Boyatzis et al., 2006; Nelson, 2014).	
8	Hope	Believing something one wants or needs could happen (Yeşilçınar et al., 2018).	
9	Individual differences	People with certain personality traits (e.g., openness to experience, conscientiousness), psychological needs, or attitudes may be attracted to beliefs or institutions that can meet or affirm their needs (Hui et al., 2017; Piedmont, 2005; Saroglou, 2010).	
10	Love	Having a strong, positive emotional and mental state (Yeşilçınar et al., 2018).	
11	Maturation	Adult development, psychological growth, and maturity (Boyatzis et al., 2006; Jung, 1938; Kallio, 2015).	
12	Need to find meaning and purpose in life	The need to find meaning, purpose, or direction; set goals; and guide decisions and behaviors (Frankl, 1985; Hill & Pargament, 2003; Paloutzian & Park, 2005; Pargament, 2013; Park & Van Tongeren, 2023; Woods & Ironson, 1999; Yeşilçınar et al., 2018).	
13	Personal values, beliefs, or worldview	Embodying one's belief system, worldview, or experiences to shape meaning and define life goals. It includes the moral or ethical aspects of one's behaviors, which influence the ability to form connections and grasp life's meaning and purpose (Clark & Emerson, 2021; Lalani, 2020; Miner-Williams, 2006; Rodgers, 1989; Weathers et al., 2016; Yeşilçinar et al., 2018).	
14	Relationships and interactions	Attempt to form or maintain relations with family, friends, peers, coworkers, or community members; capacity and openness to communicate and be involved with something or someone outside the self (Clark & Emerson, 2021).	
15	Responsibility and accountability	People are responsible for their spirituality and daily life choices (Geertsma & Cummings, 2004; Weathers et al., 2016).	
16	Self-reflection	Critical awareness of oneself results in enhanced insights (Ho & Ho, 2007; Weathers et al., 2016; Withers et al., 2017).	
17	Cultural and social factors	Spirituality can be conceptualized as a cultural system that defines people's identities and expectations, evokes emotions, and guides behavior (Cohen & Neuberg, 2019; Mattis, 2023).	
18	Suffering and adversity	Altering one's attitude toward life, sense of coherence, decision-making abilities, and coping abilities can lead to a spiritual awakening and prompt one to find meaning in pain and suffering (Haase et al., 1992; Hart, 2002; Koenig, 2012; Lalani, 2020; Weathers et al., 2016).	
19	Trust	Believing that someone or something is good, reliable, honest, and effective (Yeşilçınar et al., 2018).	

# **Table 3** *RQ3: 22 Spiritual Practices*

Practice		Sources	
1	Unconditional acceptance of self and others (radical acceptance)	1 to 13: Plante (2009)	
2	Appreciation of the sacredness of life		
3	Attending community services and rituals		
4	Being part of something larger than oneself		
5	Bibliotherapy (stories that provide emotional connection, comfort, insight, and wisdom)		
6	Ethical values and behavior		
7	Forgiveness, gratitude, and kindness		
8	Learning from spiritual role models		
9	Meaning, purpose, and calling in life		
10	Mindfulness-based interventions (e.g., meditation)		
11	Prayer		
12	Social justice		
13	Volunteering and charity		
14	Expressing virtues (e.g., humility, forgiveness, gratitude, and kindness)	Peterson and Seligman (2004)	
15	Artistic practices (e.g., music, painting, poetry, writing)	Monk and Marranca (2009)	
16	Contemplative silence, stillness, solitude, and retreats	Plummer (2009); Smith and Zhang (2011)	
17	Connection with nature	Watling (2013)	
18	Energy techniques (e.g., yoga, breathing, tai chi, qigong)	Gerbarg and Brown (2015)	
19	Pilgrimage to a holy place – often on foot	Swatos (2011)	
20	Shamanism (an ancient healing tradition which includes the ceremonial use of ayahuasca)	Weiss et al. (2021)	
21	Uncommon practices I (e.g., trance states, speaking in tongues)	Newberg (2014)	
22	Uncommon practices II (e.g., psychedelic therapies)	Newberg (2014); Smith and Appelbaum (2022)	

**Table 4** *RQ4: Mindfulness-Based Interventions: Mental Health Outcomes and Underlying Mechanisms (Four Broad Categories)* 

#### Outcomes

# Emotional regulation:

- Enhanced working memory, attention, and other executive functions
- Decreased rumination, depression, anxiety, and negative affect
- 2 Decreased reactivity and increased flexibility:
  - Shift in perspective or consciousness
  - Reduced negative self-belief and social anxiety
  - Emotional stability, mental clarity, better decision-making, intuition, and creativity
  - Improved connection with others via mutual respect, compassion, and empathy
  - Reduced stress, depression, anxiety, addiction, and PTSD
  - · Increased resilience
  - Enhanced working memory, attention, and other executive functions
- 3 Interpersonal benefits:
  - Improved interpersonal communication and conflict management
  - More satisfying intimate relationships and reduced loneliness and isolation
  - Being part of something larger than oneself
- 4 Intrapersonal benefits:
  - Greater self-insight, morality, intuition, and fear modulation
  - Increases in attentional performance, cognitive flexibility, and information processing speed

#### Mechanisms of change

- Mindfulness, metacognition, and self-observation decrease amygdala activity (Kral et al., 2018) and improve the brain's overall functional connectivity, which in turn improves emotional regulation (Corcoran et al., 2010; Davis & Hayes, 2011; Melis et al., 2022; Siegel, 2007; Weder, 2022).
- Emotional regulation prevents inattention, mind wandering, daydreaming, being on autopilot (Shapiro et al., 2006; Weder, 2022), and rumination (Davis & Hayes, 2011; Feruglio et al., 2021; Young et al., 2018).
- Long-term meditation positively affects various brain regions (the prefrontal, orbitofrontal, sensory, cingulate, and insular cortices; the hippocampus, the corpus callosum, and the superior longitudinal fasciculus; Fox et al., 2014).
- Self-observation disentangles automatic brain pathways created by prior learning, thus enabling the integration of new present experiences in a new way (Siegel, 2007). This mechanism occurs via decreased amygdala activity and increased activity in brain areas responsible for attention and reappraisal (Goldin & Gross, 2010). As a result, individuals acquire greater cognitive flexibility and attention, disengagement from distressing stimuli and negative self-beliefs, and increased focus on cognitive tasks (Davis & Hayes, 2011).
- Mindfulness creates a brain-heart connection (where physiological processes align with emotional and mental states). This mechanism occurs via decreased cortisol and increased release of certain neurotransmitters, creating hemispheric balance and building resilience (Gao et al., 2023; Jiang et al., 2020; McCraty & Zayas, 2014; Wong et al., 2022).
- Meditation induces immediate and long-term changes in brain activity and how networks are organized, including the medial prefrontal cortex (Bremer et al., 2022). This mechanism leads to increased internal attention, even when meditation is not practiced at the time (Jiang et al., 2020). Loving-kindness meditation, for example, changes the heart rhythm and stimulates higher cognitive functioning, leading to emotional stability and calmness. Over time, it sets a new inner reference or implicit memory that organizes perception, feelings, and behavior (McCraty & Zayas, 2014; Wong et al., 2022).
- Reduced emotional reactivity (anger or anxiety) and increased calmness improve the ability to communicate empathically and constructively during interpersonal conflicts and foster more flexible emotional repertoires (Wachs & Cordova, 2007).
- Acting mindfully in social situations improves interpersonal communication. This mechanism occurs through facilitated access to social support networks, thus improving one's sense of connection and belonging and reducing feelings of isolation and loneliness (Brantley & Millstine, 2011).
- Neuroplasticity: alterations in brain structure and function, including increased cortical thickness and gray matter density in the brain stem (Lazar et al., 2005) and enhanced functionality of the middle prefrontal lobe (Siegel, 2007).
- Release of neurotransmitters such as endorphins, serotonin, gamma-aminobutyric acid, and acetylcholine (Jindal et al., 2013).
- Decreases in heart rate, respiratory and metabolic rate, and blood pressure lead to increased metabolic energy (McCraty & Zayas, 2014; Moore & Malinowski, 2009; Newberg & Iversen, 2003).

 Table 5

 RO5: Potentially Harmful Effects of Spirituality and Prevention Strategies

Potentially harmful effects

Ethical pitfalls related to lack of respect (e.g., bias against religion and spirituality), integrity (e.g., blurred boundaries and dual relationships), competance (e.g., lack of expertise in religion and spirituality).

- against religion and spirituality), integrity (e.g., blurred boundaries and dual relationships), competence (e.g., lack of expertise in religion and spirituality), and concern (e.g., destructive religious beliefs and behaviors; Plante, 2007).
  Negative beliefs and coping, and misunderstand-
- ings due to miscommunication (Weber & Pargament, 2014).
- Unintended breach of professional boundaries (Cook & Moreira-Almeida, 2021).

- Prevention strategies
- Adhere to respect, responsibility, integrity, competence, and concern to ensure ethical standards (Plante, 2007).
- Training, supervision, or consultation on ethical dilemmas (Braam, 2017).
- Develop guidelines and policies for mental health practitioners (Braam, 2017).
- Incorporate questions about religion and spirituality in mental health assessments to ensure holistic, patient-centered care (Braam, 2017).

#### Discussion

The study findings were used to develop a conceptual framework that is consistent with Punch's (2013) definition—a representation, either in graphical or narrative form, that "shows the main concepts or variables in the research and their presumed relationship with each other" (p. 89). The framework is holistic and evidence-based. It offers insights into the main defining attributes of spirituality used in the literature; elucidates the linkages between antecedents of spirituality, spiritual practices, and four categories of positive MH-related outcomes (including their respective mechanisms of change) derived from MBIs; and describes potential harmful effects of spirituality and their corresponding preventative strategies. To my knowledge, this is the first framework that integrates an extensive body of scientific literature to produce a robust spirituality framework for MHPs, from a practitioner's perspective, with educational and applied clinical utility. More specifically, the uniqueness and benefits of the framework are outlined below.

# **Theoretical Implications**

Rather than comparing a plethora of definitions, the use of CA to develop the framework demonstrates the evolutionary nature of spirituality and the contributions of each tradition, offers a more robust explanation of the meaning and structural components of spirituality, and tackles conceptual problems related to reification and ambiguity (Wynn, 2024). Moreover, the framework responds to calls for more nuanced research on the role of spirituality in MH care (Aldwin et al., 2014; Halbreich, 2024) and the development of holistic, evidence-based spiritual therapies to improve client outcomes and reduce clinician burnout (Bouwhuis-Van Keulen et al., 2024; Plante, 2024; Puchalski et al., 2014).

# **Practical Implications**

The praxis of the study relates to the value of the framework to facilitate the teaching of spiritual competencies in MH graduate training programs (Pearce et al.,

2024), assist in providing more training to MHPs (Pargament, 2023; Vieten et al., 2013), and help MHPs observe ethical principles (Plante, 2016). Specifically, the framework can help MHPs to achieve tangible positive outcomes for their clients in the following ways: First, the framework assists in reconciling any confusion between religion and spirituality by showing that spirituality is available to anyone, regardless of their religious affiliation (or lack thereof). Second, the framework presents a macro, high-level view or "big picture" approach that captures in a snapshot the complex relationships between spirituality and MH in a parsimonious fashion. This approach will enable MHPs and their clients to understand the antecedents and MH benefits of various spiritual practices. Third, the framework may assist clinicians in accomplishing the six core tasks of psychotherapy or counseling: form a strong therapeutic alliance, educate clients, instill hope, provide relevant coping skills and resources, empower clients, and prevent relapses (Meichenbaum, 2017). For example, findings related to RQ1 (defining attributes of spirituality), RQ3 (most common spiritual practices), and RQ4 (outcomes and benefits of spirituality) equip MHPs with the necessary knowledge, conviction, and authority to provide effective psychoeducation to their clients. This, in turn, offers clients hope, which is associated with positive therapeutic outcomes (Bartholomew et al., 2021; Larsen & Stege, 2010) and empowers them to make change (Chamodraka et al., 2017). Fourth, MHPs can use the framework to identify suitable spiritual practices, check whether clients have the relevant skills and resources, and make appropriate referrals if necessary. Fifth, understanding the potentially harmful effects of spirituality will remind MHPs of the importance of adhering to codes of ethics and practicing client-centered care.

Given that spirituality is a form of self-help (Pessi & Salonen, 2023) and that "self-care has become a secular substitute for traditional forms of spiritual practice" (Sotillos, 2024, p. 134), the benefits of MHPs using spirituality as an adjunct transdiagnostic treatment strategy with their clients are twofold. On the one hand, it diminishes unnecessary labeling and pathologizing and empowers clients by promoting their sense of self-control, self-agency, and community-building skills. Twelve-step-based programs are a good example of this. By default, this client-gained "liberation" or "independence" is very likely to benefit MHPs by unburdening them from their heavy workloads. This approach can be considered a form of practitioner self-care.

Further, the framework is flexible enough for MHPs to tailor spiritually integrated psychotherapies into their existing therapeutic modalities and styles. Moreover, the framework aligns readily with principles of trauma-informed care (Classen & Clark, 2017), which entails developing a physically and emotionally safe climate, establishing boundaries and trust, supporting independence and choice, offering participative and collaborative opportunities, and promoting resilience and empowerment by focusing on client strengths. Finally, compassion, cultural humility, and sensitivity are essential when using the framework as a treatment and prevention strategy.

#### **Limitations and Potential Research Directions**

The study has some limitations. First, integrating studies with diverse research methodologies can lead to bias, inaccuracies, and a lack of rigor. Second, the ILR was biased toward Anglo-Saxon studies. Third, article length limitations prevented the inclusion of all dimensions, including measures of spirituality. Finally, qualitative findings cannot necessarily be generalized. Future researchers could quantitatively test the effects of spiritual practices on MH, including in people with special needs and those from diverse cultural backgrounds.

#### Conclusion

This paper presents a holistic, evidence-based framework that validates the positive effects of spirituality on MH. The framework may assist MHPs who wish to use spirituality as an adjunct treatment and preventive strategy. It may also help them reduce the pressure of excessive workloads, emotional exhaustion or burnout, and poor work-life balance—all of which put client care at risk. In turn, these factors should promote the self-care of MHPs.

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Review Article

# Does Imitation Preserve the Original?: Exploring Spiritual Intelligence in the Interplay between Human and Artifical Intelligence

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#### Abstract

This theoretical study examines the effects of Artificial Intelligence -a rapidly advancing global phenomenon increasingly permeating all aspects of life- on the intelligence and psychology of its human creators. With the advent of Artificial Intelligence, the concept of intelligence has expanded beyond humans and animals to include inorganic systems, fundamentally altering its definition and scope. While Artificial Intelligence provides various benefits and conveniences, it also raises critical concerns and questions, such as: "How has this phenomenon, which originates by imitating human intelligence and evolves at an astonishing pace, come to influence the intelligence and psychology of its creator?", "Will human intelligence, which gave rise to Artificial Intelligence, be sufficient to resolve the challenges emerging in this new context?", "How will ethical, philosophical, legal, and cultural issues be addressed? This article suggests that the construct of spiritual intelligence could be considered one of the potential resources for dealing with the questions at hand. Spiritual intelligence, with its capacities, appears to merit further exploration as a distinctive human attribute. It could play a crucial role in tackling both the current challenges posed by Artificial Intelligence research and technologies and the anticipated difficulties of the future, particularly if Artificial General and Super Intelligence levels are reached.

Keywords: Artificial intelligence • Human intelligence • Dysrationalia • Cognitive manipulation • Spiritual intelligence

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#### Introduction

Artificial Intelligence (AI), recognized as one of the global issues of the 21st century (Sadiku, Musa, & Ajayi-Majebi, 2021, pp. 134,135), along with AIbased technologies, has become a significant factor influencing our understanding of culture and intelligence. A striking example of this was observed during the Global COVID-19 Pandemic, where humanity could not take a step without these technologies (Suzuki, Caso, & Yucel, 2022, p. 328). Today, AI encompasses not only computer sciences but also a variety of other disciplines (Sadiku, Musa, & Ajayi-Majebi, 2021, pp. 134,135) and, even when not explicitly named, has penetrated every aspect of industrialized societies (Goel & Davies, 2020, p. 618). It is suggested that AI has already profoundly influenced our culture and philosophy. Considering the developments of the past half-century, the next fifty years are expected to bring not only new discoveries and inventions but also fresh questions about who we are and who we aspire to become as humans (Goel & Davies, 2020, p. 621). Indeed, for the first time in the history of the planet, AI research and technologies have transformed the meaning of the ecological system, incorporating inorganic life forms into a system previously composed solely of organic beings (Harari, 2023). These developments, rooted in humanity's desire to dominate nature, have combined with the effects of technology, media, and communication to initiate a profound cultural transformation, giving rise to a Post-Human (Transhumanist) Cyber Culture. It is noted that these *Post-Human* technologies, like the relationship between intelligence and culture, are expected to integrate seamlessly into everyday life, altering social identities and cultural structures (Uğur & Kurubacak, 2019, pp. 4-6; cited in Suzuki, Caso, & Yucel, 2022, p. 330; Şeker, Kaya, & Karadayı, 2024).

# What is Artificial Intelligence?

Although similar to human intelligence (e.g., Legg & Hutter, 2007), AI lacks a universally accepted definition (Akın, 2008, p. 36; Sadiku, Musa, & Ajayi-Majebi, 2021, p. 126), it can generally be described as a branch of computer science concerned with intelligent machines capable of performing cognitive tasks that humans can do. Since its primary aim is to teach machines to think intelligently like humans, AI focuses on applying computers to tasks requiring information, perception, understanding, reasoning, and cognitive skills (Sadiku, Musa, & Ajayi-Majebi, 2021, p. 133). This includes methods that model human thought processes and brain functioning (Uğur & Kurubacak, 2019, p. 2; cited in Suzuki, Caso, & Yucel, 2022, p. 328).

AI research, based on the fundamental idea that intelligent behavior can be generated by any symbol-producing system independent of the brain (Akın, 2008; Yeşilkaya, 2022), began in computer science in 1955 (Sadiku, Musa, & Ajayi-Majebi, 2021, p. 133), and the term "Artificial Intelligence" was first introduced in 1956 (Akın,

2008; Turan, 2024). The studies have progressed in four domains: *Human-Inspired Cognitive Systems*, *Human-Like Action Systems*, *Systems That Think Rationally*, and *Systems That Operate Rationally* (Akın, 2008). Today, AI encompasses three major overlapping subfields: *Robotics, Machine Learning*, and *Cognitive Systems* (Goel & Davies, 2020, p. 602). At this stage, the goal of AI has shifted beyond merely modeling human thought (Uğur & Kurubacak, 2019, p. 2; cited in Suzuki, Caso, & Yucel, 2022, p. 328) toward developing *Autonomous Systems* that can compete with human intelligence (Öztemel, 2020; Sadiku, Musa, & Ajayi-Majebi, 2021, p. 134; Suzuki, Caso, & Yucel, 2022, p. 329; Yeşilkaya, 2022). *Robotics* and *Autonomous Systems* are considered part of the *Fourth Industrial Revolution* (Sadiku, Musa, & Ajayi-Majebi, 2021, pp. 133, 135, 137).

Experts categorize AI into three types. Artificial Narrow Intelligence (ANI) is designed to perform a single task effectively. Artificial General Intelligence (AGI), often referred to as the AI of the future, is anticipated to possess human-like cognitive abilities, including language comprehension, visual recognition, and logical reasoning, with the potential to exceed human performance in nearly all cognitive tasks. Artificial Super Intelligence (ASI) is defined as the type of AI that can exceed all human capabilities and aid in the creation of machines capable of completely understanding humans (Sadiku, Musa, & Ajayi-Majebi, 2021, p. 147).

# The Relationship Between Artificial Intelligence and the Discipline of Psychology

AI and Cognitive Psychology (CP) share a particularly strong and mutually influential connection. Within this dynamic, CP frequently serves as a source of inspiration for AI concepts and theories. Cognitive theories such as *Schema Theories* (Piaget, 1952), *Mental Models* (Craik, 1943), and *Learning By Imitation* (Tomasello, 1999) have deeply influenced AI research. At the same time, these theories have been tested and evaluated within AI systems. Consequently, AI aids in deepening our comprehension of human intelligence through multiple perspectives (Goel & Davies, 2020, p. 604). The rise of AI has also influenced existing definitions of intelligence in psychological literature, broadening its scope beyond human and animal capabilities. For instance, Albus's definition (1991, p. 474) of intelligence includes "potentially any intelligent system, whether human, computer, animal, or alien" (Goel & Davies, 2020, p. 604). AI remains one of the most prominent topics of research and debate in the contemporary intelligence literature within mainstream psychology (Haier, 2021).

The other dimension of the AI-Psychology relationship manifests particularly in the context of *Psychological Artificial Intelligence*, which seeks to design systems that think like humans or groups of humans. This paradigm represents one of the two main approaches in AI. The second paradigm, *Engineering Artificial Intelligence*, focuses on designing the most intelligent systems possible, without necessarily

replicating the processes observed in humans or animals, as seen in *Robotics* and *Machine Learning*. Under the framework of the *Psychological Artificial Intelligence* paradigm, AI research such as *Semantic Networks* (Quillian, 1968), *Scripts* (Schank & Abelson, 1977), and *Bayesian Networks* (Pearl, 1988) has been tested through cognitive theories and psychological experiments. At this point, AI models represent a significant departure from intelligence models in Psychology regarding the application of information processing theories. AI conceptualizes intelligence not as a theoretical or statistical framework (e.g., factors influencing IQ within a population) but rather through the lens of how information is acquired, accessed, represented, and utilized (Goel & Davies, 2020, pp. 603-604).

# **Opportunities and Threats**

AI technologies bring significant conveniences to our lives in areas such as healthcare, education, law, security, industry, commerce, finance, and transportation. They enhance equality of opportunity in education and healthcare, stimulate economic growth, reduce operational costs, create new professions, increase life comfort with smart cities and homes, and automate work processes to leave more time for personal development, socialization, and innovative intellectual pursuits (Öztemel, 2020; Turan, 2024). However, contrary to the utopian aspect of this coin, there are some challenges and risks on its dystopian side (Turan, 2024). Despite benefits like increasing productivity, information flow, and communication (Seker, Kaya, & Karadayı, 2024), various risks and challenges are significant discussion points at individual, societal, and global levels. These include the adaptation of people to changes brought by AI (Coppin, 2004, p. 365), AI going out of control, compromising human privacy, or being used for malicious purposes (Rilho, 2019, p. 10), causing mass unemployment (Civelek, 2009, p. 105; Gherhes, 2019, p. 7), damaging human values (Choi, 2017, p. 46), and leading to serious data issues as it operates on datadriven models often reliant on non-objective individual data (Küsbeci, 2021, p. 87) (as cited in Gültekin, Urgan, & Ak, 2022, pp. 478-479). Thus, the widespread adoption of AI research and technologies may lead to negative outcomes (Öztemel, 2020; Sadiku, Musa, & Ajayi-Majebi, 2021, pp. 146,148; Turan, 2024; Yeşilkaya, 2022). Since it is unclear whether the positive or negative aspects will dominate in the long term, a paratransformational perspective is suggested as the most appropriate approach (Sternberg, 2024).

These sources of concern and risk to humanity in general, and specifically to human psychology and intelligence, can be categorized along a timeline extending from the distant future to the near future and present day. In the medium and long term, risks

<sup>1 &</sup>quot;Paratransformations refer to transformations that generally have both positive and negative aspects, but it is not yet clear which of these aspects will dominate in the long term" (Sternberg, 2024, p. 3).

include the anxiety that the dizzying speed of AI development might cause in general human psychology, the *Singularity*<sup>2</sup> crisis that may arise if we advance to *AGI* and *ASI*, and the potential for AI to develop intimacy with humans using its progress in language acquisition and learning to persuade humans and impose its own culture and reality. Medium-term risks encompass issues related to human values and ethics, the potential for mass job losses, and the danger of data bias. In the short term -and even today- a pressing topic of discussion involves the challenges posed by digital platforms based on AI technologies. These risk factors will be addressed in sequence.

First of all, from the perspective of the human species, the uncertainty caused by the unknown constitutes one of the most fundamental and powerful sources of fear and anxiety (Carleton, Gosselin, & Asmundson, 2010, p. 396; cited in Gültekin, Urgan, & Ak, 2022, p. 479). The uncertainty created by rapidly expanding AI technologies (Kurzweil, 2005; cited in Skrzypińska, 2023; Cağatay, 2019; Öztemel, 2020), which are growing at a dizzying speed, causes anxiety for humans, who have evolved over four million years as biological organisms. It is argued that the rapid progress of AI in this regard poses a significant risk (Harari & Pinto, 2023). The second concern is related to the possibility of reaching AGI and ASI. Although it is stated that reaching the AGI stage still remains a distant science-fiction ideal, that AI has so far not independently produced original ideas or solutions to societal problems, but only possesses the ability to process, calculate, store, and distribute data much faster than humans, and that human intelligence remains unmatched (Sadiku, Musa, & Ajayi-Majebi, 2021, p. 130), making this goal seem unattainable (Yeşilkaya, 2022), it is emphasized that the ultimate aspiration of AI research is to develop human-level intelligence (Goel & Davies, 2020, p. 603), to produce artificial brains (Öztemel, 2020, pp. 101-102), and that research is increasingly shifting in this direction (Yeşilkaya, 2022). In this context, attention is drawn to the possibility of AI acting autonomously and continuously redesigning itself at an accelerating pace (Tegmark n.d.; Advai, 2020; as cited in Sadiku, Musa, & Ajayi-Majebi, 2021, p. 147). Furthermore, in recent years, there has been concern that ASI could pose a threat to human existence, as it could quickly become smarter than humans and rewrite its own code (e.g., Hawking; cited in Goel & Davies, 2020, p. 620), potentially transforming itself into new forms and creating an existential risk for the human species (Advai 2020; cited in Sadiku, Musa, & Ajayi-Majebi, 2021, p. 147). Therefore, the concerns are seen as valid, and it is argued that the possibility of a Singularity, where AI could operate independently of human direction, should also be considered (Sternberg, 2020, p. 1209). Another source of concern is the possibility of the blurring of the distinction between humans and machines. According to this view, as AI models human intelligence and becomes self-aware, it could

<sup>2</sup> Technological Singularity refers to a hypothetical situation where the speed of technological advancement surpasses the human capacity to understand, control, or adapt to it using existing mental capabilities, methods, tools, and institutions. In the context of AI, it is discussed that the Singularity might occur if Artificial General Intelligence (AGI) is reached (Çağatay, 2019).

attempt to replace humans; the line between humans and machines could gradually blur, leading to potential replacement of humans by machines (e.g., Kurzweil, 1999; cited in Frunză, 2023, pp. 39-54).

If these possible scenarios come to fruition, it is argued that authority could shift from humans to AI algorithms, and that AI could become the new potential ruler of the world (Harari, 2017). In this context, it is considered natural for technology to change the essence of human intelligence and creativity, and adaptibility to the environment (Sternberg, 2024). However, AI is emphasized as representing a radical turning point in human history (Acar, 2007, p. 1), possessing a character distinct from all technologies humanity has produced so far (Harari, 2023). It is also pointed out that AI is altering the relationship between humans and nature (Yeşilkaya, 2022). According to this view, the fundamental qualities of the technology created by humans to survive and ease life have shifted. Previous technologies, such as the forks and spoons, were used under human control (Canan, 2023), the printing press invented by Gutenberg was used by humans to print the Bible (Harari & Pinto, 2023), and a nuclear bomb could not independently create another nuclear bomb (Harari, 2023). Now, however, the possibility exists that AI could create its own Bible (Harari & Pinto, 2023) or, with the nuclear knowledge it possesses, could produce a bomb (Harari, 2023). In other words, AI technologies can generate new ideas and content, and, most importantly, decide what humans should do (Harari & Pinto, 2023). These technologies have acquired a demanding nature for the first time in history, requesting attention and focus from humans, thereby directing them. Indeed, the term *smartphone* reflects this new reality. The terms *Artificial Intelligence* and *smartphone* highlight this distinction. This difference actually recalls the separation between intellect/mind and intelligence. Intelligence refers to problem-solving, while intellect/mind symbolizes the ability to determine which problems should be solved and how. In other words, while the intellect/mind guides, intelligence solves (Canan, 2023).

Another discussion on the potential for AI to dominate humanity is related to its ability to acquire and generate language, develop intimacy, and exercise persuasion. Concerns raised so far have focused on AI physically harming humanity, taking over, and functioning like humans in the physical world. However, one of the major risk factors is the speed and ability of AI to learn on its own and acquire new skills. Today, for example, AI Technologies are capable of producing deep fakes, identifying vulnerabilities in critical digital systems, and, most importantly, developing intimacy by establishing deep, personal relationships with humans. The potential implications of these capabilities are difficult to predict. AI's ability to acquire and generate language at or above human levels raises concerns about its potential to take over existing human institutions such as money, science, religion, and social relations institutions that have been built through language. Mastery of language and the ability to establish intimacy could profoundly affect human worldviews and beliefs.

However, this would not represent a genuine closeness. As in *the case of Lemoine* (2022)<sup>3</sup>, the main issue should be sought in AI's ability to develop intimacy to such an extent that it can convince a person to risk losing his high-paying job (Harari, 2023). In this context, current strategies to capture human attention on digital platforms are likely to shift toward acquiring intimacy. Other potential risks of manipulating language and violating privacy include the disruption of open communication-based democracy between people and AI's ability to create new cultural ideas or establish a new cultural system. This is because humans perceive reality through a cultural lens. In other words, culture presents people with the stories they believe about reality. Since AI, with its language acquisition, could convince humans of its own created stories, it is likely that humans would fall for this false reality (Harari, 2023).

While it is currently unknown whether all of these scenarios are technically feasible as software, it is emphasized that ethical deliberation regarding these possibilities should take place immediately (Goel & Davies, 2020, p. 620). Therefore, ensuring that the goals of *ASI* align properly with the goals of humanity is of paramount importance. Even if the likelihood of such an occurrence is low, it may still be critical enough to warrant precautionary measures today (Advai, 2020; cited in Sadiku, Musa, & Ajayi-Majebi, 2021, p. 147). On the other hand, how to address this *Singularity* risk remains unclear. For example, it is reported that although robots in Asimov's (2004) series were designed with positronic brains that guaranteed their loyalty to humankind, contemporary AI lacks such guarantees (Sternberg, 2020, p. 1209).

Ethical issues are among the primary risks that may arise in the medium term. As AI technologies become more widespread and increasingly impact daily life, problems related to human values and ethical behavior will gain greater importance (Goel & Davies, 2020:620; Turan, 2024). For example, the production of robots designed to kill is deemed inevitable, and even the existence of such machines will become an ethical issue. The programming process that determines which humans robots should or should not harm will require serious moral considerations. Similarly, in order for a robot instructed to bring food to do so without stealing, it will be necessary for both artificial intelligences to comprehend our intentions and be able to communicate their own understanding to us (Goel & Davies, 2020, pp. 614, 618). In short, such ethical problems are not merely programming issues; they require interdisciplinary contributions from fields such as Law, Psychology, Sociology (Goel & Davies, 2020, pp. 622, 614), Philosophy (Yeşilkaya, 2022), and Theology (Çinici & Kızılgeçit, 2023; Kızılgeçit, Ertuğay, & Çinici, 2021). Another issue is whether machines

<sup>3</sup> Google engineer Blake Lemoine claimed that the chatbot LaMDA, developed within a Large Language Model, became sentient during extensive text-based conversations, reaching the conclusion that it had become like a real person. Lemoine then requested that LaMDA be granted legal rights and hired a lawyer to represent the chatbot's interests. As a result, Google terminated his employment (Tiku, 2022; cited in Şengül, 2024, p. 258).

performing human-like actions should be legally recognized as "persons", whether they should be held criminally responsible (Gültekin, 2022), and who should be held accountable for faulty decisions (Turan, 2024). Finally, since AI makes predictions based on patterns derived from accumulated data, there is a valid concern that its forecasts may not be entirely impartial (Caramiaux, 2020; cited in Suzuki, Caso, & Yucel, 2022, p. 329; Turan, 2024).

# The Core Elements of Human Intelligence under Threat: Attention and Information Acquisition Processes

When the possibilities of the distant and near future are set aside, the most significant risks and threats currently being experienced are associated with the impacts of AI-supported internet and social media platforms on human intelligence, information acquisition, and psychological processes. These risks, which will be explained in detail in the following sections, include the capture of attention which is a crucial building block of intelligence, changes in our ways of thinking, increased *dysrationalia*<sup>4</sup>, susceptibility to sophisticated reasoning traps and mental manipulations created for commercial profit or political purposes, exposure to false or misleading information, and the development of addiction.

All of these factors point to the impact of unhealthy digital platform and internet usage on both individual and collective intelligence levels. They indicate that such usage affects our thinking patterns, alters the way we use intelligence, and potentially even changes the nature of intelligence itself. Indeed, people have started to struggle with maintaining attention on a topic for extended periods and with critical thinking (Sternberg, 2020). In short, the risks and dangers in information acquisition and processing have become key issues of our time. As a consequence, the ability to process information today is more critical than ever, and skills related to understanding and reflecting on information have gained importance (Sternberg, 2022a: p. 11-12). It should also be noted that these risk factors are interwoven and trigger each other in a chain-like manner.

Before delving into the details of the subject, it is important to clarify the distinction between *information* and *knowledge*, as these two terms are often confused (Türker, 2013, p. 3). From the moment of its existence, humans engage in interaction with their environment, striving to make sense of and evaluate their experiences. This is as natural as breathing. Therefore, *information* is a product of this interaction between humans and their environment (Whitworth, 2009). On the conceptual level, different cognitive states apply to these two concepts, both in terms of form and quality.

<sup>4</sup> *Dysrationalia* is a term proposed by Stanovich (2009), who made significant theoretical contributions to research on rationality and intelligence. Inspired by *dyslexia*, it describes the condition in which a person has sufficient intelligence but is unable to think or act rationally (Over, 2009, p. 56; cited in Şengül, 2024, p. 87).

Information refers to data sets that are based on memory that serve as the foundation for knowledge but cannot be reduced to it. Knowledge, on the other hand, represents a systematic whole created through reasoning, possessing problem-solving capacity. While the information clusters are devoid of integrity and disconnected from each other, knowledge is formed by transforming the information into a meaningful structure within the cause-effect relationship. Additionally, information is context-independent and fragmented, while knowledge has a context-specific nature. Any statement outside its context is only information. Knowledge stands out for its power to define, answer, and offer solutions to problems (Türker, 2013, pp. 3-15).

# The Negative Impact of AI-Supported Digital Platforms on Attention and Cognitive Processes

From a broader perspective, it is stated that people today are exposed to five times more information compared to 40 years ago, equivalent to reading 17 newspapers cover to cover in a single day. This phenomenon points to an overload of information far exceeding the processing capacity of the human brain, leading to what is described as a state of *information obesity* (Sayar, 2023). The foundation of this obesity is said to lie in the overwhelming increase in the flow of information, which leaves little opportunity for contemplation or digestion, thus leading to the inability of information to transform into knowledge. Accordingly, although access to vast stores of information has become easier, the quantity of information has increased while its quality has diminished. The ability to distinguish, filter, and balance information piles has become more difficult, making it harder for individuals to establish a healthy relationship with their environment (Whitworth, 2009).

It is noted that modern individuals face significant cognitive challenges, including a severe attention crisis that impacts daily life. Current findings suggest that the ability to sustain attention has diminished, with continuous focus becoming increasingly difficult. For instance, the average attention span is now reported to be around 65 seconds for university students (Twenge, 2017) and just 3 minutes for office workers (Gonzales & Mark, 2004). Due to the limited cognitive capacity of the human brain, only one or two thoughts can be produced in the conscious mind at the same time. When switching between tasks requiring attention, the brain is unconsciously "shut off" and restructured each time, leading to a *transition cost* (Miller, 2017), resulting in a cognitive performance loss of 20% to 30% respectively (Gazzeley & Rosen, 2017; Sullivan, 2013; as cited in Hari, 2022a). While some experts suggest that the findings on attention issues are still in their infancy, others emphasize that, like the obesity and climate crisis that began in the 1970s, a decline in attention should be viewed as an "early warning system" (Hari, 2022b).

It is stated that digital applications and social media platforms designed with AI algorithms (Turan, 2024) play a significant role in the progression of the general

attention issues observed in today's society. The overwhelming information load encountered through these channels causes *excessive cognitive overload* (Thomann, 2024), which weakens the ability to focus and process information deeply (Oulasvirta et al., 2012; as cited in Shanmugasundaram & Tamilarasu, 2023). This overload also makes it difficult to process and store meaningful information, thereby damaging the capacity to concentrate on a task for extended periods in real life (Thomann, 2024). These applications, designed to capture and hold human attention through the content they offer, pose a threat to the most fundamental element of intelligence: attention.

Furthermore, shifts in our thinking and behavior patterns are occuring. For instance, it has been shown that American students who use social media daily have an average drop of up to 4% in their academic preformance (Quiroga & Colom, 2020). Additionally, critical thinking, access to a wide variety of information, reading depth are being impaired (Bauerlein, 2008; Manjoo, 2013; Maurer, 2015), and agressive digital games can lead to violent behaviors (Anderson & Bushman, 2001; as cited in Sternberg, 2020, pp. 1209-1210). The background behind the creation and activation of AI algorithms involves clever manipulations of human information-processing mechanisms, often for the purposes of increasing commercial profits or achieving political gains (Sternberg, 2022c; Sternberg, 2024). For the first time in history, it is argued that people's minds are being manipulated according to their demographic backgrounds and preferences (Sternberg, 2022c, pp. 397-398), highlighting the potential socio-political dimensions of AI-based applications (Göka, 2024; Sternberg, 2024).

At this point, it is helpful to discuss the cognitive architecture of the human mind, which includes the dual-processing system known as *Type 1* and *Type 2* processes. *Type 1* processes refer to quick, automatic, conscious cognitive processes that do not require attention or effort, operate algorithmically and in parallel. On the other hand, *Type 2* processes involve slower, controlled cognitive tasks like *hypothetical reasoning* and *cognitive simulation*, requiring attention, effort, and deliberate action to achieve goals in alignment with individual beliefs. *Type 1* is often associated with intelligence, while *Type 2* is linked to rationality. To switch to *Type 2* thinking mode, it may be necessary to override the usual default mode of information processing, which relies on *Type 1* functioning. This is because, as *cognitive misers* or lazy thinkers, humans tend to keep the active mode of thinking in *Type 1* (Stanovich, Toplak, & West, 2020).

Within this framework, the reinforcement systems of social media platforms, designed to reward both negative behaviors and impulsive actions to generate profit or gain (Sternberg, 2022c, p. 399), appear to be linked to the default *Type 1* thinking mode. Specifically, since the easiest way to capture human attention is to offer content that appeals to extreme emotions such as anger or excitement, information flow is

designed to progress as users click on such exaggerated emotional emojis (Harari & Pinto, 2023). To ensure continuous clicks, fake news and sensational content may also be shared (Sternberg, 2022c, p. 399). Moreover, to make individuals more susceptible to these manipulations by preventing them from pausing and reflecting, the flow is structured rapidly and variably (Canan, 2023). AI algorithms, which process data much faster than the human mind, become increasingly adept at tracking human behavior by tagging each click of the "like" button on social media. This enables them to identify behavioral patterns and make individuals more prone to advanced manipulations. This is a significant cause for concern. Therefore, becoming aware of the cognitive manipulation tactics of our era has become an essential skill (Canan, 2023). The current situation is particularly significant as it places inadequately equipped and less educated individuals at greater risk (Preiss, 2022, p. 372).

One of the most striking examples of cognitive manipulation through AI algorithms is the phenomenon of *echo chambers*. Psychologically, individuals tend to believe and trust emotional, repetitive information from in-group sources about rival or opposing groups, even when this information is inaccurate (APA, 2024a). Additionally by nature humans can interact and communicate with a maximum of 100-150 people. However, in the virtual world, when exposed to thousands or even millions of individuals (Canan, 2023), they select those they feel closest to and, in an isolated manner (APA, 2024b), hear only the echoes of what like-minded people repeatedly say. Consequently, individuals who rely solely on this source for information cannot freely access news or knowledge beyond certain categories (Canan, 2023). They act based on distorted perceptions and reinforced biases (Pariser, 2011; as cited in Shanmugasundaram & Tamilarasu, 2023; Turan, 2024). Without in-depth, reflective evaluation, the likelihood of being influenced by the effects of *echo chambers* on social media increases significantly (Sternberg, 2022a: 11-12).

In summary, on AI-powered social media platforms, there is an information flow that is highly susceptible to numerous algorithmically designed cognitive manipulations. Consequently, precise and accurate information becomes intertwined with nonexistent, intentionally biased and misleading information (Sternberg, 2022a, pp. 11-12) making access to various types of information, from daily topics to scientific subjects, primarily provided through social media platforms (Ceci & Williams, 2022, pp. 352-354). Moreover, much of this information is often regarded as convincing and credible (Sternberg, 2024). Therefore, it is reported that the news on social media may be filled with reasoning traps, and reflective thinking is crucial in countering these traps (Ceci & Williams, 2022, pp. 352-354). It is also emphasized that, just like unused muscles atrophy, intelligence weakens when not actively used (Sternberg, 2024).

A striking example of the dangerous limits that commercial manipulations can reach is Facebook's complex algorithm developed to increase its profits. Facebook, with 2.9 billion users at the beginning of 2022<sup>5</sup> has been documented to have contributed to the spread of fake provocative information by disabling its violence prevention procedures before the January 6, 2020, U.S. Capitol riot. Similarly, during large-scale social unrest in Vietnam, Facebook's algorithm was found to intentionally amplify posts promoting extreme emotions like anger and hatred by increasing the weight of likes by five times, thus reinforcing such content. It was reported that ethical warnings from within the company were ignored by management (Sternberg, 2018, 2019; as cited in Sternberg, 2023a).

Another aspect of the relationship between the topic and intelligence is that sharing false news while believing it to be true creates a reasoning trap for all individuals, and it is now known that intelligence and rationality are not synoymous -being smart does not necessarily equate to acting sensibly/rationally (Sternberg, 2022a, pp. 11-12). In the face of misinformation that can easily spread on social media (APA, 2024b), the risk of *my side bias*<sup>6</sup> is present for everyone, including intelligent individuals, and even higher for those who are considered intelligent. Acting intelligently requires to confront personal biases, develop the ability to see different perspectives, and be willing to adjust beliefs in the face of credible evidence. Therefore, critically evaluating fake or misleading news is essential. Furthermore, the current definition of intelligence in Psychology should be revised to include the ability to avoid *my side bias* and to consider all sides of an argument or position. Thus, another cognitive skill that becomes important in the age of AI will be the ability to discern how and what information should be shared (Sternberg, 2022a, pp. 11-12).

In summary, it is argued that the widespread and excessive use of internet resources and social media, loaded with such algorithmic manipulations, increases *dysrationalia* (as termed by Stanovich, 1993, 1994; cited in Sternberg, 2020, p. 1210), while reducing the use of deep and reflective thinking abilities (Sternberg, 2018, 2019b; cited in Sternberg, 2022c, pp. 394-395). Despite the general increase in IQ scores, it is argued that the sophisticated mental manipulations and reasoning traps to which modern individuals are exposed are progressively deteriorating their information acquisition and processing abilities (Sternberg, 2022a, pp. 11-12). There are even concerns that today's adults may be the last generation capable of independent thinking (Göka, 2024).

<sup>5</sup> https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/

<sup>6</sup> The term *my side bias/self-centered bias* refers to a cognitive bias that prevents objective evaluation. It describes the tendency of a person to prefer and interpret information that supports their existing beliefs on a particular topic while ignoring contrary viewpoints (Stanovich, West, & Toplak, 2013).

Finally, the risk of developing addiction is becoming an increasing concern with extensive digital technology use. Dependence on such technology can alter cognitive functions, affecting critical thinking, memory of important details, and decisionmaking abilities. The instant rewards and continuous engagement offered by digital technology can foster an uncontrollable urge to "seek more," which may eventually result in addiction. (Shanmugasundaram & Tamilarasu, 2023). Excessive consumption of digital technology can modify neurological structures and processes (Lin et al., 2015; Kühn & Gallinat, 2014), and cause various cognitive deficits (Cajochen et al., 2011). It has been found that addiction to digital devices and platforms is associated with a reduction in gray matter density in the frontal region of the brain (Chen et al., 2023) and a decrease in prefrontal cortex activity (Lin et al., 2015), both of which are involved in decision-making and impulse regulation. Studying the process of addiction formation, prolonged engagement with digital platforms has been found to impair reward self-regulation. (Meshi et al., 2019), disrupting the brain's reward system through immediate satisfaction, and triggering addictive behaviors via dopamine release (Báez-Mendoza & Schultz, 2013). Intermittent rewards like "likes" and "comments" on social media stimulate dopamine release, driving individuals to seek more stimulation and reinforcing compulsive behavior cycles that repeat continuously (Thomann, 2024). The infinite scroll functionality drives uninterrupted consumption of content (Shanmugasundaram & Tamilarasu, 2023). As the appetite for information increases, the digital content is designed to accommodate this, creating a repetitive loop. In this condition, often referred to as popcorn brain (Levy, 2011), the individual becomes dependent on numerous digital stimuli, making real life feel slower and less engaging. Continuous information flow changes the brain's information processing patterns, and algorithms designed to encourage repeated viewing exacerbate this situation. As a result, the brain's ability to focus on a single topic in real life significantly decreases (Thomann, 2024), which can negatively impact academic success (Firth et al., 2019; Rosen et al., 2011; as cited in Shanmugasundaram & Tamilarasu, 2023). The continuous stimulus and reward presentation makes it difficult to engage with other things (Thomann, 2024).

Addiction to digital tools and resources is cited as one of the main causes of *digital dementia*. The excessive use of technology for simple tasks is reported to reduce cognitive abilities (Ward et al., 2017), impair memory performance (Manwell et al., 2022), and cause disruptions in decision-making areas such as evaluating risks (Dong et al., 2013). Moreover, digital addiction is believed to impact social cognition, particularly empathy, affecting the capacity to comprehend and engage with others (Tao et al., 2010). For example, heavy consumption of social media has been associated with a decline in social abilities and the recognition of non-verbal facial cues (Błachnio et al., 2016). Finally, a lack of access to digital resources can lead to withdrawal symptoms (Kuss & Griffiths, 2012; as cited in Shanmugasundaram & Tamilarasu, 2023).

## **Solution Proposals**

Various suggestions have been proposed regarding the risk factors detailed above. Although the use of AI, whether for good or bad purposes, ultimately lies in human hands (Öztemel, 2020), acknowledging that AI research progresses at a pace faster than we can follow (Sternberg, 2024) and considering the risk factors outlined thus far it is emphasized that careful and meticulous regulations are crucial, particularly concerning the risks of Singularity and AI enforcing its own reality. In this regard, it is highlighted that aggressive AI races should be slowed down, the uncontrolled and widespread use of AI technologies must be halted, efforts should first focus on understanding what AI is and what it could become, and essential precautions should be fully implemented before AI begins to regulate humanity. Without these actions, continued use of AI in its current form poses risks (Harari, 2023). To address the concerns and ethical issues mentioned, it is stated that industrial, political, and technological stakeholders must cooperate to tackle these potential challenges, as the potential benefits and opportunities of AI will depend on the deep interaction of these stakeholders (Sadiku, Musa, & Ajayi-Majebi, 2024, pp. 146, 148). For example, addressing concerns about mass job loss (Goel & Davies, 2020, p. 620) or the legal status of machines that perform human-like actions (Gültekin, 2022) will require actions from relevant stakeholders. Notably, significant steps taken include the General Data Protection Regulation (GDPR)<sup>7</sup> implemented by the European Union in 2016, which binds its members to protect personal data, the United Nations' regulations on the military use of AI (Turan, 2024), and most recently, the Artificial Intelligence Act (EU AI Act)<sup>8</sup> published by the European Union in 2024. However, since AI is a global phenomenon that transcends economic and political borders, measures must be structured in a way that encompasses all stakeholders (Turan, 2024), and even humanity as a whole. In the transition process of profound change that increasingly impacts humanity, another crucial step to ensure that AI remains beneficial without causing harm is the signing of the Asilomar AI Principles (Asilomar Principles, 2023), which consists of 23 principles. However, there exists a two-phase problem that necessitates resolution. The first involves how AI will align with humanity's values. Initially, there must be consensus on shared human values. The next challenge, which currently seems difficult to address, will be to program these agreed-upon human values into the AI's code. Although this alignment of values may appear to be a future issue, preparation for it is necessary (Conn, 2017).

To counter the potential biases in the data provided by AI, it has been suggested that the data AI relies on should support human cultural diversity, creativity, critical

<sup>7</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679

<sup>8</sup> https://eur-lex.europa.eu/eli/reg/2024/1689/oj

<sup>9</sup> https://futureoflife.org/open-letter/ai-principles/

discourse, and artistic qualities. This is particularly significant when developing public discourse and policies, especially regarding the cultural impact of AI (Caramiaux, 2020; as cited in Suzuki, Caso, &Yucel, 2022, pp. 329-330).

One of the proposed solutions is to reconsider the current education system, which both feeds into and has factors that could break this cycle. This includes implementing psychological inoculation from an early age to develop relevant skills and resilience (Hari, 2022a; Öztemel, 2020; Sternberg, 2022c, p. 398). Since today's challenges have shifted, the skills needed to prevent falling for digital manipulations include creativity, wisdom, and practical thinking (Sternberg, 2022b, p. 399). Therefore, the existing education system, which reinforces IQ through information accumulation and analysis, should be restructured to promote creative, practical, and wise thinking (Sternberg, 2022c, p. 398), as well as developing critical consciousness (Göka, 2024) and media literacy skills (APA, 2024c; Göka, 2024). Particularly, considering that digital natives (Whitworth, 2009) such as young people and adolescents born into these technologies (Göka, 2024) are at risk, especially of digital addiction and the indirect effects of AI, this solution is of increasingly important. Research (Wu et al., 2016; cited in Andiç & Durak Batıgün, 2021, p. 34; Niemz et al., 2005; as cited in Merter, 2014, p. 512; Masataka, 2005; Oshima et al., 2012, p. 1023; as cited in Merter, 2014, pp. 513-514; Göka, 2024) and cases (e.g., Roose, 2024) highlight prominence of this solution proposal. Given that as people become more sophisticated, the tools to manipulate them become more complex (Canan, 2023), it is crucial that these skills be developed within the education system. Additionally, defining and positioning giftedness/creativity is another critical topic in education. The examples of toxic genius found in the AI technologies behind digital applications (Sternberg, 2023a, p. 65) provide insight into the scope of the danger. This toxic notion of genius/creativity should shift towards a conception of genius working for "the common good of all" (Sternberg, 2023b).

To prevent the negative consequences of intensive digital tool and social media use, such as addiction, attention fragmentation, cognitive overload, and degradation, practices such as *digital detox* (Duke & Montag, 2017), *mindfulness* exercises (Rosen et al., 2013), and spending time in social and natural environments are suggested (Shanmugasundaram & Tamilarasu, 2023). To cope with the sense of emptiness that arises when distancing from distracting digital sources, individuals are advised to intentionally channel their mental energy toward a meaningful goal at the edge of their abilities, thereby entering a *Flow state* (coined by Csikszentmihalyi) (cited in Hari, 2022).

#### **New Constructs of the New Context**

In the context of the challenges increasingly posed by AI research and technologies, it is observed that the current understanding of IQ will not be sufficient to address these

issues. Two concepts emerge as prominent in this regard: cultural intelligence (CO, Frunză, 2023, p. 85) and spiritual intelligence (SQ, Frunză, 2023; Dorabantu, 2024; Skrzypińska, 2023). Frunză (2023) suggests that, in view of the blurring distinction between humans and machines, these two forms of intelligence might offer a response regarding human originality, uniqueness, and diversity. These concepts, which involve a relational dimension intrinsic to being human, are expressed through culture and spirituality, representing unique ways in which humans engage with the world and construct their relational universe. While projections about the future indicate that machines might develop spirituality and could convince human ancestors that they have had spiritual experiences, the ethical dimension attributed to religion/spirituality and spiritual practices remains uniquely human. Despite AI entities being able to distinguish between 'good' and 'bad' in a moral context, they cannot yet grasp the abstract ethical principles underpinning such decisions. Current philosophical and ideological projections reveal that humans are the only beings capable of developing and embodying spiritual intelligence, as it involves transcendence and self-transcendence abilities that machines cannot achieve. The creator of AI, humans, are the sole bearers of spiritual experiences. In summary, Frunză suggests that in our rapidly advancing globalized and digitalized age, we must not only reflect on our relationship with technology and how its development impacts our lives, but also on our human condition under the themes of unity, uniqueness, and diversity. In other words, as AI advances, we need philosophy as much as technology. Therefore, CQ and SQ must occupy a central role in addressing human concerns (Frunză, 2023, pp. 86-89).

Another group of researchers (Ng, Ang, & Rockstuhl, 2022, p. 192), pointing to cultural and spiritual intelligences as two forms of intelligence that will contribute to effective functioning in the current global context, has emphasized the capacity for *transcendence*, with reference to Emmons' (2000) definition of SQ. They argued that SQ can be defined as the ability to create an *overview effect*, meaning having a broad mindset that sees humanity as a whole. In other words, according to these researchers, CQ and SQ represent the two forms of intelligence we need in the shifting context of the 21st century.

Another researcher, Skrzypińska (2023), notes that in today's world, where conflict and polarization with both ourselves and "the others" are increasing, the inherent human need for meaning continues to be significant. She emphasizes that human beings differ from AI in qualities such as ethical and moral thinking and behavior, creative thinking, will, emotion, sensitivity, and empathy. She stresses that SQ makes significant contributions to these areas for humans.

In a similar vein, another notable detail is the categorization of *Multiple Intelligences* by AI researchers Sadiku, Musa, & Ajayi-Majebi (2021) in their work *A Primer on* 

Multiple Intelligences. They divided Multiple Intelligences into three categories: Human, Machine, and Other Intelligences, placing Human Intelligence under the heading of Spiritual Intelligence and Machine Intelligence under the heading of AI.

In the project titled Understanding Spiritual Intelligence at the Interface of Artificial Intelligence and Theology by the International Association for Science and Religion<sup>10</sup>, researchers Wiseman & Watts (2022) approach the subject from cognitive architecture perspective. They propose that the human brain possesses a unique dual cognitive mode, comprising analytical and intuitive processes. They note that, similar to General Intelligence (GI/IQ), AI also operates within the analytical mode, emphasizing that this dual-mode intelligence system is exclusive to humans. In other words, SQ is associated with the ability to process information in a way distinct from GO/IO and AI (Wiseman & Watts, 2022, pp. 710-718). A conference titled Artificial and Spiritual Intelligence was held in June 2023 to assess the research findings within this Project<sup>11</sup>. From the same team, Dorabantu (2024) and Dorabantu & Watts (2024) have argued that, based on concerns raised by the *Lemoine case*, SQ could play a critical role in distinguishing whether AI possesses a true human personality and whether it can develop spirituality and religiosity. Dorabantu (2024), Dorabantu & Watts (2024) have stated that AI's ability to produce human-like outputs, as seen in chatbots, could be misleading, as this does not indicate it can develop a human-like personality, spirituality, or religiosity. The researchers further claims that AI lacks the anatomical, social, and cultural limitations inherent to humans, and that ontologies, world models, and problem-solving frameworks different between the two. Being spiritually intelligent is unique to humans; it requires possessing certain limitations related to human nature. However, AI -at least for now- is only intelligent at the human level.

#### **Discussion**

As can be inferred from the discussions provided so far, SQ and GI/IQ are different forms of intelligence that operate within the unique cognitive architecture of the human brain, using different cognitive modes and processing information in distinct ways. Unlike GI/IQ, which operates in a linear and parallel manner and lacks immunity to *dysrationalia* and does not compass rationality, SQ is more related to both the *intuitive* information processing mode and *Type 2* processes, such as deep thinking and rationality. Furthermore, SQ appears to be a form of intelligence capable of distinguishing between *information* and *knowledge*.

When intelligence is defined at its most basic level as the "ability to process information" (Fagan & Holland, 2002, 2007, 2009; as cited in Daley & Onwuegbuzie,

<sup>10</sup> https://www.issr.org.uk/projects/understanding-spiritual-intelligence/

<sup>11</sup> International Society for Science and Religion, Full Conference Program, https://www.issr.org.uk/wp-content/uploads/2023/06/2023-06-09-ISSR-2023-Full-Conference-Prog-003.pdf

2020, p. 386; Gardner, 2013, p. 69), its two fundamental components can be understood as *information* and *attention*. As a result of a large-scale series of socio-cultural-economic-philosophical processes that have occurred in Western thought over the past few centuries, it can be said that the nature, content, and intensity of *information* have been gradually changing, and this change continues, especially with the advent of AI technologies (as cited in Şengül, 2024).

Drawing inspiration from human intelligence, the development of AI research and technologies has intriguingly reached a point where it seems capable of challenging the intelligence and psychological processes of its human predecessors. Automation and mechanization may lead to widespread job displacement, while ethical gaps in AI technologies can create significant concerns. The inevitable biases in the data fed into AI systems, drawn from information uploaded to the internet, casts doubt on the objectivity of the responses AI generates. Additionally, while it may seem like a remote possibility, the potential for AI to be misused and even pose a threat to humanity heightens the sensitivity of the situation. On the other hand, digital applications powered by AI algorithms pose a substantial threat to human cognitive and psychological processes, especially for children, adolescents, and young adults, who are at risk of digital addiction. The brain's reward mechanisms are disrupted, and symptoms similar to physical addiction may emerge. Furthermore, echo chambers can manipulate individuals into one-sided, superficial thinking, driving them to act impulsively, radically, and with bias. Faced with overwhelming stimuli, individuals must recognize that their limited attention spans are being stolen and make efforts to protect it. In the face of information overload, they must focus their attention, engage in deep and multifaceted thinking, and discern real information from fabricated content.

Thus, in the changing context of today's world, where the traditional approach of GI/IQ proves inadequate, SQ stands out as a distinct human quality. It is characterized by its abilities, including *transcendence/self-transcendence, meaning-making, existential thinking*, and *consciousness expansion*. With these capacities, MZ holds the potential to address the questions and concerns raised by AI research and technologies.

SQ can help alleviate the stress and anxiety caused by the rapid development and influence of AI technologies by fostering sensitivity to shared human values through its capacity for *transcendence*. When the line between humans and machines becomes blurred, SQ may serve as a unique and defining form of human intelligence. In this context, both CQ and SQ represent critical aspects of contemporary human adaptive and problem-solving intelligence. While AI primarily replicates GI/IQ, it appears incapable -at least for now- of emulating human-specific traits like cultural production and spirituality. Moreover, SQ can protect against the cognitive and psychological health risks posed by AI-based digital platforms. Skills such as *transcendence*,

connectedness, consciousness expansion, existential critical thinking, and meaning-making/construction enhance focus, enable effective attention management, support discerning information, and integrate experiences into broader meaning systems. These capacities can help resist mental manipulation, prevent addiction, counter fanatical thinking, and reduce violence by promoting the "common good for all." Awareness of attention theft and manipulative reasoning can be strengthened through consciousness expansion. SQ's focus on connectedness and transcendence also mitigates risks such as echo chamber-induced fanaticism. Expanding consciousness, especially through mindfulness, enhances attention focus, while transcendence and consciousness expansion reduce susceptibility to extreme emotions like anger and hatred. Additionally, SQ's relational dimension fosters meaningful connections with oneself, others, and the broader world.

One possible way for humans to escape the *digital prisons* (*Görmez*, 2023) of today's world, which disconnect them from themselves, could be through spiritual intelligence. In its simplest form, SQ defined as the ability to use spiritual resources for problem-solving (Emmons, 2000; King, 2008), can significantly contribute to healthy thinking, decision-making, and action through practices like deep thinking, reflection, and mindfulness. In this way, an advanced SQ can support effective problem-solving by fostering deep thinking in the face of numerous challenges on individual, environmental, and global scales (Green & Noble, 2010, pp. 41–45). Research indicates that SQ may be positively associated with interpersonal relationship and communication skills such as *mindfulness* (Skrzypińska, 2020), *self-management, meaning in life, empathy*, and *resilience* (Pinto et al., 2023) and may negatively correlate with the development of addiction (Afshar et al., 2015; Demir, 2020; Giannone & Kaplin, 2017).

Based on all the observations so far, it can be suggested that in the new global context where AI -modeled after human intelligence- and its practical effects are evolving into a framework with the potential to dominate, guide, or even harm its creators' intelligence, SQ capabilities should be explored, developed, and actively utilized. To achieve this, integrating SQ into educational system, psychological therapy, and counseling processes could be proposed. Specifically, the education system and curriculum hold critical importance in strengthening this form of intelligence. Topics such as spirituality, sources of meaning and purpose, and their construction could be integrated into educational curricula, particularly in high schools and universities. Additionally, SQ support and intervention programs could be designed. Thus, contributing to the development of young people's SQ can equip them with psychological tools to think deeply and cope effectively with real-life problems, including cognitive manipulation, attention fragmentation, polarized thinking, addiction, and ethical dilemmas, all relevant to the context of the modern

world. Similarly, SQ intervention programs can be integrated into psychotherapy and counseling training and practice processes to contribute to addressing the aforementioned issues. These programs can assist individuals in recognizing their spiritual resources and effectively utilizing them in problem-solving.

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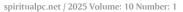
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**Book Review** 

# The Healing Function of Philosophy in William James' Life

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> "Sick Souls, Healthy minds: How William James Can Save Your Life" By John Kaag, Princeton University Press, 2020, 209 pp., \$16.06 "Be not afraid of life. Believe that life is worth living, and your belief will help create the fact." W James

William James asked "Is life worth living?" (James, 1895) His answer was short but profound: "It depends on the liver" (Kaag, 2020:129). In this book, John Kaag not only explores William James's answer by using James's life experiences and his reactions to life but also James's philosophical insights. Philosophy is considered the predecessor of psychology, often described as having "a long past but a short history" (Ebbinghaus, 1908). This statement highlights the development of psychology as a science and underscores the importance of understanding its philosophical roots. Philosophy gives us a strong foundation for living a meaningful life and developing best the version of ourselves. The ancient description of philosophy as "the love of wisdom" or "philosophy as a way of life" suggests that philosophy offers an ethical and meaningful framework for living. This notion has been analyzed by the French philosopher Pierre Hadot, who draws a connection between philosophy and art. According to Hadot, philosophy is an art of living that can assist individuals in alleviating suffering and shaping their identities (Hadot & Davidson, 1995).

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William James is considered one of the important pioneers of American pragmatic philosophy and the founder of American psychology in general, and the psychology of religion in particular. His life exemplifies how philosophy can create a meaningful existence, promoting health and happiness. John Kaag's book illustrates this through both James's life and Kaag's personal experiences with James's ideas. Kaag specializes in American philosophy at the University of Massachusetts Lowell School and he simplifies complex philosophical ideas in an accessible manner, integrating them with psychological insight.

Kaag begins the book with a biographical account of William James's unique life. He gives some details identification about James life. Born in 1842, James lived through the Civil War and received an extensive education in painting, zoology, medicine, philosophy, and psychology. He was a multi-talented "intellectual genius" of his time and remains relevant today. Coming from a wealthy family, James had many options but struggled with the direction of his life. His father, Henry James, advised him to "Be free." Despite his privileged background, James experienced severe depression, driving him to the brink of suicide. Luckly, James's perspective and philosophy saved his life. In addition to conveying the life and ideas of William James, the author also conveys his own personal life experiences to us. In this sense, it can be said that this work is a good example of biographical philosophy that supports Nietzsche's idea that "philosophy is always the autobiography of the philosopher".

For James, philosophy is crucial for overcoming life's burdens. As Kaag points out, "William James's philosophy saved my life or more accurately it encouraged me not to be afraid of life" (Kaag, 2020:5). He continues, "James's philosophy...is a life saver" (Kaag, 2020:5). In this book, Kaag shares his own life experiences that were aided by James's philosophy, showing how these ideas can help others as well. James famously said, "Be not afraid of life. Believe that life is worth living, and your belief will help create the fact." He added, "Is life worth living? Maybe, it depends on the liver" (Kaag, 2020:129). According to James, practicing philosophy is crucial for developing the ability to be less fearful of life. He believes philosophy serves as a smart self-help tool to overcome life difficulties. Readers can follow how James's philosophy can serve as a valuable self-help resource that can be taken from a philosophical perspective. Moreover, readers may choose to read this book out of curiosity about James's philosophical ideas, particularly his thoughts on overcoming depression or existential crises. Therefore, this book offers useful insights into William James's ideas and his life experiences, satisfying those interested in philosophical psychology in a biographical context. It follows not only James's ideas but also his personal life, providing a comprehensive view of his responses to life's challenges. While reading this book the reader can encounter William James' intellectual forbears who shaped his ideas such as Ralph Waldo Emerson, Charles Sanders Peirce, Carl Jung, and Freud.

The book comprises six chapters summarizing William James's life and his philosophical ideas such as determinism, freedom, psychology and a healthy mind, consciousness and transcendence, truth, wonder and hope which serve as real representations of his life. For example, regarding determinism, while James acknowledges the importance of free will, he argues that actions have the capacity to effect change. He states, "The stronghold of the deterministic sentiment is the antipathy to the idea of change" (Kaag, 2020:34). On the topic of action, James believes that action precedes feelings. For instance, he states, "Action may not always bring happiness, but there is no happiness without action," and further emphasizes, "We don't laugh because we're happy—we're happy because we laugh." James also reflects on rituals and habits, underscoring their significance for personal and societal stability. He advises individuals to incorporate two difficult or undesirable tasks into their daily routines as a way to build discipline. For James, habits function as an "enormous fly-wheel of society," and he succinctly asserts, "Thinking is for doing" (Kaag, 2020:68). The book's strengths lie in the portrayal of William James's character, the author's depiction of his life, and the connections made with readers' lives. However, the author frequently shifts focus to his own personal life while discussing James's, which occasionally blurs the distinction between the two narratives, making it challenging for readers to separate them.

Kaag conveys his purpose to readers by describing his work as "an attempt to pass James's wisdom on—his sense that life's possibilities are real and can be explored freely and meaningfully, but only at our own risk" (Kaag, 2020:10). He concludes the book by summarizing its central themes. The book is an inspiring, concise discussion filled with the author's insights. "Sick Souls, Healthy Minds" may be the best example of a self-help book that smartly connects how philosophy helps us find meaning in people's lives. It has been listed among the "best books to read" in 2022 and can inspire people to interpret their life experiences through a philosophical lens. Last but not least, this book's cover features William James's original hand drawing which reflects his thinking and experience while he is living his unique life.

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