



## Review Article

## Multiple perspectives of spiritual intelligence: A systematic literature review

Andréa Fidelis<sup>a</sup>, António Carrizo Moreira<sup>a,b,c,d</sup>, Andreia Vitória<sup>a,b,\*</sup><sup>a</sup> Department of Economics, Management, Industrial Engineering and Tourism, University of Aveiro, 3810-193, Aveiro, Portugal<sup>b</sup> GOVCOPP—Research Unit on Governance, Competitiveness and Public Policies, University of Aveiro, 3810-193, Aveiro, Portugal<sup>c</sup> INESCTEC—Institute for Systems and Computer Engineering, Technology and Science, 4200-465, Porto, Portugal<sup>d</sup> NECE-UBI—Research Center for Business Sciences, Universidade da Beira Interior, Covilhã, Portugal

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## ABSTRACT

This paper aims to understand the influence of sociocultural perspectives on the perception and conceptualization of spiritual intelligence (SI). To do so, a systematic literature review was carried out, and 64 journal articles and reviews form the sample for data analysis. Four different perspectives (Western, Eastern, Islamic, and Hindu) were identified. In the Western perspective, an egocentric and utilitarian approach to the construct prevails. In the Islamic perspective, religion is understood as the only possible expression of SI. In the Eastern perspective, the point of view of the common good and the connection with nature prevails. In the Hindu perspective, however, knowledge is the key to expanding spiritual awareness. The results indicate that the authors' perspective interferes in the understanding of the conceptualization of SI and its dimensions, and in the interpretation of the research results. Finally, a framework for analyzing SI research is proposed.

## 1. Introduction

Spirituality, formerly studied in the fields of philosophy and theology, has aroused the interest of the scientific community (Houghton et al., 2016). Studying it in this context is a challenging task since the term 'spirituality' carries with it the concepts (or prejudices) that the theme raises within individuals. The topic deals with human beings' natural restlessness, which leads them to reflect on their own existence (Zohar & Marshall, 2000). This restlessness drives the desire to leave a positive mark during their lives through the relationship built with their peers, through the work they have done or the lives they have touched.

In this paper spirituality is studied through spiritual intelligence (SI). It is understood as a cognitive capacity that answers existential questions, known as 'ultimate concern' (Emmons, 2000a, 2000b; Zohar & Marshall, 2000), which is represented by the questions: 'who am I?'; 'what's the meaning of life?'; and 'what am I doing here?' (alluding to mission and life purpose). However, the ways to answer these questions are not unanimous. Clearly, spiritual intelligence goes well beyond traditional notions of intelligence and involves an individual's capacity for self-awareness, meaning, and a connection to something larger than oneself, it can include both religious and non-religious perspectives, and the interpretation may vary based on individual beliefs and worldviews.

SI theory originated in the West and carries with it the values and meanings of spirituality in this context (Kwon, 2008). When explored and investigated in different contextual and geographical settings, interpretations are impregnated with local values (Chan & Siu, 2016). Feng et al. (2019) and Kwon (2008) claim that researchers from different sociocultural contexts use the same theoretical groundings and mention the same concepts, but interpret them in a different way, using their own beliefs about issues of faith, religiosity and/or existential concerns to define SI. Consequently, facts are based on biased perceptions, which compromise a clear understanding of the SI concept and dimensions. Then religious perspective may include, e.g. (Armstrong, 2023; Moore, 2016; Willard, 1998): connection with the divine or transcendent force, which may cultivate a sense of purpose and meaning in life through religious beliefs and practices; moral and ethical framework, emphasizing the development of moral and ethical values and adhering to religious teachings, commandments, or ethical principles derived from religious scriptures; prayer and meditation, which may involve the ability to engage in these practices effectively, fostering a sense of connection, inner peace, and spiritual growth; or community and service that stress the importance of engaging in meaningful relationships within a community and to serve others in accordance with religious beliefs. The non-religious perspective may include (Armstrong,

\* Corresponding author. Department of Economics, Management, Industrial Engineering and Tourism, University of Aveiro, 3810-193, Aveiro, Portugal.

E-mail addresses: [acris.fidelis@gmail.com](mailto:acris.fidelis@gmail.com) (A. Fidelis), [amoreira@ua.pt](mailto:amoreira@ua.pt) (A.C. Moreira), [atvitoria@ua.pt](mailto:atvitoria@ua.pt) (A. Vitória).

2023; Wilber, 2007; Willard, 1998): self-reflection and awareness that lead to a deep understanding of one's own values, beliefs, and purpose in life; ethical and humanistic values that can encompass the ability to live in accordance with one's values, promote empathy, and contribute positively to society without relying on religious doctrines for guidance; mindfulness and contemplation practices that focus on being present in the moment, cultivating a deep understanding of oneself, and fostering a sense of inner peace; or the connection to nature and humanity, which may involve recognizing and fostering a sense of interconnectedness with the world and fellow human beings.

This study aims to explore the influence of the four different perspectives identified in the literature on the perception and conceptualization of SI, seeking to answer the following questions: How are the dimensions of spiritual intelligence interpreted through each perspective? And how does the authors' perspective influence the way they conceptualize SI and relate it to religion? Hence, this research contributes to the discussion of SI, by exploring how the different contextual perspectives impact on the perception and conceptualization of SI and pointing out different paths adopted in academic studies. To answer these questions, a systematic literature review (SLR) was carried out, which also supported elaboration of the framework for analyzing SI research.

Through the lens of SI, spirituality is concerned with understanding the commitment of human capacity in the search for meaning and purpose through the expansion of consciousness about the existential, transcendental, and immaterial issues of life (Emmons, 2000a; King & Decicco, 2009; King et al., 2012; Zohar & Marshall, 2000). To understand better this dimension of spirituality and the theoretical bases that support it, the theory is presented through its seminal authors, pointing out different paths that influence development of the theory in different perspectives.

This paper is organized in five sections. After this introduction, section 2 presents the conceptual understanding of spirituality, religion, and spiritual intelligence. Section 3 presents the research method followed. Section 4 presents the findings, discussing the influence of sociocultural perspectives on SI contexts, conceptualization, and dimensions. Section 5 addresses the theoretical implications and makes suggestions for future studies.

## 2. Spirituality, religion, and spiritual intelligence – conceptual understanding

### 2.1. Seminal authors

Gardner (1983), Zohar and Marshall (2000) and Emmons (2000a) are recognized as seminal contributors to SI theory. However, they dissent in the conceptual understanding of SI. On one hand, Gardner (2000) maintains a position of not including SI as a type of intelligence. On the other hand, Zohar and Marshall (2000) claim that SI is 'the' primordial intelligence. Finally, Emmons (2000a, 2000b) associates the religious and theological aspects with the theory of SI.

Gardner (1983) had a pioneering role popularizing the expansion of a multifaceted concept of intelligence, not restricting it only to logical mathematical thoughts or the mastery of language (written and spoken). Gardner (1983) considers the existence of seven types of distinct 'intelligences': linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal and intrapersonal. Afterwards, Gardner (2000) expanded his list of intelligences to include an eighth one called 'existential intelligence,' which aligns with the exploration of spiritual and existential aspects of human experience. However, Gardner's (2000) theory does not explicitly use the term 'spiritual intelligence.' The idea of spiritual intelligence has been developed by other researchers and authors as a distinct concept that goes beyond Gardner's original framework.

However, the spiritual perspective of intelligence caught academics' attention and sparked discussions about the religious, divine, and sacred

aspects of the human being, which propelled SI into an independent theoretical conception (Halama & Strizenec, 2004). It was precisely this relationship between religion/religiousness and SI that was questioned by Gardner (1983, 2000). Gardner (2000) justifies that as the sacred is an ambiguous issue he was not prepared to argue what is holy and what is profane.

Zohar and Marshall (2000) claim that SI is the final intelligence, which integrates and re-signifies the human being's thought process. SI is responsible for uniting information coming from the physical body, reason and emotion generating meaning for the human being. Therefore, SI is defined as a human capacity to approach and solve moral and ethical problems, of deep existential significance, influencing the choice of a life path that makes sense to the individual (Zohar & Marshall, 2000). The search for meaning (the ultimate concern) is the key issue for these authors. It is manifested by the natural tendency of the human being to question oneself 'who am I?' and 'what is the meaning of life?' Its conceptual bases are existential philosophy, neurology, and the psychology of the meaning of life (Zohar & Marshall, 2000).

Concomitantly, Emmons (2000a) presents the theory of SI defending that SI is an autonomous construct that integrates different concepts of psychology, philosophy, and theology. Contrary to Gardner (1983), Emmons (2000a) considers that SI meets all the requirements to be considered an intelligence, based on the criteria defined by Gardner (1983).

From these seminal publications, SI started to be analyzed and discussed in areas such as psychology, education, or organizations. One of the first questions raised was whether one should consider SI as an intelligence or as a domain.

### 2.2. Spiritual intelligence: domain or intelligence?

Although spirituality and spiritual intelligence are related concepts, they have clear distinct meanings. Spirituality is a broad and subjective term that involves a sense of connection to something greater than oneself and often encompasses beliefs about the meaning and purpose of life. It refers to the search for and experience of the transcendent or sacred. It manifests, among others, in religious practices, contemplation of nature, ethical or moral considerations, and a sense of interconnectedness with others (King & Decicco, 2009; Wilber, 2007; Zohar & Marshall, 2000). Differently, SI is a specific aspect of intelligence that goes beyond traditional cognitive abilities involving the capacity to access and apply a set of values, principles, and meanings. SI often includes qualities such as self-awareness, empathy, compassion, the ability to see the bigger picture, a sense of purpose and meaning, and the capacity to transcend individual concerns. In essence, spirituality is a broader and more inclusive concept that encompasses various personal beliefs and experiences related to the transcendent, while SI is a more focused term that denotes a particular aspect of human intelligence associated with navigating and making sense of spiritual or existential aspects of life (Gardner, 1983, 2000; King & Decicco, 2009; Wilber, 2007; Zohar & Marshall, 2000).

Intelligence is a central concept for psychology, which seeks to explain the complex phenomenon related to the human method of thinking, understanding, adapting, learning and efficiently using personal and natural resources in the face of life's obstacles (McElya, 2017). The approach to intelligence is divided into two different perspectives: the view of a single intelligence with the use of formal logical capabilities (Kovacs & Conway, 2019), and the perception of multiple intelligences (Almeida et al., 2009; Sternberg, 1999).

The multiple intelligence perspective extends the concept of intelligence to encompass cognitive processes beyond reason and logic. In this view, the concept of intelligence has problem solving as its central point, reflecting on the importance of human beings using their cognitive abilities to adapt and survive life's demands (Emmons, 2000a; Gardner, 2000). Scholars who follow the perspective of multiple intelligences use the criteria of Gardner (1983) to assess what can be considered as

'intelligence,' as some human abilities (musical, spatial, bodily-kinesthetic, intrapersonal and interpersonal abilities, among others), cultural and individual differences, practical applications in education help foster the strengths and learning styles of individuals and allow the varied understandings of artistic, social and practical skills that allow a personalized understanding of intelligence (Gardner, 1983, 2000). In this sense, Gardner (2000) explains that SI cannot be identified as an intelligence, but only a domain, because it is limited to knowledge about spirituality themes. Emmons (2000b) counter argues by explaining that SI is a human skill, positively using spiritual knowledge to solve daily problems, fitting all the criteria suggested by Gardner (1983). Thus, if SI is considered as an intelligence, it will be perceived as a way of being, thinking, and doing in life, considering the human relationship with the transcendent and the divine (Collins, 2010). If SI is conceived as a domain, it is assumed that knowledge about spirituality may or may not influence individuals' decisions and behavior.

This discussion is a key factor in the conceptualization of SI, since intelligence is the way to process information, while domain is only information (Gardner, 2000). Using a figure of speech, intelligence is like the computer operating system, while the domain is the information itself put inside.

The importance of defining spirituality as a type of intelligence lies in removing it from the field of a domain, raising it to the level of science (Emmons, 2000b). In this way, SI has begun to be studied as a biological and cognitive potential and not just as an area of knowledge. The biological potential gives SI a physiological predicate. It means that spiritual intelligence is part of human nature, even when it manifests itself at unimpressive levels. The theory of Zohar and Marshall (2000) embraces this feature, presenting research in the neurology field to determine the 'God spot' in the human brain.

The cognitive potential unveils the influence of spirituality in problem-solving, which is the central question in defining intelligence (Emmons, 2000a; Gardner, 2000; King & Decicco, 2009; Zohar & Marshall, 2000), involving the complexity of factors, weighing personal goals, the maximum amount of information available, and the implications for decision-making (Gage, 2016). It brings a 'modus operandi,' with insight and understanding of facts through the lens of spirituality.

SI framed as intelligence is crucial for the inclusion of spirituality as a scientific matter, which was the desire of some seminal authors such as Emmons (2000a) and Zohar and Marshall (2000). Emmons (2000b) states that spirituality as intelligence becomes a tool to understand human nature, integrating it into Psychology studies. Thus, spirituality is no longer seen as an irrational, emotional or a philosophical matter. Moreover, when SI is reduced to a domain (knowledge) it is deemed as a synonym for religiosity or religious behavior, and several authors consider this assumption a conceptual error (e.g., King & Decicco, 2009; Zohar & Marshall, 2000). The texts by Gardner (2000) and Emmons (2000a, 2000b) lead the reader to this misunderstanding, which is present in certain articles that discuss SI solely through the bias of religion.

This lack of consensus, and consequently, the twofold forms of interpretation of SI (domain and intelligence) are caused by the way each author understands and defines what spirituality is. This issue is analyzed below.

### 2.3. Religion, spirituality, and spiritual intelligence

The word 'spirituality' raises different concepts and opinions. Discussing and debating this ambiguous and complex subject is a challenging research topic (Karakas, 2010). However, many authors follow this path intending to investigate and understand the influence of this dimension on individuals and society (Ashmos & Duchon, 2000; Emmons, 2000; Kauanui et al., 2008; Skrzypińska, 2021).

The approach to spirituality occurs from three – intrinsic original, religious, and existential – different views (Houghton et al., 2016). The 'intrinsic original view' assumes that spirituality is the expression of

individuals' inner consciousness, which is beyond learned beliefs and values. It is associated with a sense of connection with oneself and with the community. The 'existential view' describes human beings' search to use their potential to create a purposeful and meaningful life, integrated with what they believe to be essential in their existence (Ashmos & Duchon, 2000). The 'religious view', on the other hand, discusses spirituality through a specific religious confession, with its doctrines, values, and beliefs, such as Catholicism, Islam, and Hinduism (Krishnakumar & Neck, 2002). Thus, the understanding of spirituality is influenced by the context in which the individual is living (Kwon, 2008), i.e. the perspective adopted is based on beliefs and values.

In sociocultural contexts with strong religious influences, authors tend to internalize spirituality into current confessional doctrines, like 'religious view.' In these contexts, spirituality and religion have a direct relationship (Hanefar et al., 2016). In other sociocultural contexts, where rationality and materialism predominate, this connection is irrelevant (Chan & Siu, 2016). In these latter contexts, the existential view or intrinsic original view prevails (Houghton et al., 2016).

The discussion around religion, spirituality, and SI concepts and boundaries, is not new (Dein et al., 2012). Some authors believe that SI has a strong relationship with faith and religion, regardless of their type of confession (Antunes & Silva, 2015; Anwar et al., 2020; Snelgar et al., 2017), while others exclude religion, defending SI from an existential point of view (King & Decicco, 2009; Zohar & Marshall, 2000).

Religion is the institutionalization of beliefs about the divine that involves rituals and ceremonies (Clark et al., 2015; Yang & Wu, 2009). Each religious confession expounds its perception of the relationship between the individual and God, presenting 'an instruction manual' to answer 'how' to have a meaningful life. It involves a code of practices and conduct that constrains moral values and behaviors (Cowan, 2005; Moradi et al., 2018).

If the experience of spirituality, through an intrinsic and existential view, may result in the choice of a religious confession (Houghton et al., 2016), the practice of religious confession may or may not result in the development of spirituality (Zohar & Marshall, 2000). Following an existentialist perspective, SI can be understood as an internal capacity of an individual who seeks deep existential responses, above what is given and defined by a certain religion, culture, or society. As such, it cannot be reduced to a religion. Although individuals can express themselves through a certain religious confession, being religious is not necessarily related to having SI (King et al., 2012; Zohar & Marshall, 2000).

### 3. Method

This SLR follows the methodology proposed by Tranfield et al. (2003) to identify and evaluate high quality scientific articles regarding the organization, approach and discussion of the data. The normative steps are divided into three phases: preparation, application and dissemination of results.

#### 3.1. Phase 1 – preparation/planning

The first phase includes two steps: the first involved the definition and construction of the research protocol, establishing the rules of inclusion/exclusion of documents. Here, the SCOPUS platform was established as the source to search for documents. The selection was made in December 2020, using the expression 'Spiritual Intelligence' (originally the term used to conduct the search was 'spiritual\*' in order to address terms related to spirituality and spiritual intelligence; however, it was so broad, that spiritual intelligence as a search term was totally overshadowed. As such, the final term 'Spiritual Intelligence' was adopted. in *Article title*, *Abstract* and *Keyword* as search topic. The first batch presented 331 documents. After this result, it was decided to consider only 'journal articles' and 'reviews.' 53 documents were excluded as they did not fulfill these characteristics.

The second step involved the elimination of articles that were not

written in English, Portuguese or Spanish (21 in total). Then the abstracts were analyzed in order to identify which journal articles and reviews addressed spiritual intelligence from the analysis identified in this paper. Since the term ‘spiritual intelligence’ is used without any contextualization regarding theoretical issues related to the research focus, i.e., with reference to common sense, it was decided to exclude 62 more documents at this stage.

At the end of this first phase, 195 documents were identified to proceed with application of the evaluation protocol. Two more articles were added. Although they did not appear in the initial research, due to their importance in discussing the topic, they were included: [Emmons \(2000b\)](#), who answers the questions presented by [Gardner \(2000\)](#) regarding SI theory, and [King and Decicco \(2009\)](#), who present the SISRI scale for spiritual intelligence. As such, the total number of documents for analysis in the next step is 197.

3.2. Phase 2: application of the quality assessment protocol

In this stage, all the 197 papers selected in the previous phase were analyzed according to the quality of the content. This evaluation is performed through the guide adopted by the Academy of Management, which serves as a framework for reviewers to evaluate articles for publication. This ‘guide’ ([Appendix 1](#)) is structured in 17 questions that assess the robustness of the theoretical presentation, the methodology used, the clarity of data presentation, coherent construction in presenting the results and the contribution of the work to the scientific and social area.

Each of the 17 questions receives one point for Yes and zero for No. After this evaluation the documents are classified – as a percentage of the maximum evaluation – into three groups: group A, where the score must be greater than 80%; group B, where the evaluation varies between 51% and 79%; and group C, where the assessment is 50% or less.

Articles classified in group C were excluded for not having enough consistency to be considered relevant for the study. Type A documents were included in the subsequent analysis. Those classified as B were reassessed by the authors of this research, applying the parameters described by [Pittaway et al. \(2004\)](#) and followed by [Silva and Moreira \(2019\)](#).

There are 96 documents classified as ‘Type C’, 35 as ‘Type A’ and 61 as ‘Type B.’ Type B documents were reassessed by the five quality factors ([Appendix 1](#)). In this new evaluation, each revised article receives a classification for each of the quality issues: NA (not available); 1 – marginally achieves the evaluated objectives; 2 – achieves the objectives; and 3 – completely achieves the objectives. Those that presented values 2 and 3 in all items of analysis were included in the final sample, together with the documents classified as ‘Type A’ in the previous step.

In this re-evaluation stage, of all documents classified as ‘Type B’, 32 were excluded and 29 were included in the analysis with the remaining ‘Type A’ documents. At the end of this classification, 64 documents ([Appendix 2](#)) were included as the final sample of this SLR.

3.3. Phase 3: application and dissemination of the results

In this last evaluation phase, the 64 documents covering all the requirements proposed in the SLR protocol were fully analyzed. Based on evaluation of these selected documents (namely, their theoretical and practical consistency), it was possible to conclude about the influence of sociocultural perspectives on academic research on SI.

4. Findings

The 64 documents selected for evaluation ([Table 1](#)) were published between 2000 and 2020. From 2016 onwards the number of publications increased substantially, showing increasing interest in this topic.

Of the total number of studies analyzed, 42 articles used quantitative methods, four qualitative methods, five a mixed method and 13 were

**Table 1**  
Characterization of the analyzed articles.

Publication Year	N		
2000–2003	3		
2004–2007	3		
2008–2011	4		
2012–2015	10		
2016–2020	43		
Type of Paper	N	Scale	%
Quantitative	42	SISRI	45.3%
		ISIS	7.8%
		PSI	3.1%
		SLI	3.1%
		Nasseri Scale	1.5%
		Without or different scales	39.2%
Theoretical	13		
Qualitative	4		
Mixed	5		
Subject Area	N	%	
Psychology	37	57.8%	
Organizations and Business	24	37.5%	
Education	3	4.7%	
Perspective	N	%	
<b>Islamic</b>			
Iran	14	46.9%	
Malaysia	9		
Pakistan	2		
Indonesia	3		
Jordan	1		
Egipt	1		
<b>Hindu</b>			
India	7	10.9%	
<b>Western</b>			
USA	6	34.4%	
South Africa	2		
Canada	2		
Portugal	2		
Slovenia	2		
Greece	2		
Poland	2		
United Kingdom	1		
Brazil	1		
Peru	1		
Sweden	1		
<b>Eastern</b>			
China	2	7.8%	
China and Taiwan	1		
Hong Kong	1		
Korea	1		

theoretical articles. The most used scale was SISRI-24 (n = 29), followed by ISIS (n = 5), SLI (n = 2) and PSI (n = 2). Most studies are in the field of psychology (n = 37), aiming to analyze human behavior, exploring themes related to happiness, subjective well-being, and physical and mental health. Furthermore, in these studies, feelings of compassion, hope and resilience are also analyzed through the lens of spirituality.

In the articles related to the business area (n = 24), the main emerging issues concern the impact of spirituality on ethical values and on organizations’ social and environmental orientation, since they are fundamental in implementing business strategies and in defining: resource management policies; human resource management policies; and the impact of services on the environment and the community.

Another organizational perspective is more focused on the employee. This perspective explores the impact of spirituality: on the employee’s feeling of contributing to the common good; on the construction of their personal identity; on the satisfaction of performing tasks; on the commitment to work; and on improving the quality of employees’ relationships with customers and colleagues.

There are also three studies in the area of education that focus on the teaching-learning mechanisms and practices that can help to develop spiritual intelligence, as well as on understanding the impact of implementing programs that stimulate the development of spirituality in the context of classroom activities and in developing meaningful interactions among students.

Although research on spirituality and/or SI was carried out in 22 different countries, Iran emerges as the country with the most research in this field, followed by Malaysia. Based on the perspectives of the analyzed articles, more than 45% of the research in this field is found to originate in countries based on Islamic religion ( $n = 30$ ) and around 34.4% in Western countries ( $n = 22$ ).

#### 4.1. Different perspectives on the SI construct

Four different ways to understand, interpret and define SI emerged from analysis of the articles included in this systematic literature review. We classified them as Western, Eastern, Islamic and Hindu perspectives. We used the term ‘perspectives’ and not culture because we intend to address and refer to understanding of the SI concept and dimensions perceived in the light of beliefs, customs, and traditions, within certain sociocultural contexts, and not allude to broader cultural standards, norms or behaviors that cut across a country or a group of countries. The fundamentals of each perspective will be presented to understand the impacts of the context on the understanding in each of them.

##### 4.1.1. Islamic perspective

Understanding SI through the Islamic lens is connecting spirituality to religion, as SI is consubstantiated in the context of Islamic religion (Anwar et al., 2020). In this perspective, the act of reflecting on one’s existence and answering questions about ‘the why of life’ is a sign of high moral, cognitive, and emotional abilities that only people with a high SI possess (Moradi et al., 2018; Munawar & Tariq, 2018). Moreover, from this perspective there is no SI without the relationship with God and Islamic religious principles (Hanefar et al., 2016). Although they use the concepts developed by Emmons (2000a) and King and Decicco (2009), who conceived spirituality and SI with no direct connections with religion, these concepts are understood as synonyms of religion: “*In the hearts and minds of all people, spirituality is evident in religious habits and behaviors everywhere*” (Ahoei et al., 2017, p. 2).

For example, the SISRI scale and its factors are predominantly used by Islamic authors, but they are interpreted through a religious bias. Hence, the meaning of life and the ultimate concern are revealed to men and women when they fulfill their role as a servant of God. In the same sense, the expansion of consciousness is the offering of God’s abilities and knowledge to his believers, and transcendence is the recognition of divine existence, and that God is the Lord of creation and the only source of life.

This perspective has been reinforced by some research findings that suggest a relationship between SI and religious behavior. In a study with adolescent fighters, results indicate that a high SI (understood as “with a greater presence of God”) leads to lower aggression (correct behavior, less negative emotions, and better emotional control) (Karimi & Mohammadi, 2020). In another study analyzing women with cancer, even without measuring their religious behavior, Ahoei et al. (2017) conclude that the presence of SI is a sign of the usual practice of religious rites and a good spiritual life.

In works where it is not possible to confirm the relationship between SI and positively valued and/or ethical behavior preached by religious denominations, researchers show surprise at the results obtained. As an example (Razaghi et al., 2017), in a study of the parents of hospitalized premature infants, mothers’ SI is correlated with their mental health, but for the fathers there was no significant relationship between these two variables. The authors expressed incomprehension of the results obtained. In a study that tried to relate the ethical behavior of librarians with SI (Moradi et al., 2018), the results show no relationship between SI

dimensions and professional ethics, which was expected by the authors. The results obtained by Munawar and Tariq (2018) with elderly Muslims also confirm this situation as there is a highly significant negative correlation between life satisfaction and SI.

These results may suggest that the authors’ willingness to understand SI as an expression of religious behavior does not do justice to the complexity of this dimension and reduces it to a single possible aspect of its expression. Therefore, from the Islamic perspective and based on the authors analyzed, there is no existential answers in critical reflection on immateriality, transcendence, and fundamental aspects of human life outside the religious context.

From an Islamic perspective, religion becomes the defining characteristic of spiritual intelligence, reducing it to a domain rather than a form of intelligence. Surveys measure the faith and religious behavior of these people and not spiritual intelligence. This discrepancy shows that researchers’ cultural ideas about spirituality determine the interpretation of the facts studied.

##### 4.1.2. Eastern perspective – collective view

The Eastern perspective represented here by the countries of China, Taiwan, and Korea follows, mainly, the principles and beliefs of Buddhist, Taoist, and Confucian philosophies (Feng et al., 2019). Chinese political society is organized according to a communist system that tends to suppress religious expression. Thus, a tiny fraction of people professes a religion (Chan & Siu, 2016; Yang & Mao, 2006).

Even so, the first articles on SI (Yang & Mao, 2006; Yang & Wu, 2009) from these countries used the perspective of Wolman (2001), who claims that religious experiences, regardless of ideological creed, contribute to the development of spiritual intelligence. SI was assessed through factors like recognition of a divine power, meditation or contemplation practices, involvement in charitable activities, discussions on the topic of spirituality, childhood religious experiences, and personal traumas that cause individuals to reflect on spiritual issues. Except for experiences of pain and suffering (trauma), the results indicate a low significant relationship between SI and those factors. However, the group that reported having a specific religion (5.4%) scored better than the others, leading the authors to conclude that religion may have a positive impact on SI.

Yang and Wu (2009) compared SI in two different societies (China and Taiwan). The scores obtained by the Taiwanese group are higher than those obtained by the Chinese group. The commonality is that both respondents with religious affiliation had higher SI scores than those without religious affiliation. This result strengthens the idea that religious beliefs contribute to the development of SI. Moreover, the results acknowledge that despite the common shared cultural roots of both countries, differences in social systems affect the way people think about the purpose and meaning of life. However, an important aspect of these studies (Yang & Mao, 2006; Yang & Wu, 2009) was that they did not consider the practices of Buddhism, Taoism, and Confucianism that are ingrained in Chinese societies. These philosophies represent their values and identities. Thereby, as SI is influenced by individuals, the study of SI must focus on their beliefs and perspectives in order to understand their expressions (Chan & Siu, 2016; Kwon, 2008).

With the intention of studying SI from an Eastern perspective, Chan and Siu (2016) and Feng et al. (2019) conclude that the understanding of some key concepts of SI theory is conceived differently from the West. For example, in the Eastern perspective, the word “transcendence” means being in touch with the energy of the universe, in which the individual is part of the whole; the values of the community represented by the family or society are above the desires or needs of the individual. The expansion of consciousness is an energy that seeks balance between the “I,” the community, and nature. Cultural principles proclaim that people must devote themselves to a virtuous life dedicated to the collective, practicing humility, honesty, and responsibility for the collective (Chan & Siu, 2016; Feng et al., 2019).

Yang and Mao (2006) and Yang and Wu (2009) did not find a

relationship between religion and SI (sample with 26.8% with religious belief and 73.25% without religion). Moreover, they found that Chinese students interpret the search for the meaning of life differently from Canadians, which might be explained by the use of certain variables/constructs – Personal Meaning Production and Critical Existential Thinking – which might have been understood as existential well-being rather than spiritual intelligence, by some of the respondents.

#### 4.1.3. Western perspective– egocentric one

The seminal authors of SI theory are aligned with the Western perspective. These authors can be divided into those who associate spirituality with religion (Emmons, 2000a; 2000b), and those who use the existentialist point of view (King et al., 2012; Zohar & Marshall, 2000). Despite the different positions, both advocate a worldview centered on individualism. That is, the angle of analysis of SI is egocentric, seeing the human being as an isolated being. His quest for self-development aims at finding personal well-being, material balance, and success (Z. Bauman, 2009).

From the Western perspective, SI is a tool for achieving quality of life. As such, the SI concept expresses this usefulness when it states that it integrates and adapts spiritual (or religious) information, applying it in solving daily problems and guiding the pursuit of personal goals (Emmons, 2000b).

In Western articles there are several references to the “Self” (personal goals, personal interpretation of ultimate concerns, skill, inner self, self-realization). The main idea is that SI: (a) increases individuals’ ability to achieve a happy and fulfilling life (Skrzypińska, 2021); (b) enhances personal communication skills (Clark et al., 2015); improves creative capacity and focus on tasks, with a consequent positive performance at work (Cowan, 2005); or (c) develops spirituality to enjoy and enrich one’s own life (Canales & Huaman, 2020).

In the West, individuals normally seek to achieve autonomy and independence. The process of personal, professional, and financial development is based on the individual’s responsibility (C. M. Bauman, 2009). Life’s achievements are perceived as personal merit (Bauman & Haugaard, 2008). The ‘meaning of life’ is related with happiness and quality of life. And this happiness, usually, is not related to other people. Meditation or yoga practices, for example, are seen as techniques to achieve well-being (Kwon, 2008). Therefore, spirituality is also perceived as a means to achieve personal goals, as defined by Adams and Hyde (2008 p. 59) “*spirituality involves a deep-down awareness of one’s relationship with one’s self, and with everything other than one’s self.*”

Western investigations are also interested in finding a practical usefulness for SI theory. For example: the analysis of childhood dreams (Adams & Hyde, 2008), aiming to understand the process of resolving personal conflicts; the leadership development model (Cowan, 2005), which focuses on developing leaders’ spiritual skills to achieve greater efficiency in management; or improving the quality of care and management in the health service (Canales & Huaman, 2020).

#### 4.1.4. Hindu perspective

There are several religions in India, with Hinduism being the most common and prevalent (Devi et al., 2017). Hinduism is expressed through polytheism, i.e., believing that God manifests himself in many ways. It defends that the human being is part of the consciousness of the cosmos. An individual is incarnated on Earth to evolve as a soul, reinforcing an individual and introspective perspective on life. As such, birth within a social caste indicates the process of spiritual evolution for each person. Therefore, respect for tradition and knowledge are the guiding principles of this perspective (Raman, 2012).

The Hindu perspective closely relates spirituality to knowledge. Knowledge is intrinsically connected with light. This light represents the human connection with the divine consciousness of which each subject is a part (Raman, 2012). The search for knowledge is the essence of spirituality and this is the way individuals reach their purpose in life. In this context, SI is interpreted as the natural process of interaction

between enlightenment (religion), science (knowledge) and expansion of consciousness (Devi et al., 2017), or ‘the’ influences to learn and internalize knowledge (Augusty & Mathew, 2020).

The study of spirituality through the Hindu perspective is closely related to the Hindu religious view. Respect for tradition, cults and ancestral teachings are present in the understanding of SI (Jain & Singh, 2020). The expansion of consciousness is understood as a divine mission and transcendence is achieved through meditation and the practice of prayers and religious rites (Devi et al., 2017).

#### 4.2. Relationship between spirituality, religion, and spiritual intelligence perspectives

In the Islamic perspective, the meaning of spirituality and religion is intertwined as the relationship with the divine, which happens only through the grace of God (Anwar et al., 2020; Hanefar et al., 2016). Polytheism is ingrained in the Hindu perspective. Each type of God, with His/Her characteristics inspires the human being to discover the divine in different ways (Augusty & Mathew, 2020; Upadhyay, 2017). In the Eastern perspective, religion and the idea of God are not as relevant as in the Western, Islamic or Hindu perspectives. In the Eastern perspective, spirituality is related to the search for balance in life and collective issues are more important than individual desires (Chan & Siu, 2016).

Additionally, SI was found to be presented in two different ways: as a domain and as intelligence (Emmons, 2000a; Gardner, 2000). When spirituality is reduced to its religious or confessional aspect, it becomes a domain of knowledge. When it is treated as a cognitive human skill it is discussed through the scientific lens of intelligence. It is possible to conclude that what determines the way of seeing and interpreting SI is the perspective context. Each perspective answers the existential questions aligned mainly by the interpretation about personal values and beliefs.

In the Western perspective, the starting point is egocentric. So, SI is internalized as a resource or a tool for improving the quality of individual life (Cowan, 2005; Emmons, 2000b). In the Eastern perspective, the collective values of coexistence in community and harmony with nature stand out. Individual issues tend to be subdued (Chan & Siu, 2016). Religion and its practices are the answer to spirituality in the Islamic perspective (Anwar et al., 2020; Hanefar et al., 2016). In the Hindu perspective, spirituality and knowledge go hand in hand to achieve divine enlightenment (Augusty & Mathew, 2020; Menon & Sadasivan, 2019).

Reflections on life, death, the relationship with the community and nature, for example, are topics widely discussed in Eastern philosophy and the Hindu perspective. In contrast, the finitude of life is generally an uncomfortable affair for individuals in the West. The relationship with God is a central factor in the Islamic perspective. In the West, this connection with the divine suffers great interference from the positions and interpretations of religiosity. In the East, this aspect has little impact.

Regardless of the convergence of the cognitive aspects of the human mind, with a focus on existential concerns unrelated to religion, King and Decicco (2009) believe that SISRI can be used in different socio-cultural contexts. Their research sought to identify patterns that portray the search for the deep meaning of life in any context. However, it must be considered that they are immersed in a sociocultural context that influences the way they think about spirituality. A careful look at the SISRI instrument shows a structure centered on individualism, on personal well-being that is in line with the principles of the Western perspective.

To understand better the impacts of the perspectives on the conceptualization of religion, spirituality and SI, the concepts are summarized in Table 2. When religion is conceived as an expression of spirituality, SI is perceived through it. When spirituality is perceived as broader than religion, SI is analyzed in a deep existential sense, unrelated to confessions of faith.

**Table 2**  
Spirituality, Religion and Spiritual Intelligence: comparing the concepts.

Author	Spirituality	Religion	Spiritual intelligence
Emmons (2000a)	Spirituality is the personal expression of ultimate concern.	It is the state of being grasped by an ultimate concern, a concern which qualifies all other concerns as preliminary and which itself contains the answer to the question of the meaning of our life.	SI is a framework for identifying and organizing the skills and abilities needed for adaptive use of spirituality.
Zohar and Marshall (2000)	–	It is a set of rules and beliefs imposed from outside.	SI is the mental aptitude used by human beings to address and find solutions to problems of meaning and value in life.
Yang and Mao (2006)	Spirituality is more than religion, just as symbols are more than informational signs. Spirituality is a belief system which imparts vitality and adds meaning to life events; it is also a connection to the transcendent and gives value and purpose to life. Spirituality is experienced in the secular and the sacred.	Religion is what is firmly believed, made up of a unique system of ideology and enforced amongst members of that belief system	They use the definition of Wolman (2001).
King and Decicco (2009)	Spirituality is the personal quest for understanding answers to ultimate questions about life, about meaning, and about relationship to the sacred or transcendent.	Religion is an organized system of beliefs, practices, rituals, and symbols.	SI is a set of mental capacities that contributes to the awareness, integration, and adaptive application of the nonmaterial and transcendent aspects of one's existence, leading to such outcomes as deep existential reflection, enhancement of meaning, recognition of a transcendent self, and mastery of spiritual states.
Kaur et al. (2013)	Spirituality is a set of adoptive skills and resources that facilitate problem solving and goal attainment	–	It refers to the ability to access, express and process spiritual information.
Jorge et al. (2016)	Spirituality can be considered an internal, personal, and emotional expression of the sacred.	It is a formal, institutional, and external expression of the sacred.	It is the ability to manage spiritual information, which provides an adaptive sense for improving daily livelihood, increasing problem solving and facilitating the achievement of goals.
Clark et al. (2015)	Spirituality refers to the inner,	Religiousness involves	They use the definitions of Emmons (2000a) and

**Table 2 (continued)**

Author	Spirituality	Religion	Spiritual intelligence
	subjective life, affective experiences, values, sense of who we are, where we came from, and why we are here. Spirituality indicates our sense of the meaning and purpose of work and life as well as connectedness to the world.	adherence to a set of faith-based beliefs (and related practices) concerning both the origin of the world and the nature of the entity or being that is believed to have created and govern the world. It typically involves membership in some kind of community of fellow believers and practitioners, and participation in ceremonies and rituals.	King and Decicco (2009).
Munawar and Tariq (2018)	Spirituality can be seen in the way individuals acquire and show meaning and purpose in their lives, practice cohesion to the current moment, one's self, world, other people and holy or vital objects	–	SI is understood as the capacity to search for sense, reason and worth in lives. It can also be defined as an effort to link our lives with a broader, deeper, and more meaningful objective.
Feng et al. (2019)	–	–	SI is understood as the ability to connect meanings by seeing interconnectedness between life world experience and the inner spheres, as well as the ability to create meaning based on the understanding of practical problems.

It is important to emphasize that in addition to the concept described or used by an author, the most important thing is to understand how they interpret it. For example, Moradi et al. (2018) use non-religious scales to measure SI. However, they position themselves in a confessional logic. The opposite also happens, reinforcing that the point of view is tainted by personal perspectives and beliefs on the topic (Yang & Mao, 2006; Yang & Wu, 2009).

**4.3. Perspectives-based definitions of spiritual intelligence and spiritual intelligence dimensions**

As already mentioned, the perspective context influences how the SI concept is understood. Consequently, the understanding of its dimensions is also affected by the context. Therefore, meaning and purpose of life, transcendence, and spiritual resources are perceived through heterogeneous lenses, according to the author's perspectives.

In contexts in which religion is the only way of understanding spirituality (divinity, God), SI is understood in a curtailed way, not expressing all the potential that it can really express (Hanefar et al., 2016; Maryam et al., 2012). In these situations, authors who treat the topic as a synonym for religious confession measure and interpret spirituality as a domain of knowledge and not as a cognitive human capacity (intelligence).

As a domain, spirituality is expressed by the knowledge acquired on the topic, influenced by the religious beliefs and doctrines of its

perspective.

In the Hindu perspective, beliefs are also used in the relationship between religion and spirituality in the discussion of SI, influencing the way of understanding, measuring, and interpreting this construct (Augusty & Mathew, 2020; Upadhyay, 2017).

In materialistic societies, as occurs in the West, where there is a demand for survival and huge encouragement of consumption, there is little room for developing and internalizing reflections on the transcendental and immaterial values of life (Antunes & Silva, 2015; Clark et al., 2015).

Differently, Eastern perspectives face the concept encompassing transcendental issues, appealing to values such as collective well-being and harmonization with the universe (Chan & Siu, 2016; Kwon, 2008). As such, it could be argued that the understanding of SI is influenced by the material life or the religious point of view of each perspective.

**5. Theoretical contributions, limitations and suggestions for future studies**

Theoretically, it is important to note that SI research is impregnated with a strong bias according to the contexts individuals live in. Thus, it is important to establish some guidance to help the reader grasp the logic that will support the theoretical argument, interpretation of the data collected and the results achieved. Therefore, we proposed a framework for analyzing SI research, which clarifies the main concepts and definitions, as well as the relationship with religion, regarding different contexts (Fig. 1). This framework allows the reader to understand that when spirituality and religion are used as synonyms, SI will be associated with confessional behaviors and practices. But when these ideas are dissociated, SI is expressed through an existentialist point of view.

This article has an important limitation. It is clear that three perspectives here analyzed are closed connected to different religions,

which is not the case when the authors refer the Western perspective. It is clear that the Judeo-Christian traditions are part of the historical, cultural, demographic, educational traditions that have coined the prevalence of Christian values and traditions in Western culture. Some of those values are the foundational concepts shaping Western morality, ethical norms, law and culture, which are deeply embedded in the cultural fabric of the Western world.

In the Western world, particularly in many European countries and North America, secularism has become a defining characteristic of governance and public life with several implications for the understanding of spirituality and spiritual intelligence: secularism, which deter religious authorities holding any political power; laicity as a bedrock of religious freedom and pluralistic society; neutrality of the State with respect to religion; and a public discourse characterized by a secular approach, with discussions about policies, ethics and societal issues framed in non-religious terms normally polarized in equality and individual freedoms regardless of religious doctrine.

It clear that although there are some countries in the Western world with more pronounced secularism and laicism, the perspective of the authors, from a clear Western-based perspective, may have given a less religion-based approach to the Western perspective, which may be considered a limitation of the study.

Despite the contribution of this work to understanding the multiple perspectives of SI, allowing its research to be more accurately interpreted, SI research faces a challenging future. For example, when SI theory is reduced to religious behavior, it is lowered to a domain. However, it is worth remembering that human intelligence is a capacity with potential for development (Zohar & Marshall, 2000). Just like rational skills, SI needs to be stimulated and given opportunities to grow. Human beings have within themselves the ability to reflect on their existence in addition to materialism or rationality. This human cognitive skill to seek meaning represents more than a domain; it is an intelligence. It represents human beings' capacity to find explanations and a

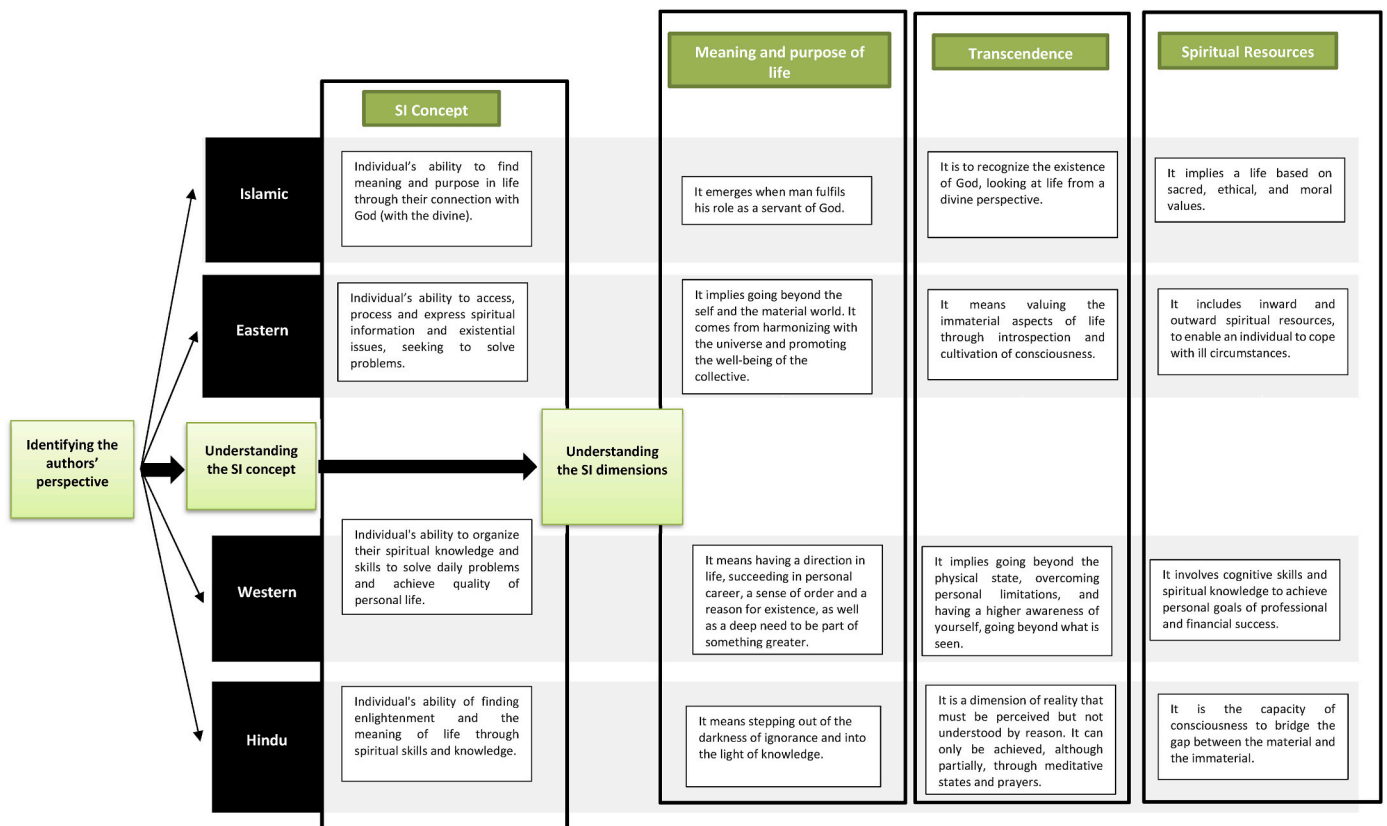


Fig. 1. Framework for analyzing SI research.

positive sense in living, in overcoming obstacles and adversities, and in looking at life itself as fruitful participants in something greater than themselves, regardless of the differences across sociocultural, religious, or geographical perspectives. SI allows human beings to reflect on their own existence using all their cognitive skills to find meaning and purpose in being alive. The presence of SI in the lives of individuals leads to the reflection that existence is not a mere chance of destiny. It reinforces the feeling that life has meaning and purpose and thus it creates an impact on life itself, on the lives of others and on their contexts.

Therefore, efforts must go in the direction of achieving the essence of SI. It is not a matter of establishing new definitions of SI but of understanding that SI is a cognitive process of thinking and endowing life with meaning and purpose, above what is dictated by each perspective or religion. With the human potential to develop the ability to look at the existential experience with a positive awareness of the meaning of life, SI can inspire research on the prevention of depressive behaviors, suicide, resilience, tolerance to stressful situations and balance in life.

In the field of organizations, research can relate to topics such as leadership, work motivation, engagement, and productivity. This is because work is a favorable field for individuals to find their purpose of life, especially with different interpretations among beliefs and religions.

#### CRedit authorship contribution statement

**Andréa Fidelis:** Conceptualization, Writing – original draft,

Methodology, Formal analysis, Investigation, Visualization. **Antônio Carrizo Moreira:** Conceptualization, Writing – review & editing, Data curation, Methodology, Formal analysis, Supervision, Funding acquisition. **Andreia Vitória:** Conceptualization, Writing – review & editing, Methodology, Formal analysis, Supervision, Funding acquisition.

#### Declaration of competing interest

Andréa Fidelis, Antônio Carrizo Moreira, and Andreia Vitória co-authors of this manuscript, certify that they have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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## Appendix 1. Quality Assessment

### Introduction

- 1 Is there a clear research question, with a solid motivation behind it?
- 2 Is the research question interesting?
- 3 After reading the introduction, did you find yourself motivated to read further?

### Theory

- 1 Does the submission contain a well-developed and articulated theoretical framework?
- 2 Are the core concepts of the submission clearly defined?
- 3 Is the logic behind the hypotheses persuasive?
- 4 Is extant literature appropriately reflected in the submission, or are critical references missing?
- 5 Do the hypotheses or propositions logically flow from the theory?

### Method

- 1 Are the sample and variables appropriate for the hypotheses?
- 2 Is the data collection method consistent with the analytical technique(s) applied?
- 3 Does the study have internal and external validity?
- 4 Are the analytical techniques appropriate for the theory and research questions, and where they applied appropriately?

### Results

- 1 Are the results reported in an understandable way?
- 2 Are there alternative explanations for the results, and if so, are these adequately controlled for in the analyses?

### Contribution

- 1 Does the submission make a value-added contribution to existing research?
- 2 Does the submission stimulate thought or debate?
- 3 Do the authors discuss the implications of the work for the scientific and practice community?

## Appendix 2. Documents Classification

Reference	Year	Objective	Method/Instrument	Country
Gardner	2000	Analysis of IS theory	Theoretical	USA
Emmons	2000	Introducing the theory	Theoretical	USA
Emmons	2000	Response to Gardner's perspective	Theoretical	USA
Halama & Strizenec	2004	SI and Existential Intelligence Review	Theoretical	Slovakia
Cowan	2005	SI in leadership contexts	Theoretical	USA
Yang & Mao	2006	SI of nurses	PSI/Quantitative	China
Adam & Hyde	2008	Theory of dreams and SI	Qualitative	United
Kwon	2008	Well-being study for Koreans sample	Theoretical	Korea
King & DeCicco	2009	SISRI scale	SISRI/Quantitative	Canada
Yang & Wu	2009	Comparing SI between China and Taiwan	PSI/Quantitative	China and Taiwan
Maryam et al.	2012	Exploring how to develop SI in students	ISIS/Qualitative	Malaysia
King, Mara & DeCicco	2012	SI and EI relationship	SISRI/Quantitative	Canada
Kaur, Sambasivan & Kumar	2013	SI, EI and Burnout model	SISRI/Quantitative	Malaysia
Karbalaei, Abdollahi, & Abdullah	2015	Waste prevention	SISRI/Quantitative	Malaysia
Anwar & Osman-Gani	2015	Citizen behaviors	SISRI/Quantitative	Malaysia
Clark, Lin & Maher	2015	Relations between SI and altruism	SISRI/Quantitative	USA
Kaur, Sambasivan & Kumar	2015	EI and SI of nurses	SISRI/Quantitative	Malaysia
Ekegren & Dåderman	2015	Leadership training	SLI/Quantitative	Sweden
Yazdi	2015	Spiritual capital of organizations	Theoretical	Iran
Mahasneh et al.	2015	SI and personality traits	SISRI/Quantitative	Jordan
Ferreira & Schulze	2016	Multireligious conviviality	Qualitative	South Africa
Malik & Tariq	2016	SI and organizational performance	ISIS/Quantitative	Pakistan
Karimi and Mehrdad	2016	SI, EI, quality of life and engagement	SISRI/Quantitative	Iran
Chan & Siu	2016	Chinese SISRI validation	SISRI/Quantitative	Hong Kong
Jorge, Esgalhado & Pereira	2016	Portuguese ISIS validation	ISIS/Quantitative	Portugal
Moafi, Gianbagheri, & Beliad	2016	Premenstrual syndrome and SI	Nasserri scale/Quantitative	Iran
Hanefar, Sa'ari & Siraj	2016	SI and Islam	Theoretical	Malaysia
Razaghi, Gazerani & Sadeghi	2017	Mental health and SI	SISRI/Quantitative	Iran
Salehi, Ali Mirzaee, & Yazdani	2017	SI and tax avoidance	SISRI/Quantitative	Iran
Feng, Xiong & Li	2017	SI scale for China	Own/Quantitative	China
Ahoei, Faramarzi &	2017	SI and well-being	SISRI/Quantitative	Iran
Karimi & Mohammadi	2020	SI and aggression	SISRI/Quantitative	Iran
Antunes, Silva & Oliveira	2017	Portuguese SISRI validation	SISRI/Quantitative	Portugal
Snelgar, Renard & Shelton	2017	SI and intrinsic motivation	SISRI/Quantitative	South Africa
Upadhyay	2017	Academic performance and SI	Own/Mixed	India
Moradi et al.	2018	SI and ethics	SISRI/Quantitative	Iran
Moafi et al.		SI and depression	SISRI/Quantitative	Iran
Munawar & Tariq	2018	SI, religiosity, and life satisfaction in elderly Muslims	ISIS/Quantitative	Pakistan
Mahmood et al.	2018	SI and HR	Theoretical	Malaysia
Tajpour & Salamzadeh	2019	SI and organizational entrepreneurship	SISRI/Quantitative	Iran
Fesharaki	2019	SI and self-efficacy in entrepreneurship	SISRI/Quantitative	Iran
Karim	2019	Quality of life and well-being	Qualitative	Iran
Simak, Fitriyani, & Setiawan	2019	SI and risky sexual practice in adolescents	SISRI/Quantitative	Indonesia
Jain & Singh	2019	organizational behaviour	SISRI/Quantitative	India
Menon & Sadasivan	2019	SI and leadership	Zohar based Mixed	India
Dami, Setiawan, Sudarmanto & Lu	2019	Mental health and SI	SISRI/Mixed	Indonesia
Sharma	2019	Life stile, EI e SI	SIS/Quantitative	India
Polemikou & Vantarakis	2019	SI and Posttraumatic stress disorder	SISRI/Quantitative	Greece
Polemikou, Zartaloudi, & Polemikou	2019	SISRI scale validation	SISRI/Quantitative	Greece
Sondakh, Osman, & Zainudin	2020	computational thinking/content validity	Quantitative	Indonesia
Arsang-Jang, Khoramirad, Pourmarzi & Raisi	2020	SI and Ethical Decision in Nurses	SISRI/Quantitative	Iran
Giannone & Kaplin	2020	SI and mental health	SISRI/Quantitative	EUA
Arnout	2020	SI and mental health	Own/Quantitative	Egypt
Canales & Huaman	2020	Own SI scale validation	Own/Mixed	Peru
Augusty & Mathew	2020	SI and knowledge society	Theoretical	India
Lotfabad, Hashemi, Sarabian, Mohammadi, & Salarhaji	2020	SI training patients with cancer	SISRI/Quantitative	IRAN
Jain & Singh	2020	work performance	SISRI/Quantitative	India
Anwar, Gani & Rahman	2020	SI and emotional intelligence	slamic scale/Quantitative	Malaysia
Vasconcelos	2020	Sistematic review	Theoretical	Brazil
Ghanizadeh & Jahedizadeh	2020	Islam pratices and SI	slamic scale/Quantitative	Malaysia
Samul	2020	Leadership training	SISRI/Quantitative	Poland
Mušinovic	2020	environments	SISRI/Mixed	Slovenia
Prabhu, Mehta, & Srivastava	2020	Leadership	Theoretical	India
Skrzypińska	2020	theoretical discuss	Theoretical	Poland

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