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The Reliability of Spiritual Intelligence Self-Report Inventory Instrument among Brunei's Teachers

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Abstract:
Spiritual intelligence (SQ) promotes better health behavior and quality of life. Those with a higher level of spirituality live longer and are happier, satisfied with their job, and live more productive lives. The nature of SQ makes it attractive for Brunei's teachers. The SQ of an individual can be measured and developed. Therefore, the quality of SQ is necessary for teachers too. This article adapts the Spiritual Intelligence Self-Report Inventory (SISRI-24) developed by King (2008) in Brunei Darussalam and examines Brunei's teachers' SQ. This study was one of the first in Brunei and secondary education. However, there exists a substantial controversy in the measurement of SQ. Hence, in this study, based on the review of various measures of SQ, it was decided to analyze the SISRI-24 developed by King (2008). The scale was initially developed and validated in Canada. A reliability study was conducted to identify whether the scale validly measures SQ in the Bruneian scenario. Supervisors and pilot studies authorized this instrument to obtain credibility among Brunei's teachers. According to the results, the overall reliability value was 0.832. In addition, the results of EFA revealed that the item communalities in the SISRI-24 ranged from 0.436 to 0.738. Based on these findings, the SISRI-24 questionnaires have high reliability. It is suitable for use among teachers in Brunei.

Keywords: spiritual intelligence, self-report inventory, Brunei's teacher, reliability.

文莱教师灵智自评量表的可靠性

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摘要:
精神智力（平方数）促进更好的健康行为和生活质量。灵性水平较高的人寿命更长、更快乐、对工作更满意、生活更富有成效。平方数的性质使其对文莱的教师具有吸引力。个人的平方数是可以测量和发展的。因此，教师的平方数素质也是必要的。本文改编自国王(2008)在文莱达鲁萨兰国开发的精神智力自我报告量表(西斯研究院-24)，并检查文莱教师的平方数。这项研究是文莱和中等教育领域的首批研究之一。然而，平方数的测量存在很大争议。因此，在本研究中，基于对平方数的各种测量的回顾，决定分析国王(2008)开发的西斯研究院-24。该量表最初是在加拿大开发和验证的。进行了一项可靠性研究，以确定该量表是否能有效测量文莱情景中的平方数。主管和试点研究授权该工具在文莱教师中获得了可信度。结果显示，总体信度值为 0.832。此外，全民教育的结果显示，西斯研究院-24 中的项目公共性范围为 0.436 至 0.738。基于这些发现，西斯研究院-24 问卷具有很高的可靠性。适合文莱教师使用。

关键词：精神智力、自我报告清单、文莱的老师、可靠性。

1. Introduction

The essential intelligence of a person is SQ. It is significant and valuable in and of itself. Everyone needs SQ, including teachers. SQ is the most fundamental and central of all intelligence to guide others. In this study, the SQ of teachers should be kept in mind that SQ is the root of all other intelligence. Besides that, SQ can assist a person in thinking maturely and adapting to varied settings and circumstances. It assists teachers in performing their responsibilities as educators. Teachers are highly valued in society. Previous studies indicate that SQ helps teachers solve global challenges by raising global consciousness (Sisk, 2008). In addition, SQ is a valuable tool in classroom disciplinary management. It proves that teachers can create a richer and more meaningful life if their SQ is high (Amram & Dryer, 2007). According to Ker-Dincer (2007), SQ also provides a sense of personal wholeness, goal, and direction. To this study, teachers with high levels of SQ can help teachers and students of all ages live a healthy, self-respecting, and creative existence.

Nevertheless, knowledge is an intangible asset processed by human intelligence, not technology (Bratianu, 2015). Human intellect may generate novel solutions, wisdom, goodness, and vision (Zohar & Marshall, 2004). SQ processes spiritual knowledge. This type of intelligence is fundamental because it serves as our guide (Covey, 2014). SQ uses spiritual aspects to enhance everyday activities, whereas spirituality is the experience of greater consciousness and transcendence. SQ is defined as:

a. The ability to use spiritual knowledge to solve problems;

b. The ability to instill a sense of sacredness in everyday activities and relationships;

c. The capacity for transcendence of the physical and material;

d. the ability to create meaning based on a deep understanding of the existential question;

e. The interconnection of all and the transcendent (Emmons, 2000b; Vaughan, 2002).

Understanding the realities of our daily work routines and changing our behaviours or organisational behaviour can be termed SQ (Bratianu, 2015). SQ motivates spiritual leadership (Bass & Riggio, 2006; Daft, 2008). Trust, motivating followers, creating a pleasant and relational climate, improving employee health, increasing productivity, lowering attrition rates, and achieving organisational goals are just a few examples (Reave, 2005). Besides that, spirituality assists leaders in inspiring others. In other words, a teacher with high SQ inspires others, especially their students. In addition, spiritual leaders foster an environment where employees have meaningful and close relationships (Aslan & Korkut, 2015). As we can see, spiritual leadership is a comprehensive vision focusing on universal ideals rather than specific traits, behaviors talents, or contextual circumstances. For example, honesty, integrity, love, compassion, and gratitude impact a leader's attributes, behaviors, attitudes, and talents (Samul, 2020a, 2020b).

The challenges in educating students affect the life and behavior of teachers as educators. Teachers feel overwhelmed and depressed when solving job satisfaction and delinquency issues. With SQ, the teacher will be more mature and effective in handling problems, have more rational context, and better understand Allah SWT's provisions. According to Vassallo (2014), teachers who work in challenging educational situations are more stressed by disruptive student behavior than teachers who work in less challenging environments. Teachers may become unable to perform their duties efficiently due to difficulties associated with inappropriate and disruptive classroom behavior. For example, they deliver quality instruction and supervision. In a previous study, instructors revealed that 76% of middle and high school educators felt better equipped to teach students if there was less-widespread bad student conduct. More than a third of teachers said they would consider leaving the profession due to severe student behavioral issues (Public Agenda, 2004). Negative student behavior in a disruptive setting may physically or emotionally impact a teacher's job satisfaction.

According to previous research, job satisfaction is the primary factor associated with teachers' decision to leave or remain in the teaching profession (Soleiman &

Fatemeh, 2012). Their personal feelings may occur due to various circumstances (Ossai, 2004; Ubom & Joshua, 2004); for example, co-worker relationships, pay, benefits, educational policies, administration, working conditions, advancement chances, job responsibilities, and recognition. Heller et al. (1993) demonstrated that nearly half of the public schools sampled in their study were dissatisfied with their professions. Teachers were most satisfied with their coworkers and least satisfied with their teaching finances. Teacher job satisfaction is positively associated with problems of school reform such as teacher professionalism, participatory decision-making, teacher growth, teacher empowerment, views of school atmosphere, and working conditions (Ma & MacMillan, 1999; Stockard & Lehman, 2004).

SQ can help teachers to be able to deal with current conflicts and pressures. Through this process, SQ can help to translate the issue into a solution that will benefit everyone (Jacob & Rajeswari, 2013). Therefore, teachers must have a high level of SQ to perform their duties with the highest regard and as noble as possible. In the context of teachers, the need for SQ is critical for a teacher as an educator. Thus, the main objective of the study was to analyze the reliability of the SISRI-24 instrument among teachers' SQ in Brunei secondary schools. It seeks to determine whether the SISRI-24 teachers' version is a valid measure of SQ in the Bruneian scenario.

There has been a growing interest in SQ and its potential impact on personal and professional growth in recent years. This interest has led to the development and use of self-report measures to assess SQ in individuals. In Brunei, there should be more research on SQ among teachers, with validated self-report measures available to assess this construct. However, this study introduced a novel instrument for SQ self-report research among Brunei teachers, which can fill this gap and contribute to a better understanding of the concept of SQ in Brunei. In this study, the development process involved a rigorous procedure that ensured the validity and reliability of the instrument. The SISRI-24 teacher version provides a locally adapted measure for assessing SQ in Brunei teachers and can contribute to the professional development of teachers and communicate policy decisions.

Also, this study can be considered a foundation for understanding and measuring SQ among Brunei's teachers. It is essential to analyze the reliability of the SISRI-24 instruments to ensure that the data collected are accurate and trustworthy. This is also because the originality of the SISRI-24 scale was initially developed and validated among students in Canada (King, 2008). Moreover, most of the scales developed in the region focus on spirituality more than SQ and rarely has such a scale been developed for teachers. For this reason, the Scale for SISRI-24 teachers' version was designed to evaluate teachers' levels of SQ in Brunei. By assessing the consistency and stability of the instrument, the researcher can ensure that external factors do not influence the results. It provides a true reflection of an individual's SQ. This study can lead to more effective interventions and strategies for personal growth and development for Brunei's teachers.

This research is beneficial for several reasons:

a. *Professional growth:* Studying SQ among Brunei secondary teachers can also benefit the teachers themselves. It offers an opportunity for self-reflection and self-awareness, allowing teachers to enhance their SQ and integrate it into their professional practice. It can foster personal growth, well-being, and resilience among teachers, positively influencing their effectiveness and job satisfaction.

b. *Contextual factors:* Brunei has unique cultural, religious, and societal characteristics. The research can consider the contextual factors influencing SQ within the Bruneian educational system by focusing on Brunei secondary teachers. This localized perspective can provide insights tailored to the needs and realities of Brunei's educational landscape.

c. *Relevance to the curriculum:* Secondary education typically involves subjects and curricula that delve into deeper philosophical, ethical, and moral dimensions. Exploring SQ among Brunei secondary teachers aligns with the relevance and integration of these aspects into the teaching and learning process. It can show how teachers incorporate spiritual values and perspectives into their instructional practices.

1.1. Objective

The study's main objective was to analyze Brunei's teachers' SQ using SISRI-24 by King (2008) and validate the scale measure of SISRI-24 in the Bruneian scenario. It seeks to validate whether Brunei's teachers have high levels of SQ and whether the SISRI-24 instrument is suitable for use in Brunei. The teacher SQ level is essential for job satisfaction to maintain their quality of life. The specific objectives involve examining the reliability of the SISRI-24 instrument among instruments in Brunei. It aimed to explore the applicability of an item using exploratory factor analysis (EFA) and Cronbach's alpha reliability coefficient instruments.

2. Literature Review

2.1. Model of Spiritual Intelligence

SQ is the awareness, management, and regulation of human energy. It is the key to personal fulfillment and good work performance. SQ practices can lead to a more satisfying, effective, and productive workplace. Hence, teachers need the SQ to improve their quality of life related to meaning, purpose, values, and community. There is an ongoing debate about whether the construct of SQ can be assessed. There are several indicators and measures of SQ. The construct of SQ can be nurtured and developed. This study used King's (2008) model of SQ. The SQ model by King (2008) approach is a theoretical framework covering all the paramount understanding central to SQ in the literature among the various views of SQ. Hence, it was decided

to analyze the SISRI-24 suitability in the Bruneian scenario. SQ can be defined in several ways, including applying the mind and body to the nonmaterial and transcendent aspects of one's existence. In the current model, SQ is defined as a set of mental capacities contributing to the awareness, integration, and adaptive application of our existence's nonmaterial and transcendental aspects. The literature review researcher has identified four essential elements of SQ, which include (1) critical existential thinking, (2) personal meaning production, (3) conscious state expansion, and (4) transcendental awareness. After discussing these essential elements, the researcher will examine the capacities of these components to support the development and adaptive applications over the lifespan.

2.1.1. Critical Existential Thinking (CET)

The first component of SQ is referred to as CET. It defines the capacity to contemplate the nature of existence, reality, the universe, space, time, death, and other existential or metaphysical issues (King, 2008). *Existential* is defined as 'having to do with existence' (Critchley, 2001). Therefore, existential thinking refers to thinking about one's existence from a fundamental view. It can be inferred that thinking about one's existence involves life and death, reality, consciousness, the universe, time, truth, justice, evil, and other similar issues. As previously established, existential thinking is prevalent in the definition of spirituality, e.g., in the studies by Koenig et al. (2000), Matheis et al. (2006), Wink and Dillon (2002). In the study by Nasel (2004), Vaughan (2002), Wolman (2001), Zohar and Marshall (2004), existential thinking is also prevalent in spiritual intelligence.

A critical existential thinking approach can be applied to various life issues as an object or event to view one's existence. According to Koenig et al. (2000), existential thinking can be regarded as one's existence. Some people may search and discuss a "quest for understanding answers" to these seemingly ultimate questions (Noble, 2000). It can more practically be considered a related pattern of behavior. It also mirrors Gardner's (1993) description of existential intelligence as "the intelligence of big questions". References to thinking and reasoning on an existential level help us infer mental capacity more readily. Critical thinking is a skill people should have to excel in their field (Chance, 1986), such as the ability to analyze facts, organize ideas, draw inferences, make comparisons, and solve problems. Recently, Scriven and Paul (1992) defined it as the intellectually disciplined process of actively and skillfully conceptualizing, analyzing, and synthesizing information gathered from or generated by observation, experience, reflection, reasoning, or communication.

Based on these definitions, critical thinking involves far more ability or skill than simply thinking. Therefore, this particular capacity is called critical existential thinking; this expression is used to denote its analytical and computational qualities fully. It should also help differentiate between individuals with thoughts or questions regarding existential issues and those who can analyze the analysis and come to conclusions. Research has typically demonstrated a significant relationship between critical thinking, mental ability, and intelligence (Clifford et al., 2004).

2.1.2. Personal Meaning Production (PMP)

The second component in the model of SQ by King (2008) is PMP. PMP is the ability to construct personal meaning and purpose in all physical and mental experiences, including the capacity to create and master a life purpose. Like existential thinking, personal meaning is also frequently noted as a component of SQ, for instance, in the study by Kiesling et al. (2006), Koenig et al. (2000), Sinnott (2002), Wink and Dillon (2002), Worthington and Sandage (2001). They require it as a consideration in a model of SQ. Nasel (2004) suggests that SQ is a process that helps people recognize the meaning of their lives. It involves considering the significance of certain personal events and circumstances to find purpose and meaning in all life experiences.

Emmons (2000a) also includes "sanctification" in his model of SQ as essentially a form of personal meaning production. Personal meaning has been defined by Reker (1997) as having a purpose, a sense of direction, and a reason for existence in life. Even if the view allows one to identify the relationship between meaning and existential thinking, there is a critical difference. For example, we have a "reason for existence". According to Reker (1997), having a "reason for existence" goes beyond simply thinking about existence. Here, we find a different and distinct mental capacity. Reker's (1997) definition concerns the relationship between meaning and purpose.

A life purpose is an essential aspect of personal meaning. Meaning is "a sense of purpose" (Critchley, 2001). A capacity to create or derive meaning must include the ability to construct purpose, as noted in the definitions above; one mentioned above may derive purpose from daily events and experiences. One may also be able to define a purpose or life. It likely involves more coherent and creative forms of meaning production. The mastery of a purpose refers to determining an individual's purpose in every situation. It is another form of meaning creation that relates directly to a predefined life purpose or definition.

2.1.3. Transcendental Awareness (TA)

The third component is TA. TA is defined as the capacity to identify transcendent dimensions of the self (e.g., a transpersonal or transcendent self), of others, and of the physical world (e.g., non-materialism, holism) during the regular, waking state of consciousness, accompanied by the capacity to identify their relationship to oneself and the physical world. At first glance, many people may dismiss the correctness of any suggested mental capacity involving the transcendental. By itself, it is necessary to examine this

word in greater detail. As stated by Critchley (2001), the transcendent is defined as "going beyond normal or physical human experience" or "existing apart from and not subject to the limitations of the material universe". Late definitions accurately reflect this capacity, as it is awareness beyond the physical or material. The word *transcendental* is a more appropriate descriptor. It is not the awareness itself as transcendent. Somewhat, it is transcendent awareness.

Transcendent aspects of life are commonplace in definitions and theories of spirituality. According to Koenig et al. (2000), spirituality is "the personal quest for understanding answers to ultimate questions about life and the relationship to the sacred or transcendent". However, King et al. (2001) contend that spirituality involves "a person's sense of a relationship or connection with a power or force in the universe that transcends the present context of reality". Likewise, Sinnott (2002) defines spirituality as "one's relation cred or transcendent".

In developing the Spiritual Orientation Inventory, they identified the transcendent dimension as one of the nine main components of spirituality (Elkins et al., 1988). Martsolf and Mickley (1998) also highlighted transcendence as an essential component of spirituality, important as the experience, awareness, and appreciation of a transcendent dimension to life beyond the self. Lukey and Barušs (2005) found that transcendent beliefs are associated with greater intelligence, suggesting a potential intellectual component underlying transcendence. It may be beneficial to review what the term *transcendent dimension* means. The current model refers to any aspect of reality beyond the physical. Regarding transcendent aspects of individuals, it should be clear that the transcendent or transpersonal self is the best example.

2.1.4. Conscious State Expansion (CSE)

The fourth component of SQ is the CSE. It is defined as the ability to enter and exit higher or spiritual states of consciousness at one's discretion, e.g., pure consciousness, cosmic consciousness, unity, oneness, deep contemplation, meditation, and prayer. To begin with, CSE is important to understand what the term consciousness means and the state of consciousness. From a very general perspective, consciousness is defined as "one's awareness of something" or "the state of being aware of and responding to one's surroundings" (Critchley, 2001).

However, consciousness is far more complex from a psychological viewpoint. Solso et al. (2005) stated that consciousness is the awareness of environmental and cognitive events, such as the sights and sounds of the world and one's memories, thoughts, feelings, and bodily sensations. However, Tart (1975) differentiates between awareness and consciousness. He contends that awareness is the basic knowledge that something is happening, perceiving, feeling, or cognizing in its simplest form. Besides that, consciousness refers to awareness in a much more complex way. Consciousness is awareness as modulated by the structure of the mind. The dissimilarity between TA and CSE is well supported by psychology. Even so, the two capacities would interrelate with experiences of higher states of consciousness. It still contributes to one's TA.

A state of consciousness can be defined as a unique configuration or system of psychological structures or subsystems (Tart, 1975). The term essentially describes the various organizations of human consciousness, some of which, like the sleeping and dreaming states, are well documented and seen as part of the average human experience (Solso et al., 2005; Tart, 1975; Vaitl et al., 2005). These states have often described the levels of consciousness to specify the amount of awareness, including self-awareness, environmental awareness, spiritual awareness, or some combination of these and arousal involved. For example, the sleeping and dreaming states of consciousness would be considered lower than the ordinary waking state, as one's field of awareness is narrowed (Vaitl et al., 2005). Lucid dreaming is viewed as a slightly higher consciousness than dreaming (Tart, 1975). However, Gackenbach (1987) argues that lucid dreaming is a starting point or perhaps only a bridge to what has been called higher states of consciousness.

3. Methodology

3.1. Research Design

A quantitative approach was applied in this study.

3.2. Sample

This study's target population was secondary school teachers in Brunei. The respondents' age range was 25-59. This study used stratified random sampling procedures. All 116 Brunei's teachers in secondary schools participated. The study used a questionnaire to collect the data. As a result, 23.5% were male and 76.5% were female participants.

3.3. Sample Selection Criteria

In selecting Brunei's teachers as participants for the SISRI-24, several criteria were considered in this research:

1) *The targeted population:* This study focuses on Brunei secondary school teachers. Brunei's secondary teachers represent a specific subset of the teaching population. Focusing on this group allows for a more targeted examination of SQ in the context of secondary education. Secondary teachers play a crucial role in shaping their students' academic, social, and emotional development. Investigating the SQ of Brunei secondary teachers can provide insights into how their SQ impacts their interactions with students, classroom management, and the overall learning environment. This knowledge can contribute to the promotion of holistic education and the well-being of students;

2) *Willingness to participate:* This study seeks teachers willing to participate voluntarily. Participants

should be genuinely interested in the research topic and motivated to provide accurate and meaningful responses to the SISRI-24 teacher version;

3) *Teaching experience:* This study considers the range of teaching experience among Brunei's teachers as two years above. Including teachers with varying experience levels can be beneficial. Teachers with more than two years of teaching experience have gained significant professional expertise and knowledge. By including these experienced teachers in the study, their perspectives on SQ can provide valuable insights based on their teaching experiences;

4) *Informed consent:* This research provided Brunei's teachers with clear information about the study's purpose, procedures, potential risks, and benefits. Participants can ask questions and make informed decisions about their involvement in the research;

5) *Confidentiality and privacy*: This study includes safeguarding their personal information and ensuring that the data collected is used only for research. This study addresses data privacy and protection concerns to encourage trust and openness among the participating teachers.

Considering these selection criteria, researchers can ensure a diverse and representative sample of Brunei's teachers for the SISRI-24 teacher version. This study contributes to the robustness and generalizability of the SQ findings among Brunei's teachers. By selecting Brunei secondary teachers to participate in the SISRI-24 teacher version, researchers can gain a deeper understanding of the role of SQ within the secondary education context, inform educational practices, and support the personal and professional development of teachers in Brunei.

3.4. Instrument

David King developed this questionnaire for the spiritual intelligence model (King, 2008; King & DeCicco, 2009). King (2008) carried out the reliability and validation of the questionnaire from the original item of the 84-item questionnaire, which was reduced to 24 items of study on 305 university students consisting of 231 females and 74 males and obtained an alpha of 0.92. This study used the SISRI-24 instrument by King (2008). It is designed to measure various behaviours, thinking processes, and mental characteristics. The SISRI-24 will examine teachers' SQ levels in Brunei. King's (2008) SISRI-24 questionnaire has four components. Table 1 shows the items and construction of the instrument.

Table 1. Items and components of the SISRI-24 questionnaire (Developed by the authors)

Components	Positive Item Number	Negative Item Number
Critical Existential Thinking (CET)	1, 3, 5, 9, 13, 17, 21	-
Transcendental Awareness (TA)	2, 10, 14, 18, 20, 22	6*
Personal Meaning Production (PMP)	7, 11, 15, 19, 23	-
Conscious State Expansion (CSE)	4, 8, 12, 16, 24	-

Higher scores represent higher levels of spiritual intelligence and each capacity (King, 2008). Thus, the SISRI-24 was applied in this study to measure SQ teachers in Brunei with its subscales: CET, TA, PMP, and CES. Table 2 shows a person's spiritual intelligence level according to the score obtained from the Spiritual Intelligence Self-Report Inventory (SISRI-24) by King (2008).

Table 2. Score levels of a person's spiritual intelligence according to the SISRI-24 instrument by King (2008) (Developed by the authors)

Score	Person's Spiritual Intelligence Level
65 to 96	High
40 to 64	Moderate
0 to 32	Low

The SISRI-24 questionnaire by King (2008) has 24 items. It uses a Likert scale consisting of five possible responses. Table 3 shows the Likert-scale SISRI-24.

Table 3. The Likert-scale SISRI-24 by King (2008) (Developed by the authors)

Point Scales	Description
0	Not at all true of myself
1	Not true of myself
2	Slightly true of myself
3	Very true of myself
4	Mostly true of myself

3.5. Data Collection

The SISRI-24 was used to collect the data for this study. All 116 teacher educators were given the SISRI-24 and were asked to respond to all 24 items.

3.6. Data Analysis

3.6.1. Using Exploratory Factor Analysis

EFA was completed using varimax rotation and principal component analysis to determine the construct validity of the instrument of SISRI-24 by King (2008) among Brunei's teachers. After testing the construct validity of the SISRI-24 using EFA, the reliability of the scale's overall scores was calculated using Cronbach's alpha of internal consistency. In addition, it was conducted to reveal that the instrument SISRI-24 can be adopted in Brunei Darussalam among teachers.

3.6.2. Using the Cronbach Alpha

The validity, reliability, and statistical characteristics of the SISRI-24 were evaluated. Cronbach's alpha was used to determine the consistency of the subscales and priori scales. All data were analyzed using the Statistical Package for the Social Sciences and Personal Computer Version (SPSS/PC+). Appropriate statistical procedures for description and inference were used. The alpha level was set at .05. All reliability indices were interpreted using Konting's (1993) and Pallant's (2001) descriptors. Konting (1993) stated that a reliability index above .60 could be accepted. Similarly, Pallant (2001) stated that a reliability index above .50 is good. The instrument's reliability refers to its stability and consistency (Creswell, 2010). The reliability level of the instrument is represented by Cronbach's alpha (Creswell, 2010). Pallant (2001) states that Cronbach's alpha value above 0.6 is considered high reliability and an acceptable index.

3.7. Pilot Study

This pilot study aimed to test the reliability and validity of the SISRI-24 instrument on Brunei's teachers. It assesses the respondents' knowledge of the items in the SISRI-24 questionnaire. Through the pilot study, we identified the weaknesses in the instrument. One of the steps in data reliability is to verify the forms by the supervisor. The validity of qualitative data is ensured by supervisors' and research partners' control of the regularity of the studies conducted (Nunnally & Bernstein, 1994). After the supervisor verified the question inventory, the researchers conducted a pilot study. The study improves the instrument, so it does not affect its results. Through the pilot studies, the researchers and the respondents could indirectly identify the items in the instrument using the same reference frameworks. A pilot study was conducted on 116 Brunei's secondary school teachers.

Reliability is critical in determining an instrument's stability and internal consistency. Face validity and pilot studies must be conducted to obtain the instrument reliability value. After receiving good feedback from related experts regarding the instrument's validity, a pilot test is conducted to determine the instrument's reliability. The pilot test was conducted by determining 116 respondents. The respondents had to answer all the questions. The time taken by the respondents to answer the whole questionnaire was recorded.

The respondents had to provide feedback, marking spelling errors, grammatical clarity, vague sentences, and any related suggestions about the instrument. To improve and enhance the quality of the instrument, the completed questionnaires were analyzed using the data in the latest version of SPSS software. The Cronbach alpha was calculated. If its value is below 0.60, it would mean that the instrument has low reliability and is unacceptable. The Cronbach alpha value is supposed to be within the range of 0.60-0.80. In that case, it means that the Cronbach alpha value is moderate and acceptable. If it is above 0.80-1.00, it is excellent. This study found that the overall Cronbach alpha value exceeds 0.8 and is very high and acceptable. Table 4 shows the reliability value of Cronbach's alpha for each construct.

Table 4. The SISRI-24 reliability in psychometrics among Brunei's teachers (Developed by the authors)

The SISRI-24 Components (King, 2008)	**The Original SISRI-24 Reliability Value (Cronbach's Alpha)**	**The SISRI-24 Pilot Study Reliability Value (Cronbach's Alpha)**
Critical Existential Thinking (CET)	0.780	0.816
Transcendental Awareness (TA)	0.870	0.783
Personal Meaning Production (PMP)	0.780	0.873
Conscious State Expansion (CSE)	0.910	0.855
Overall	0.920	0.832

4. Results

4.1. Exploratory Factor Analysis of the SISRI-24 Instrument

To test the construct validity of the SISRI-24 by King (2008) in the Brunei Darussalam scenario, EFA was performed using principal component analysis. Before starting the EFA, the Kaiser-Meyer-Olkin coefficient (KMO) and Barlett sphericity values were calculated to test whether the dataset was suitable for factor analysis. As a result of the analysis, KMO was calculated as 0.892, which was acceptable (> 0.70). Meanwhile, Bartlett's test of sphericity was 1465.179, which was significant ($p < 0.001$). This means that the correlations between variables are significantly different from zero. These two statistical values (the Kaiser-Meyer-Olkin measure and Bartlett's test of sphericity) provide minimal standards that should be met before conducting a factor analysis. Table 5 shows the KMO and Bartlett test.

Table 5. The SISRI-24 instrument among Brunei's teachers using the KMO and Bartlett test (Developed by the authors)

The Kaiser-Meyer-Olkin measure of sampling adequacy	0.892	
Bartlett's test of sphericity	Approx. Chi-Square	1465.179
	df	276
	Sig.	< 0.001

The Kaiser-Meyer Olkin to measure sampling adequacy (KMO) must be more than 0.70 (Lloret et al., 2017). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is a statistical value used as an index for deciding whether the sample is sufficient for performing factor analysis. Thus, Bartlett's test is significant at $p < 0.001$ (Field, 2013). In this study, Bartlett's test is the second measure of sampling

adequacy; it tests for the overall significance of all correlations among all items on the measuring instrument. As a result of the calculation, the measuring instrument was determined to be suitable for the factor. The EFA was completed using varimax, a vertical rotation method. After the analysis, the scale was seen to be gathered under four factors with eigenvalues greater than 1.00. The total variance explained by these four factors by the SISRI-24 was calculated as 59.561%. According to Beavers et al. (2019), the variance is commonly 50% in the humanities. Next is the total variance of the instrument SISRI-24 explained in EFA. Table 6 shows the output of EFA, and Figure 1 is the scree test criterion (SPSS output).

Table 6. Summary of total variance explained in EFA of the SISRI-24 instrument among Brunei's teachers (Developed by the authors)

Components	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of variance	Cum %	Total	% of variance	Cum %
1	9.756	40.651	40.651	4.897	20.405	20.405
2	1.886	7.860	48.511	4.679	19.496	39.901
3	1.542	6.426	54.937	3.365	14.022	53.922
4	1.110	4.624	59.561	1.353	5.639	59.561

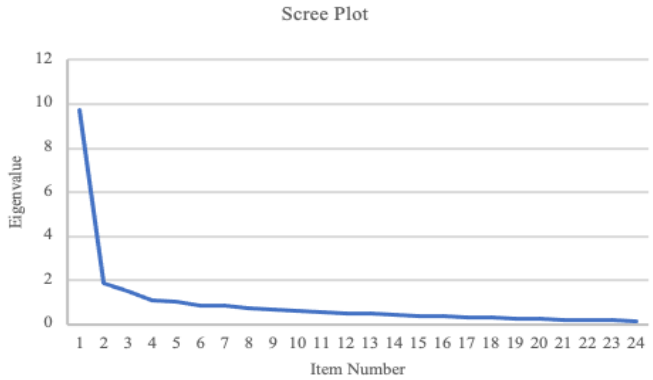

Figure 1. The scree test criterion (SPSS output) (Developed by the authors)

The study results revealed that the item communalities in the SISRI-24 ranged from 0.436 to 0.738. Costello and Osborne (2005) stated that each item's communalities must be above 0.4-0.7. Data with uniformly high communalities are considered robust.

4.2. Cronbach's Alpha of the SISRI-24 Instrument

According to the study, the findings revealed that the reliability value of the SISRI 24 instrument among Brunei secondary teachers, which measures the level of spiritual intelligence, is .832. Reliability above 0.50 is considered good and accepted (Konting, 1993; Pallant, 2001). The Cronbach alpha value between 0.6 and 0.80 is considered high reliability and an acceptable index (Nunnally & Bernstein, 1994; Pallant, 2001; Zohar & Marshall, 2004), while the Cronbach alpha value exceeding 0.80 is considered good (Zohar & Marshall, 2004). Therefore, the reliability of SISRI 24 is excellent. Table 7 shows the reliability of the components in the Spiritual Intelligence Self-Report Inventory (SISRI-24) by King (2008).

Table 7. King's (2008) SISRI-24 reliability in psychometrics among Brunei's teachers (Developed by the authors)

The SISRI-24 Components (King, 2008)	The Original SISRI-24 Reliability Value (Cronbach's Alpha)	The SISRI-24 Pilot Study Reliability Value (Cronbach's Alpha)
Critical Existential Thinking (CET)	0.780	0.816
Transcendental Awareness (TA)	0.870	0.783
Personal Meaning Production (PMP)	0.780	0.873
Conscious State Expansion (CSE)	0.910	0.855
Overall	0.920	0.832

The table above shows that the overall reliability of the SISRI-24 by King (2008) is high (a = 0.832): the critical existential thinking component (a = 0.816), discovery component of transcendental awareness (a = 0.783), the component of personal meaning production among Brunei's secondary school teachers (a = 0.873), and development component of conscious state expansion (a = 0.855). The result shows that the reliability of the SISRI-24 instrument among Brunei's secondary school teachers is high and acceptable. Cronbach's alpha value between 0.6 and 0.80 is considered high reliability and an acceptable index (Nunnally & Bernstein, 1994; Pallant, 2001; Zohar & Marshall, 2004), while the alpha exceeding 0.80 is considered good (Zohar & Marshall, 2004). This study shows that the SQ among Brunei's secondary school teachers is 0.832. Therefore, the SISRI-24 instrument by King (2008) can be used and applied in Brunei Darussalam.

5. Conclusion

In conclusion, most of the SISRI-24 items were consistent with the previous validity testing. The items from certain constructs need to be revised to avoid dimensionality issues for the teachers' context. These results would encourage further studies on exploring new items generated. One hundred twenty questionnaires were randomly distributed to Brunei's secondary school teachers, and only 116 were returned. The respondents were aged 25-59. Most respondents aged 35-39 accounted for 35.7%, 40-44 - 22.6%, 45-49 - 17.4%, 30-34 - 12.2%, 50-54 - 6.1%, 25-29 - 4.3%, and 55-59 - 1.7%. Therefore, most Brunei's secondary school teachers participating in this study were aged 30-49. This study aimed to determine the level of Brunei's

teachers' SQ and the instrument's reliability among them using the Spiritual Intelligence Self-Report Inventory (SISRI-24). The SISRI-24 has four components: CET, TA, PMP, and CSE.

Using principal component analysis and varimax rotation, EFA was conducted with 24 items. The total variance explained is also an extraction process of items to reduce them into a manageable number before further analysis. In this process, components with eigenvalues exceeding 1.0 are extracted into different components. The output reveals that the EFA has extracted four components of the SQ construct with a total variance of 59.561%. Meanwhile, the analysis shows that the SISRI-24 instrument has excellent reliability, whereas the SISRI-24 Cronbach's alpha value exceeds 0.8. Cronbach's alpha value between 0.6 and 0.80 is considered high reliability and an acceptable index (Nunnally & Bernstein, 1994; Pallant, 2001; Zohar & Marshall, 2004), while the Cronbach alpha value exceeding 0.80 is considered good (Zohar & Marshall, 2004).

The results of SQ research in Brunei's secondary school teachers highlight that SQ is also necessary for their careers and to improve their quality of life. Spiritual knowledge should be introduced to the education sector. Although emotional and rational knowledge is still crucial in education, it should also include spiritual knowledge to enhance effectiveness. According to the literature, spirituality can help an organization create positive work atmosphere and improve performance. It can also affect positive emotions.

Education often emphasizes the importance of profit-making and self-interest in building a competitive advantage. However, the organizational environment's chaotic, unpredictable, and dynamic conditions necessitate adjustments in the education sector. SQ must be introduced in education organizations. Thus, SQ theory is worth further developing and introducing into the education sector, especially to teachers and students. It significantly improves the quality of life, job satisfaction, and organization of education.

This research also contributes to a potential impact on academics. To sum up, the Teacher Spiritual Intelligence Self-Report Inventory, consisting of 24 items (SISRI-24) is a novel instrument for SQ self-report research among Brunei's teachers, and the author leads it. The development of the SISRI-24 has several potential implications for assessing SQ in Brunei's teachers. First, it provides a locally adapted tool that measures SQ, which can be used to evaluate the level of SQ among teachers. Second, the inventory can be used for professional development and training programs for teachers to improve their SQ skills. Third, it can be used for research to provide insights into the role of SQ in teaching and learning processes and inform policy decisions. This study hoped that the SISRI-24 would be widely implemented and evaluated to further contribute to understanding SQ in Brunei and beyond.

6. Limitations

6.1. Generalizability

The study findings are specific to Brunei's context and not easily generalizable to other regions or countries. This is because the cultural, societal, and educational factors are unique to Brunei. It influences the understanding and expression of SQ among Brunei secondary school teachers. The results of this study only benefit secondary school teachers. For future research, this study recommended considering the educational levels of the Brunei's teachers. It is advisable to involve teachers from all levels, such as primary, secondary, and higher education instructors, to gain a broader understanding of SQ in different teaching contexts.

6.2. Sample Size and Representation

The study limitations include the sample size and representativeness, which may restrict the generalizability of the findings. In this study, a sample size of 116 respondents participated voluntarily. It is considered a moderate sample size, but it is still sufficient to conduct statistical analyses and provide some insights into the reliability of the inventory. However, further empirical studies at a larger scale are needed to define SQ, develop a more valid SQ instrument, and understand SQ development among Brunei's teachers. It is crucial to note that if the sample is not diverse and representative of Brunei teachers from all levels, it may introduce biases and limit the scope of the study's conclusions. The adequacy of the sample size depends on various factors, including the research design, desired precision level, effect sizes, and analysis complexity. A sample size of 116 may be adequate in some cases but limited in others, especially if subgroup or complex statistical analyses are planned. Therefore, to increase the generalizability of the findings, the sample represents the population of interest. In this study, secondary school teachers in Brunei are crucial.

6.3. Self-Report

The SISRI-24 teacher version relies on self-reported responses from participants. The participants' subjective responses influenced reliability estimates. They responded what they believed, expected, or desired rather than reflecting on their experiences or perceptions of SQ. As recommendations for future research, this study suggests that other researchers focus on several areas to enhance the understanding and application of the instrument: comparative studies to explore the differences and similarities in SQ, longitudinal studies to examine the stability and developmental aspects of SQ over time, multimethod approaches by combining self-report measures with other methods to capture different dimensions of SQ, intervention studies by implementing interventions and assessing their effectiveness in enhancing, provide practical insights for teacher professional development

programs, and promote the holistic growth of teachers.

7. Implications

7.1. Instrument Selection and Adaptation

The research provides valuable insights into the suitability and reliability of the SISRI-24 for measuring SQ among Brunei's teachers. According to the results, the overall reliability value was 0.832, and EFA revealed that the item of the SISRI-24 Brunei's teacher version ranged from 0.436 to 0.738. Based on these findings, the SISRI-24 Brunei's teacher version has high reliability. The instrument proves reliable and can be used to assess and understand the SQ of Brunei's teachers. The SISRI-24 instrument is a limitation, and the research can guide future instrument selection or adaptation efforts to develop a more culturally appropriate and reliable measure of SQ.

7.2. Educational Policies and Practices

Understanding the SISRI-24 teacher's version reliability can inform about educational policies and procedures in Brunei. The research shows that the instrument is reliable and effective in measuring SQ among teachers and can encourage the integration of SQ assessments into teacher training programs, professional development initiatives, and performance evaluations. This study can contribute to a more holistic approach to education that recognizes and supports the spiritual well-being of teachers and, by extension, their students.

7.3. Teacher Development and Support

The research findings guide efforts to enhance teacher development and support in Brunei. Reliable measures of SQ can assist in identifying teachers who may benefit from additional training, mentoring, or assistance in areas related to spiritual well-being. This study can contribute to teachers' overall well-being, job satisfaction, and effectiveness, ultimately positively impacting student outcomes.

7.4. Research on SQ

Research on the instrument reliability can contribute to a broader body of knowledge on SQ. By examining the psychometric properties of the SISRI-24 among Brunei's teachers, the research can provide insights into the unique manifestations of SQ within the local cultural and educational context. This study can stimulate further research on SQ and its impact on teaching and learning processes in Brunei and beyond.

7.5. Cross-Cultural Understanding

The research compares the instrument reliability across different cultural contexts. It enhances cross-cultural understanding of SQ. By examining potential variations or similarities in reliability estimates between Brunei and other regions, this research contributes to understanding how cultural factors influence the measurement and interpretation of SQ. These findings promote cultural sensitivity and inform future research on SQ in diverse contexts.

7.6. Methodological Advancements

This research contributes to methodological improvements in the measurement of SQ. By examining the reliability of the SISRI-24 version, researchers gain insights into the strengths and limitations of self-report inventories for assessing SQ. This leads to refinements in measurement techniques, more robust instruments, and the integration of multiple assessment methods to capture the multidimensional nature of SQ more accurately.

References

[1] AMRAM, Y., & DRYER, C. (2007). *The development and preliminary validation of the Integrated Spiritual Intelligence Scale (ISIS).* Palo Alto, California: Institute of Transpersonal Psychology.

[2] ASLAN, M., & KORKUT, A. (2015). Spiritual Leadership in Primary Schools in Turkey. *Journal Education and Social Research,* 5(2), 123–136. http://dx.doi.org/10.5901/jesr.2015.v5n2p123

[3] BASS, B.M., & RIGGIO, R.E. (2006). *Transformational leadership*. 2nd ed. London: Lawrence Erlbaum Associates.

[4] BEAVERS, A.S., LOUNSBURY, J.W., RICHARDS, J.K., HUCK, S.W., SKOLITS, G.J., & ESQUIVEL, S.L. (2019). Practical Considerations for Using Exploratory Factor Analysis in Educational Research. *Practical Assessment, Research, and Evaluation,* 18, 6. https://doi.org/10.7275/qv2q-rk76

[5] BRATIANU, C. (2015). *Organizational Knowledge Dynamics: Managing Knowledge Creation, Acquisition, Sharing, and Transformation.* Hershey, Pennsylvania: IGI Global. https://doi.org/10.4018/978-1-4666-8318-1

[6] CHANCE, P. (1986). *Thinking in the classroom: A survey of programs.* New York: Teacher's College Press, Columbia University.

[7] CLIFFORD, J.S., BOUFAL, M.M., & KURTZ, J.E. (2004). Personality traits and critical thinking skills in college students: Empirical tests of a two-factor theory. *Assessment,* 11(2), 169–176. https://doi.org/10.1177/1073191104263250

[8] COSTELLO, A.B., & OSBORNE, J.W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation,* 10, 7. https://doi.org/10.7275/jyj1-4868

[9] COVEY, S.R. (2014). *The 8th Habit: From Effectiveness to Greatness.* New York: Free Press.

[10] CRESWELL, J.W. (2010). *Projeto de pesquisa: método qualitativo, quantitativo e misto.* 3rd ed. Porto Alegre: Artmed.

[11] CRITCHLEY, S. (2001). *Continental Philosophy: A Very Short Introduction.* New York: Oxford University Press.

[12] DAFT, R.L. (2008). *The leadership experience*. 4th ed. London: Thomson South-Western.

[13] ELKINS, D.N., HEDSTROM, L.J., HUGHES, L.L., LEAF, J.A., & SAUNDERS, C. (1988). Toward a humanistic-phenomenological spirituality: Definition, description, and measurement. *Journal of Humanistic Psychology*, 28(4), 5–18. https://doi.org/10.1177/0022167888284002

[14] EMMONS, R. (2000a). Is spirituality an intelligence? Motivation, cognition, and the psychology of the ultimate concern. *International Journal for the Psychology of Religion*, 10(1), 3–26. http://dx.doi.org/10.1207/S15327582IJPR1001_2

[15] EMMONS, R. (2000b). Spirituality and intelligence: Problems and prospects. *International Journal for the Psychology of Religion*, 10(1), 57–64. https://doi.org/10.1207/S15327582IJPR1001_6

[16] FIELD, A. (2013). *Discovering Statistics Using IBM SPSS Statistics.* 4th ed. London: SAGE Publications.

[17] GACKENBACH, J. (1987). Concerns with Lucidity Essay: Clinical and Transpersonal Concerns with Lucid Dreaming Voiced. *Lucidity Letter*, 6(2), 1-4. Retrieved from https://journals.macewan.ca/lucidity/article/view/760

[18] GARDNER, H. (1993). *Multiple intelligences: The theory in practice.* New York: Basic Books.

[19] HELLER, H., CLAY, R., & PERKINS, C. (1993). The relationship between teacher job satisfaction and principal leadership style. *Journal of School Leadership*, 3(1), 74–86. https://doi.org/10.1177/105268469300300108

[20] JACOB, J., & RAJESWARI, V. (2013). Role of spiritual intelligence in families: A study among spouses. *International Journal of Movement Social and Behavioral Sciences*, 2(4), 63-76.

[21] KER-DINCER, M. (2007). Educators' role as spiritually intelligent leaders in educational institutions. *Journal of Human Sciences*, 4(1), 1-22. Retrieved from https://www.j-humansciences.com/ojs/index.php/IJHS/article/view/47

[22] KIESLING, C., SORELL, G.T., MONTGOMERY, M.J., & COLWELL, R.K. (2006). Identity and spirituality: A psychosocial exploration of the sense of spiritual self. *Developmental Psychology*, 42(6), 1269-1277.

[23] KING, D.B. (2008). *Rethinking Claims of Spiritual Intelligence: A Definition, Model, and Measure*. Master's thesis, Trent University.

[24] KING, D.B., & DECICCO, T.L. (2009). A viable model and self-report measure of spiritual intelligence. *International Journal of Transpersonal Studies*, 28(1), 68–85. http://dx.doi.org/10.24972/ijts.2009.28.1.68

[25] KING, M., SPECK, P., & THOMAS, A. (2001). The royal free interview for spiritual and religious beliefs: Development and validation of a self-report version. *Psychological Medicine*, 31, 1015-1023. https://doi.org/10.1017/s0033291701004160

[26] KOENIG, H.G., MCCULLOUGH, M.E., & LARSON, D.B. (2000). *Handbook of religion and health.* New York: Oxford University Press.

[27] KONTING, M.M. (1993). *Kaedah Penyelidikan Pendidikan.* Kuala Lumpur: Dewan Bahasa dan Pustaka.

[28] LLORET, S., FERRERES, A., HERNÁNDEZ, A., & TOMÁS, I. (2017). The exploratory factor analysis of items: guided analysis based on empirical data and software. *Anales de Psicologia*, 33(2), 417–432. https://doi.org/10.6018/analesps.33.2.270211

[29] LUKEY, N., & BARUŠS, I. (2005). Intelligence correlates of transcendent beliefs: A preliminary study. *Imagination, Cognition and Personality*, 24(3), 259–270. http://dx.doi.org/10.2190/5H80-2PCY-02YB-F7HN

[30] MA, X., & MACMILLAN, B. (1999). Influence of workplace conditions on teachers' job satisfaction. *The Journal of Educational Research*, 93, 39–47. https://doi.org/10.1080/00220679909597627

[31] MARTSOLF, D.S., & MICKLEY, J.R. (1998). The Concept of Spirituality in Nursing Theories: Differing World-Views and Extent of Focus. *Journal of Advanced Nursing*, 27, 294-303. http://dx.doi.org/10.1046/j.1365-2648.1998.00519.x

[32] MATHEIS, E.N., TULSKY, D.S., & MATHEIS, R.J. (2006). The Relation between Spirituality and Quality of Life Among Individuals with Spinal Cord Injury. *Rehabilitation Psychology*, 51(3), 265–271. http://dx.doi.org/10.1037/0090-5550.51.3.265

[33] NASEL, D.D. (2004). *Spiritual orientation in relation to spiritual Intelligence: A consideration of traditional Christianity and new age/individualistic spirituality.* Ph.D. thesis, University of South Australia.

[34] NOBLE, K.D. (2000). Spiritual intelligence: A new frame of mind. *Spirituality and Giftedness*, 9, 1-29.

[35] NUNNALLY, J.C., & BERNSTEIN, I.H. (1994). The Assessment of Reliability. *Psychometric Theory*, 3, 248-292.

[36] OSSAI, G. (2004). *Principals and teachers' strategies for motivating teachers in secondary schools in Delta North Senatorial Districts.* Doctoral dissertation, Delta State University.

[37] PALLANT, J. (2001). *SPSS Survival Manual.* Buckingham/Philadelphia, Pennsylvania: Open University Press.

[38] PUBLIC AGENDA. (2004). *Teaching interrupted: Do discipline policies in today's public schools foster the common good?* New York: Author.

[39] REAVE, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly*, 16, 655–687. http://dx.doi.org/10.1016/j.leaqua.2005.07.003

[40] REKER, G.T. (1997). The purpose-in-life test in an inmate population: An empirical investigation. *Journal of Clinical Psychology*, 33, 588-693. https://doi.org/10.1002/1097-4679(197707)33:3%3C688::aid-jclp2270330316%3E3.0.co;2-f

[41] SAMUL, J. (2020a). Emotional and Spiritual Intelligence of Future Leaders: Challenges for Education. *Education Sciences*, 10(7), 178. https://doi.org/10.3390/educsci10070178

[42] SAMUL, J. (2020b). Spiritual leadership: meaning in the sustainable workplace. *Sustainability*, 12(1), 267. https://doi.org/10.3390/su12010267

[43] SCRIVEN, M., & PAUL, R. (1992). Critical thinking defined. Proceedings of the Critical Thinking Conference, Atlanta, Georgia.

[44] SINNOTT, J.D. (2002). Introduction: Special Issue on Spirituality and Adult Development, Part I. *Journal of Adult Development*, 8, 199–200. https://doi.org/10.1023/A:1011353527010

[45] SISK, D. (2008). Engaging the spiritual intelligence of gifted students to build global awareness in the classroom. *Roeper Review*, 30(1), 24–30. http://dx.doi.org/10.1080/02783190701836296

[46] SOLEIMAN, Y.J., & FATEMEH, L.G. (2012). What Is the Relationship between Spiritual Intelligence and Job Satisfaction among MA and BA Teachers? *International Journal of Business and Social Science*, 3(8), 299-303. Retrieved from https://www.ijbssnet.com/journal/index/1214

[47] SOLSO, R.L., MACLIN, M.K., & MACLIN, O.H. (2005). *Cognitive psychology*. 7th ed. Boston, Massachusetts: Allyn and Bacon.

[48] STOCKARD, J., & LEHMAN, M.B. (2004). Influences on the satisfaction and retention of 1st-year teachers: The importance of effective school management. *Educational Administration Quarterly*, 40(5), 742–771. https://doi.org/10.1177/0013161X04268844

[49] TART, C. (1975). *States of consciousness.* New York: E. P. Dutton.

[50] UBOM, I.U., & JOSHUA, M.T. (2004). Needs satisfaction variables as predictors of employees' job satisfaction: Implication for guidance and counselling. *Educational Research Journal*, 4(3).

[51] VAITL, D., GRUZELIER, J., JAMIESON, G.A., LEHMANN, D., OTT, U., SAMMER, G., STREHL, U., BIRBAUMER, N., KOTCHOUBEY, B., KÜBLER, A., MILTNER, W.H.R., PÜTZ, P., STRAUCH, I., WACKERMANN, J., & WEISS, T. (2005). Psychobiology of Altered States of Consciousness. *Psychological Bulletin*, 131(1), 98-127. http://dx.doi.org/10.1037/0033-2909.131.1.98

[52] VASSALLO, B. (2014). What makes them still tick? A study of job (dis) satisfaction among long serving teachers in Malta. *The Online Journal of New Horizons in Education*, 4(1), 97-116. Retrieved from https://tojned.net/journals/tojned/articles/v04i01/v04i01-10.pdf

[53] VAUGHAN, F. (2002). What is spiritual intelligence? *Journal of Humanist Psychology*, 42(2), 16–33. http://dx.doi.org/10.1177/0022167802422003

[54] WINK, P., & DILLON, M. (2002). Spiritual development across the adult life course: Findings from a longitudinal study. *Journal of Adult Development*, 9, 79–94. http://dx.doi.org/10.1023/A:1013833419122

[55] WOLMAN, R.N. (2001). Thinking with your soul: Spiritual intelligence and why it matters. New York: Harmony Books.

[56] WORTHINGTON, E.L., & SANDAGE, S.J. (2001). Religion and spirituality. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 473-478. https://doi.org/10.1037/0033-3204.38.4.473

[57] ZOHAR, D., & MARSHALL, I. (2004). *Spiritual capital: Wealth we can live by.* San Francisco, California: Berrett-Koehler Publishers.

参考文:

[1] AMRAM, Y. 和 DRYER, C. (2007)。综合精神智力量表（伊斯兰国）的开发和初步验证。加利福尼亚州帕洛阿尔托：超个人心理学研究所。

[2] 阿斯兰，M.，＆科尔库特，A.（2015）。土耳其小学的精神领导力。教育与社会研究期刊，5(2)，123–136。http://dx.doi.org/10.5901/jesr.2015.v5n2p123

[3] BASS, B.M., & RIGGIO, R.E. （2006）。变革型领导。第二版。伦敦：劳伦斯·埃尔鲍姆联合公司。

[4] BEAVERS, A.S. 、 LOUNSBURY, J.W. 、 RICHARDS, J.K.、HUCK, S.W.、SKOLITS, G.J. 和 ESQUIVEL, S.L.（2019）。在教育研究中使用探索性因素分析的实际考虑。实践评估、研究和评估，18, 6。https://doi.org/10.7275/qv2q-rk76

[5] 布拉蒂亚努，C.（2015）。组织知识动态：管理知识创造、获取、共享和转换。宾夕法尼亚州好时：伊吉全球。https://doi.org/10.4018/978-1-4666-8318-1

[6] 钱斯，P.（1986）。课堂思考：项目调查。纽约：哥伦比亚大学师范学院出版社。

[7] 克利福德，J.S.，布法尔，M.M.，＆库尔茨，J.E.（2004）。大学生的人格特质和批判性思维能力：二因素理论的实证检验。评估，11(2)，169–176。https://doi.org/10.1177/1073191104263250

[8] 科斯特洛，A.B.，＆奥斯本，J.W.（2005）。探索性因子分析的最佳实践：从分析中获得最大收益的四个建议。实践评估、研究和评估，10, 7。https://doi.org/10.7275/jyj1-4868

[9] 科维，S.R.（2014）。第八个习惯：从高效到卓

越。纽约：新闻自由。
[10] 克雷斯威尔，J.W.（2010）。调查项目：定性方法、定量方法和方法。第三版。阿雷格里港：阿特梅德。
[11] 克里奇利，S. (2001)。大陆哲学：非常简短的介绍。纽约：牛津大学出版社。
[12]DAFT，R.L.（2008）。领导经验。第四版。伦敦：汤姆森西南航空。
[13] 埃尔金斯，D.N.，赫德斯特罗姆，L.J.，休斯，L.L.，利夫，J.A.，&桑德斯，C.（1988）。迈向人文现象学灵性：定义、描述和测量。人本主义心理学杂志，28（4），5-18。https://doi.org/10.1177/0022167888284002
[14] 埃蒙斯，R. (2000a)。灵性是一种智慧吗？动机、认知、终极关怀的心理。国际宗教心理学杂志，10（1），3-26。http://dx.doi.org/10.1207/S15327582IJPR1001_2
[15] 埃蒙斯，R. (2000b)。灵性与智力：问题与前景。国际宗教心理学杂志，10（1），57-64。https://doi.org/10.1207/S15327582IJPR1001_6
[16] 菲尔德，A.（2013）。使用国际商业机器公司统计软件统计发现统计数据。第四版。伦敦：智者出版物。
[17] 加肯巴赫，J. (1987)。对清醒论文的关注：对清醒梦的临床和超个人关注。清晰信，6(2), 1-4。检索自 https://journals.macewan.ca/lucidity/article/view/760
[18] 加德纳，H.（1993）。多元智能：实践中的理论。纽约：基础书籍。
[19] 海勒 H.、克莱 R. 和帕金斯 C. (1993)。教师工作满意度与校长领导风格的关系 学校领导杂志，3(1)，74–86。https://doi.org/10.1177/105268469300300108
[20] 雅各布，J.，&拉杰斯瓦里，V.（2013）。精神智力在家庭中的作用：配偶之间的研究。国际运动社会和行为科学杂志，2(4), 63-76。
[21]KER-DINCER，M.（2007）。教育者在教育机构中作为精神智慧领导者的角色。人类科学杂志，4（1），1-22。检索自 https://www.j-humansciences.com/ojs/index.php/IJHS/article/view/47
[22] KIESLING，C.、SORELL，G.T.、MONTGOMERY，M.J. 和 COLWELL，R.K.（2006）。身份与灵性：精神自我意识的社会心理探索。发展心理学，42(6), 1269-1277。
[23] 金，D.B.（2008）。重新思考精神智力的主张：定义、模型和衡量标准。硕士论文，特伦特大学。
[24] KING, D.B., & DECICCO, T.L.（2009）。灵智的可行模型和自我报告测量。国际超个人研究杂志，28(1), 68–85。http://dx.doi.org/10.24972/ijts.2009.28.1.68
[25] KING, M.、SPECK, P. 和 THOMAS, A. (2001)。针对精神和宗教信仰的皇家免费访谈：自我报告版本的开发和验证。心理医学，31，1015-1023。https://doi.org/10.1017/s0033291701004160
[26] KOENIG，H.G.、MCCULLOUGH，M.E. 和 LARSON，D.B.（2000）。宗教与健康手册。纽约：牛津大学出版社。
[27] 康廷，M.M.（1993）。凯达· 潘耶利迪坎· 潘迪迪坎。吉隆坡：国语和普通话。
[28] LLORET, S.、FERRERES, A.、HERNÁNDEZ, A. 和 TOMÁS, I. (2017)。项目的探索性因素分析：基于经验数据和软件的引导分析。心理学分析，33(2), 417–432。https://doi.org/10.6018/analesps.33.2.270211
[29] LUKEY, N. 和 BARUŠS, I. (2005)。智力与超验信念的关联：初步研究。想象力、认知和个性，24(3)，259–270。http://dx.doi.org/10.2190/5H80-2PCY-02YB-F7HN
[30] MA, X., & MACMILLAN, B. (1999)。工作场所条件对教师工作满意度的影响。教育研究杂志，93，39-47。https://doi.org/10.1080/00220679909597627
[31] MARTSOLF, D.S. 和 MICKLEY, J.R. (1998)。护理理论中的灵性概念：不同的世界观和焦点范围。高级护理杂志，27，294-303。http://dx.doi.org/10.1046/j.1365-2648.1998.00519.x
[32] 马修斯，E.N.、图斯基，D.S.和马修斯，R.J.（2006）。脊髓损伤患者的灵性与生活质量之间的关系。康复心理学，51(3)，265–271。http://dx.doi.org/10.1037/0090-5550.51.3.265
[33] 纳塞尔，D.D.（2004）。与精神智慧相关的精神取向：对传统基督教和新时代/个人主义灵性的考虑。博士 论文，南澳大利亚大学。
[34] 诺布尔，K.D.（2000）。精神智慧：新的心态。灵性与天赋，9, 1-29。
[35] 努纳利，J.C.，和伯恩斯坦，I.H.（1994）。可靠性评估。心理测量理论，3，248-292。
[36] OSSAI，G.（2004）。三角洲北参议员区中学校长和教师激励教师的策略。博士论文，三角洲州立大学。
[37] 帕兰特，J.（2001）。统计软件生存手册。宾夕法尼亚州白金汉/费城：开放大学出版社。
[38] 公共议程。（2004）。教学中断：当今公立学校的纪律政策是否促进了共同利益？纽约：作者.
[39] 里弗，L. (2005)。与领导有效性相关的精神价值观和实践。领导季刊，16，655-687。http://dx.doi.org/10.1016/j.leaqua.2005.07.003
[40] 雷克，G.T.（1997）。囚犯群体的生活目的测试：一项实证调查。临床心理学杂志，33, 588-693。https://doi.org/10.1002/1097-4679(197707)33:3%3C688::aid-jclp2270330316%3E3.0.co;2-f

[41] 萨穆尔，J.（2020a）。未来领导者的情商和精神智力：教育的挑战。教育科学，10(7), 178。https://doi.org/10.3390/educsci10070178

[42] 萨穆尔，J.（2020b）。精神领导力：可持续工作场所的意义。可持续性，12(1), 267。https://doi.org/10.3390/su12010267

[43] SCRIVEN, M., & PAUL, R. (1992)。批判性思维的定义。批判性思维会议论文集，佐治亚州亚特兰大。

[44] 辛诺特，J.D. (2002)。简介：《灵性与成人发展》特刊，第一部分。《成人发展杂志》，8，199-200 。https://doi.org/10.1023/A:1011353527010

[45] SISK，D.（2008）。激发有天赋的学生的精神智慧，在课堂上建立全球意识。罗珀评论，30（1），24-30。http://dx.doi.org/10.1080/02783190701836296

[46] SOLEIMAN, Y.J. 和 FATEMEH, L.G.（2012）。硕士和学士教师的精神智力与工作满意度之间有什么关系？国际商业与社会科学杂志，3(8), 299-303 。检索自 https://www.ijbssnet.com/journal/index/1214

[47] SOLSO, R.L.、MACLIN, M.K. 和 MACLIN, O.H.（2005）。认知心理学。第 7 版。马萨诸塞州波士顿：艾林和培根。

[48] 斯托卡德，J.，和雷曼，M.B.（2004）。对一年级教师满意度和保留率的影响：有效学校管理的重要性。教育管理季刊，40(5)，742–771。https://doi.org/10.1177/0013161X04268844

[49]塔特，C.（1975）。意识状态。纽约：E.P.达顿.

[50] UBOM，I.U.和约书亚，M.T.（2004）。需要满意度变量作为员工工作满意度的预测因子：对指导和咨询的影响。教育研究杂志，4(3)。

[51] VAITL, D.、GRUZELIER, J.、JAMIESON, G.A.、LEHMANN, D.、OTT, U.、SAMMER, G.、STREHL, U.、BIRBAUMER, N.、KOTCHOUBEY, B.、KÜBLER, A ., MILTNER, W.H.R., PÜTZ, P., STRAUCH, I., WACKERMANN, J., & WEISS, T. (2005)。意识状态改变的心理生物学。心理通报，131(1), 98-127。http://dx.doi.org/10.1037/0033-2909.131.1.98

[52]瓦萨洛，B.（2014）。是什么让它们仍然存在？对马耳他长期任职教师的工作满意度的研究。教育新视野在线杂志，4(1), 97-116。摘自 https://tojned.net/journals/tojned/articles/v04i01/v04i01-10.pdf

[53] 沃恩，F. (2002)。什么是灵性智慧？人本主义心理学杂志，42（2），16-33。http://dx.doi.org/10.1177/0022167802422003

[54] WINK, P., & DILLON, M. (2002)。成人生命历程中的精神发展：纵向研究的结果。成人发展杂志，9，79-94。http://dx.doi.org/10.1023/A:1013833419122

[55] 沃尔曼，R.N.（2001）。用你的灵魂思考：精神智慧及其重要性。纽约：和谐图书。

[56] 沃辛顿，E.L.和桑德奇，S.J.（2001）。宗教和灵性。心理治疗：理论、研究、实践、培训，38(4), 473-478 。https://doi.org/10.1037/0033-3204.38.4.473

[57] ZOHAR, D. 和马歇尔, I. (2004)。精神资本：我们赖以生存的财富。加利福尼亚州旧金山：贝雷特-克勒出版社。