

Integrating Spiritual Intelligence into Traditional Bone-Setting Practices: Innovations In Holistic Healing And Well-Being

Mafeng Yakubu Vwei Pwol

Department of Religion and
Philosophy
University of Jos
Jos Nigeria
mafengpwol@gmail.com

Umar H. D. Danfulani

Department of Religion and Philosophy University of Jos Jos Nigeria dademu@unijos.edu.ng

Chentu Dauda Nguvugher

Department of Religion and Philosophy University of Jos Jos Nigeria nguvugherc@unijos.edu.ng

ABSTRACT

This research focuses on examining the SI of TBPs using King and DeCicco's SI theoretical framework with a view of integrating traditional practices with modern health technology. The study aimed to determine if SI exists among TBPs how it is incorporated into its bone-setting techniques and the possible integration into contemporary healthcare delivery systems. An Ethnography study that employs qualitative methods design. The findings indicate that the adoption of SI components such as CET PMP TA, and CSE by TBPs is evident in their practices. These components of SI found in TBPs, prove the utility of these practices in treating physical but also emotional and spiritual conditions. In light of these results, the discussion provides SI interpretation using the SI model to support the rationale that SI optimises TBPs' efficiency. The study advocates the possibility of integrating SI in both conventional and advanced models of healthcare bone treatment and analysing the need for new policies and training that incorporate SI approaches.

KEYWORDS: Spiritual Intelligence, Bone-setting, Traditional Healing, Healthcare, Innovations, and Technopreneurship.

INTRODUCTION

Traditional bone-setter practitioners (TBPs) are significant sources of healthcare services in many societies especially in developing countries including Nigeria where there are limited modern or conventional health facilities like in other parts of the world. This method of Traditional bone-setting has evolved for many years and has shown how it can be efficient in dealing with musculoskeletal disorders regardless of the culture (Kumma et al., 2013; Aderibigbe, Agaja, and Bamidele, 2013; Onuminya, 2004; Sina et al., 2015).

First of all, as Fowler himself made of the concept of 'faith' before he came up with what he has called SI in his work Stages of Faith (1995) he uses the term 'faith' in the same way as others utilise SI (Smith 15). The expansion of this construct or concept into a discipline started in the third millennium as part of behavioural science according to Ravi (Varghese, 2016). In 1996, Steinberg and Emmons (2000) laid down the theoretical foundation of this concept in the psychology literature for the first time (Saremi & Farkhani, 2015). Along the same threads, Zohar introduced the term SI in 1997 (Skrzypińska, 2020; Vas, 2017). In the framework of integrative treatment, the obtained tool



allows the practitioners to establish meaningful engagements with the patients and allow them to see what is happening to them beyond illness.

It is noteworthy to determine how SI exists and is implemented in Traditional Bone-settings (TBS) guided by King and DeCicco's SI model. This forms the key research question of this study. Specifically, the study aims to: Examine if SI exists among five (5) TBPs, how it is incorporated into its bone-setting techniques, and the possible integration into modern healthcare delivery systems. In that connection, this research is important for several reasons. Firstly, it gives independent evidence of the part played by SI in the efficiency of traditional healing practices and their curing techniques. Secondly, it helps to complement both traditional and modern practices as it can enhance our understanding of how such practices can be incorporated to improve health and well-being. In the larger context of technopreneurship, the study also shows that SI holds great potential for developing new solutions in the healthcare sector that would address the need for healing that cultural identity and tradition endure while embracing the advancement of technology.

LITERATURE REVIEW

According to the SI model, individuals, who build up the components in CET, PMP, TA, and CSE, can effectively use spiritual assets in different problem-solving in decision-making and on the other hand, psychological well-being. King (2008) affirms that if a person is to navigate in reality and overcome reality's challenges then that person needs to have the ability to think critically about reality. According to Covey (2004), "individuals face a new and increasing expectation to produce more for less in a complex world, yet they are simply not allowed to use a significant portion of their talents and intelligence" (p.15). Whereby he re-affirmed the function of SI in needing to steer or lead other intelligence. In that respect, this kind of intelligence is even higher or superior to the other intelligence. Studies have revealed fact that traditional medical practitioners attend to some ailments in a better manner ascertained by the orthodox medical practitioners (Habtom, 2018). It could be argued that such TBS practices work effectively.

In 2014, the Times reported that:

"It defies science but those who have experienced it will swear it works perfectly well. A fracture or broken bone is fixed back into shape without any use of modern medicine. This is the world of traditional bone-setters, locally known as *kuunga*, who are common in the rural parts of the country. Their works defy orthodox medical values" (p.1).

Some Rwandese people hold the opinion that traditional medicine is more effective in addressing health issues than modern orthopaedic ones. In addition to that, studies have shown that if a practitioner integrates an element known as SI then it is likely to have even a significant influence on the general health of the clients. For instance, Sahebalzamani et al. (2013) critically explored the



correlation that exists between SI with the psychological health of the nurses. The findings provide the impetus to further affirm the presence of a positive and moderate interactive correlation between SI and psychological well-being. Concurring with Sahebalzamani and his colleagues, it has been shown that enhanced SI level in nurses influences the better chances of their psychological well-being, thus helping their patients to attain stability in health. Furthermore, the study by Ebrahimi et al. (2015) established that healers with high SI scores were in a position to heal their patients' emotions and spirits since they had optimal knowledge of those respective fields which made patients have good health recovery.

From a study done by Amram & Dryer (2008), it is entirely clear that most healthcare treatments are more compassionate and have a natural harmony with moral/ethical healthcare values that are within most traditional frameworks. SI, thus, has a strong cultural-anthropological imprint, and in every culture people's beliefs based on religious acts predominate in the work of traditional healers.

As put forward by Zohar & Marshall (2000), spiritual practices allow the healers to gain understanding and insights into patients' challenges which then help in fostering trust between the patients and the healer. The blending of Indigenous practices with biomedical practice is a concept in sharp demand in the healthcare field across the world (Danfulani, 2020), and it is therefore a welcome shift. This approach not only preserves valuable knowledge of cultural practices but also strengthens the impact of healthcare service delivery.

Integrating traditional practices with modern medicine can provide a more detailed and comprehensive approach to health in general. For instance, the incorporation of SI in TBS can expand the horizon of modern orthopaedic maneuvers by addressing the emotional and spiritual aspects of healing and equally factoring in the emotional–spiritual realms of human afflictions which are not explored in medical practice (Tanyi, 2002). Adopting SI into the health care domain will enhance patient advocacy wherein intervention is personalised and considers the patient's needs. It will also reflect the increasing concern in individualised care, a key aspect of which is to consider the patient as a person rather than as a collection of symptoms (Epstein & Street, 2011). For instance, the use of spirituality in treatment can lead to increased patient satisfaction and adherence since people with religious beliefs are likely to be motivated to recover in health facilities where spiritual programs are offered (Koenig, 2012).

METHODOLOGY

Research Design

This is Ethnography research with an aim to assess the existence of SI and the extent of utilisation of systematic integration into the practices of TBS. The qualitative part of the study examined the spiritual subjective reality and activities of TBPs as to the use of SI in their healing practice by offering empirical evidence and integration of SI into the healing practice of TBPs.



Study Areas

The study areas selected are the five districts of the Northern region of Plateau State; Vwang, Gwol Gassa, Rikkos, Kishi, and Atita Nukwis. This sample is composed of TBPs from these five (5) geographical areas where TBS is conducted provided each centre accommodates not less than five (5) admitted patients. There were about 10 patients that were admitted at Vwang TBS centre, there were about 24 patients at Rikkos TBS centre being treated on various occasions and there were about 5 patients; at Gwol Gassa TBS centre, Kishi TBS centre there were also about 5 patients, while at Atita TBS centre there were about 12 patients under treatment.

Sampling Procedure

The sampling procedure used in the study is a combination of stratified and convenience sampling techniques. This study however looked at five districts in the northern zone of Plateau State, namely, Vwang, Gwol, Gassa, Rikkos, Kishi, and Atita Nukwis and it covered five (5) TBS that cut across all Local Government Areas (LGA) of the northern senatorial zone of Plateau state of Nigeria with the exception of Riyom LGA.

Table 1Bonesetter's Demographic Data

	Bonesetter	Frequency
Age Group	26-35	1
	36-45	1
	56-65	1
	46-55	2
	Total	5
Location	Atita Nukwis	1
	Gwol Gassa	1
	Kishi	1
	Rikkos	1
	Vwang	1
	Total	5
Gender	Male	5
	Total	5
Years of	16-30	2
Practice	31 and Above	3
	Total	5
Educational	Diploma Certificate	1
Level Attained	Elementary School	1
	High School	3
	Total	5
Training	Informally Trained by a Mentor	1
	and Attended Workshops or Seminars	
	Informally Trained by a Mentor	4
	Total	5
Cultural	Hausa	1
Background	Jarawa	1
	Rukkuba	1
	Berom	2
	Total	5
Religion	Muslim	1



Christianity	4
Total	5

Data Collection Instruments

Survey instruments involved the development of properly structured questionnaires, interviews, and observation tools that enable the assessment of the SI and the contribution of SI to TBS as well as to provide an understanding of the integration of SI into TBP practices. The instrument used in the study was a structured questionnaire, which was based on King & DeCicco's, Concept of SI Model. Consequently, the SISRI 24 compressed to 21 questions to avoid repetition falling under the CET, PMP, TA and CSE, in the survey. The questionnaires were administered directly to TBPs in their centre through a structured face-to-face interview. For this study, 5 qualified TBPs were sampled and interviewed to complement their identification and understanding of the role and realities of SI in their work.

Guiding questions for the interviews included questions focusing on the integration of SI practices, decisions made as a result of SI, and perceived impact on patients due to the application of SI.

Data Analysis

To achieve the goal of the study, comprehensive data analysis techniques were used to ensure a robust interpretation of the findings. When it comes to qualitative data collected from the interviews, the method used for data analysis was thematic analysis. This involved analysing the data and assigning headings and occurring trends in a way that illuminated key themes and patterns when it came to SI and its integration into TBP practices.

RESULTS AND FINDINGS

This section presents facts on the existence and the incorporation of SI into TBP practices with emphasis on several themes such as dedication to well-being, holistic healing, and decision-making processes influenced by SI. The arguments presented in this paper are inferred from the qualitative data obtained from the in-depth interviews. It highlights a unique intersection of spirituality and traditional medicine. This holistic perspective is less commonly explored in contemporary literature on traditional medicine. It adds a new dimension to the understanding of SI in practice.

CET

The findings of the questionnaire indicate that TBPs always want to find their purpose and engage in self-reflection. This is mainly because 4 out of the 5 TBPs interviewed are concerned with spiritual growth and living by what they believe. However, according to Mandeep et al., (2011), SI is positively associated with a sense of inner peace/tranquillity from beliefs. Engagement by TBPs clearly shows a strong inclination to existential questions, and search for spiritual meaning and understanding. The findings suggest that TBPs do not really per se practice spirituality but they do



pursue the meaning and purpose of life. From this point of view, TBPs are seen to have a positive opinion towards CET according to their thoughtful examination of their activities including self-analysis hence attaching significance to them. This is supported by Zohar and Marshall (2000), who define CET as reflecting upon various major aspects of life to find importance or discover something important about life. Therefore, such thinking considers TBPs universal because they do not just focus on physical needs or problems but rather both spiritual and emotional ones as well. This kind of thinking affirms TBPs as universal and not just physical need fulfillment, but spiritual and emotional ones too.

Seeking Meaning and Purpose in Life

TBPs often ponder upon the purpose of being alive and see virtues in believing in the purpose behind the occurrence of events. For example, Dantoro states, "I often think about the meaning of life, why things happen, and I often feel like there is a purpose behind everything. I believe that God allows certain things to happen to bring us closer to Him" (Personal Interview, August 29, 2023). This existential reflection is religious, and it gives TBPs the ability to explain the occurrence of events in life. The bone-setters view their healing work as a divine intervention or call to serve in the community. Ishaku contends that 'I always believe that something happens for a reason' (Personal Interview, Sept. 1, 2023), whereas Davou averred that "There is meaning to life sometimes" (Personal Interview, August 29, 2023). About the existence, Kinan states, "Sometimes I contemplate over the existence of life and the causes that she or he desires or often feel that there is a reason for everything" (Personal Interview, Sept. 11, 2023). Their faith in the existence and value of life helps to enrich their role as healers who brought in spirituality with the purpose of making humanity whole once again. This existential dimension shapes their thinking and engagement at work.

Finding Comfort and Solace in Beliefs

During trials, the bone-setters find solace and peacefulness in something that they know is truly real and within their grasp. Dantoro affirms that he strongly believes in God, he has a feeling that nothing happens by chance as there is always a purpose behind it and this makes him have a very peaceful heart whenever he is faced with challenges (Personal Interview, August 29, 2023). From the interview with Ahmadu, his practices, beliefs, faith, and religion dictate his actions and give him solace in difficult times. Kinan also firmly believes that his handiwork is the work of the Almighty, and his beliefs hold sway over his behaviours (Personal Interview, Sept. 11, 2023). Ajiji is as confident and assertive in expressing herself as he explains; "My beliefs are always comforting to me and I do find solace during testing moments" (Personal Interview, October 23, 2023). This constant appeal to their faith gives them emotional strength and assurance, making them stand firmly



on what they believe in or face in their daily lives. Their faith serves as the anchor in life, in a way that they have the right direction or meaning to their existence.

Recognising the Interconnectedness of Existence

TBPs see all events as being part of a continuum and as being divinely ordained. Ishaku said, "I agree with the fact that nothing exists individually... in fact, everything exists with something" (Personal Interview, Sept. 1, 2023). Dantoro equally concurs in believing in a superior purpose to occurrences, which he explained by averting that "God operates in ways that are not comprehensible to man" (Personal Interview, August 29, 2023). For instance, Kinan notes that, sometimes we alter God's plan due to our pride and arrogance regarding compliance (Personal Interview, Sept. 11, 2023). TBPs believe that individual and collective action is shaped by a plan or design, and providentialism reflects a providential perspective. Also, the related notion is expressed, looking inside spirituality and divine providence connecting all related aspects of life. This fosters an appreciation of the complex interconnectivity between causal chains, which operate under human actions regulated by divine forces that transcend human understanding and control.

PMP

TBPs exhibit a high ability to ask questions on personal meaning and purpose in all physical and mental experiences. PMP serves as a coping mechanism in times of stress by enabling individuals to find meaning and purpose within challenging situations, thereby reducing the negative impact of stressors. They can create and master a life purpose with that sense of feeling oneness. Altogether, spiritual beliefs have a crucial impact on the TBPs' interactions as 4 pointed out that beliefs affect their interactions completely. Not surprisingly, contact with nature is present as well; 3 occasionally and 1 frequently, feel connected with nature. In addition, they seem to have inner peace and tranquillity at most times. Spiritual substantiated evidence became prominent where TBPs demonstrated relevance with living beings, inspirational interactions based on spirituality, integration of personal values, and most importantly a feeling of serenity. This goes a long way in supporting a cultural-spiritual approach to making meaning of life situations by TBPs. As noted earlier, healing helps TBPs attain personal meaning and purpose – a clear show of commitment to PMP.

The feeling of oneness with the living in the context of the study and appreciation of self-values strategies is also supported by other authors such as Gumbo and Singh-Pillay who have stated that traditional healing is protective of spiritual and cultural values. This alignment indicates that when



practising bone-setting, healers utilise their spirituality in day-to-day practices just like their counterparts who engage in other traditional forms of healing all over the world. From the study, all the TBPs attributed their healing practices to be significant in their lives and this is an indication that the healing of the human soul is not just business to these TBPs but a calling to serve humanity. This is in tandem with the theoretical literature espoused by Emmons (2000) whose postulation affirms that spirituality can focus people on having meaning and direction in their lives.

TA

The survey shows that TBPs do indeed perceive a stronger line between the self in the world and something beyond the self in the world, as 3 out of 5 among the TBPs considered their connection to be very strong. This can be linked to spiritual purpose and recognition with 3 among the TBPs fully endorsing transcendental factors. The findings provide that there exists a strong TBP' TA suggesting a very strong attachment to something higher, as well as a firm belief in the existence of a higher purpose or meaning. The TBPs' feeling of oneness with something larger aligns with Amram and Dryer's structural definition of SI incorporating transcendence and a sense of purpose. This finding aligns with the notion held by TBPs over their work as a sacred divine responsibility.

The systematic aspect is seen in how the TBPs are sensitive to the activity and linked with a greater cause. The study also reveals that TBPs have a purpose beyond living and uphold such beliefs in their practices.

Spiritual Intelligence Integration into Traditional Bone-Setting Practices

One novel aspect of this study is a detailed examination of how SI is integrated into TBS practices among traditional healers. Specifically, this section focuses on how TBPs seek guidance in challenging cases, contribution to well-being and the greater good, connection with nature and spiritual practices, dedication to well-being, holistic healing approaches, and decision-making processes.

Seeking Guidance in Challenging Cases

In difficult situations, TBPs will pray to seek assistance from a higher power thereby displaying humility in affirming his incapability in treating some injuries. Similarly, Nasel (2004) proceeds to acknowledge that people employ SI for the purpose of addressing purposeful alternatives and issues. Ishaku posits that the necessity of divine help calls for recognition of the fact that reliance on God is better than reliance on material assistance and there is no sign of this grace in modern orthopaedic practitioners or colleagues (Personal Interview, Sept. 1, 2023). To support and extend this view, Kinan confirms that God helps him identify the type of fracture and directs on where to locate the



herbs for the treatment (Personal Interview, Sept. 11, 2023). The implication is that divine inspiration governs the treatment strategies in this context as stated by Kinan.

This commitment to values influences their bone-setting practices. It ensures respect, empathy, and compassion in patient interactions. The bone-setters' alignment with values is dynamic. They integrate traditional knowledge with modern healthcare. This strengthens their practice's effectiveness and community trust. Interview responses from bone-setters like Ishaku and Kinan affirm the survey results. They explicitly mention relying on divine guidance and spiritual insights in practices.

Contribution to Well-Being and the Greater Good

There is a sense of responsibility for contributing to the well-being of others. This responsibility is driven by their spiritual beliefs. The bone-setter's commitment reflects a profound sense of responsibility deeply rooted in spiritual beliefs. Their understanding of healthcare extends beyond the physical mending of bones. It encompasses a holistic approach that considers spiritual and emotional well-being. For example, Dantoro attests that

".I think it is very important to help make the world a better place and I feel responsible for others' well-being. This is because along the way there will be a lot of contradictions as some patients will say, if I do not walk, I will commit suicide but here is a place of soba reflection where we try to educate the patient that they might not get their fractured leg 100% but only God can give perfect healing. This is to prepare their mind before treatment is issued. We do request their confidence towards us before treatment in order not to abandon the treatment halfway to another treatment centre. Their consent is very important before treatment is done. A patient coming from Abia State is very important because we do not advertise." (Personal Interview, August 29, 2023).

At the core of their motivation lies a belief in the interconnectedness of humanity. There is a shared responsibility to make the world a better place. This perspective draws influence from his spiritual convictions. These emphasise the importance of compassion, service, and empathy. The bone-setter perceives their work not merely as a profession; it is a sacred duty. Their aim is to alleviate suffering. They wish to contribute positively to the lives of those in their community.

Ishaku, Kinan, Davou, and Ajiji all think it is extremely important to help make the world a better place. They feel responsible for others' well-being. They completely enjoy learning more about their beliefs. Growing spiritually makes them happy. In the context of bone-setting this commitment to well-being involves not only treating physical ailments but addressing the emotional and spiritual aspects of healing. By integrating spiritual practices into their approach—such as prayer and imparting moral guidance—they aim to foster a more profound and lasting sense of well-being in patients.

Connection with Nature and Spiritual Practices



TBPs described their spiritual practices as integral to their healing methods. These often involve rituals that connect them with nature and spiritual beliefs. Many TBPs highlighted how interactions with patients are guided by spiritual beliefs, compassion, empathy, and moral guidance. TBPs reported a consistent experience of inner peace and fulfillment derived from their spiritual practices. This enhances their effectiveness in providing health care services.

Dedication to Well-Being

TBPs exhibit a profound commitment to the well-being of their patients. This is deeply rooted in their spiritual beliefs. The survey data revealed that 4 out of the 5 TBPs consider it highly significant to contribute to the betterment of the world. They feel responsible for the well-being of others. This commitment aligns with the SI model. The model emphasises dedication to well-being that focuses on spiritual and physical well-being. Interviews with TBPs highlighted that there exists happiness within as a result of the deepening of their understanding of their beliefs. They also enjoy fostering spiritual growth and this illustrates a profound connection with their SI.

Holistic Healing Approach

TBPs integrate spiritual practices into their bone-setting approach aiming to enhance the overall well-being of their patients. This holistic perspective involves addressing not only physical ailments but emotional and spiritual aspects of healing. For instance 4 of the survey TBPs report that regularly they incorporate prayer and moral guidance into their treatment processes. Insights reveal that TBPs view their role as healers in a comprehensive manner. They address underlying issues. They promote positive lifestyles. This aligns with the SI model's emphasis on interconnectedness and commitment to the broader community's well-being.

Decision-Making Processes Influenced by SI

The SI of TBPs significantly influences their decision-making processes. TBPs seek a personal connection with the divine. They utilise spiritual means such as prayer and ethical guidance to resolve tensions between local and external forces of life. This alignment with the SI model's acknowledgment of spirituality in problem-solving and decision-making is evident in both survey and interview data. 4 of the 5 TBPs indicated that their spiritual practices play a crucial role in their daily decisions. Particularly in the context of patient care. Kinan affirms that:

"God normally shows me what kind of fracture the patient has immediately after he or she is brought. This knowledge comes from God. We seek God's help and direction each time we want to get herbs for mixing in the bush." (Personal Interview, Sept. 11, 2023)

Integration of SI into TBP Practices

The integration of SI into the practices of TBPs is evident through their dedication to well-being, holistic healing approaches, and decision-making processes. Empirical data from surveys validate components of King and DeCicco's SI model in the context of traditional healing. Qualitative



insights from interviews support this model. TBPs have a profound connection with their SI that enhances their healing practices. This connection provides valuable insights into the potential for integrating SI into modern healthcare. This integration is intended to promote holistic well-being, especially in the Nigerian context.

VALIDITY OF THE INSTRUMENT

Content Validity:

By using King and DeCicco's SI model it ensures that multiple dimensions of SI are addressed, that is CET, PMP, TA and CSE. Cronbach's alpha for the 24-item SI model is .92. The standardised alpha is .92. This represents more appropriate internal reliability. In particular, CET has r = .39 with a p-value is less than .001. TA and CSE have both r = .44 while PMP has r = .65. The p-value is less than .01(King, 2008).

Reliability of the Instrument

Internal Consistency: Internal consistency measures whether items on the test measure the same construct. The survey covers various dimensions of SI.

Inter-Rater Reliability:

Inter-rater reliability is relevant for qualitative data and measures agreement between different raters. The coherence between qualitative insights and survey results suggests reliable data collection.

DISCUSSION OF FINDINGS

The research findings attest to the existence of SI in TBS practices based on evidence. It shows how TBPs combine beliefs that involve spirits, deities, and religious ideas, with conventional healing protocols. This model includes components such as CET PMP, TA and CSE as TBPs demonstrate a strong inclination towards CET. They frequently engage in self-reflection and seek deeper meanings in their work. This aligns with the finding that most TBPs contemplate existential questions. This enhances their ability to address not just the physical but also the spiritual and emotional needs of their patients.

The ability to derive personal meaning from their work is crucial for TBPs. The study found that almost all TBPs see their healing practices as a source of personal purpose. Their work is not merely a profession but a calling. This deep sense of purpose drives their dedication to patient care. TA is evident in the TBPs' sensitivity and connection to a higher purpose. The study shows that TBPs believe in a higher purpose. They incorporate this belief into their practices. This transcendental perspective allows them to view healing as a holistic process. It connects the physical, emotional, and spiritual dimensions of well-being. The moments of insight and a consistent sense of awe reported by most TBPs reflect their ability to reach higher states of consciousness. These experiences contribute to their sense of inner peace. They enhance their healing capabilities, suggesting that CSE is a vital component of their SI.



The findings of this study also indicate there is an integration of SI practices into TBS. The study highlights how TBPs utilise SI dimensions in their healing practices. The integration of SI into TBPs' practices significantly enhances their effectiveness in several ways;

Holistic Healing: By addressing the physical emotional and spiritual needs of their patients, TBPs provide a more comprehensive form of care. This holistic approach is deeply rooted in their spiritual practices and beliefs and this leads to better patient outcomes and improves satisfaction. The integration of SI into TBPs' practices significantly enhances effectiveness. They address the physical, emotional, and spiritual needs of their patients. As suggested by Dossey (1999) holistic approaches that include spiritual dimensions can improve overall patient care and well-being.

Improved Decision-Making: The spiritual and ethical guidance that TBPs draw from their SI influences decision-making processes. This ensures that practices are not only effective but also ethical and compassionate. Practices foster trust and respect within their communities. Spiritual and ethical guidance that TBPs draw from their SI influences their decision-making processes. Ensures practices are not only effective but also ethical. Compassionate fostering trust and respect within their communities. This is supported by Fry (2003) and who emphasises spiritual leadership, which includes ethical and compassionate decision-making which can enhance organisational effectiveness and community trust.

Patient-centered Care: TBPs' commitment to the well-being of their patients is driven by their SI abilities in highly personalised care. This patient-centered approach is crucial for effective healing which also aids recovery. It considers the individual needs and circumstances of each patient. TBPs' commitment to the well-being of their patients, driven by their SI results in highly personalised care. This patient-centered approach is crucial for effective healing and recovery, as it considers the individual needs and circumstances of each patient. The findings align with Puchalski et al. (2014) who argue that integrating spirituality into patient care enhances the therapeutic relationship and improves health outcomes. The presence of SI in traditional healing practices offers valuable insights for the broader field of technopreneurship and innovation in healthcare in general.

Bridging Traditional and Modern Practices: The study highlights the potential for integrating traditional healing practices enriched with SI, into modern healthcare systems. This can lead to innovative healthcare solutions that are culturally sensitive and holistic which seems to be lacking. The study highlights the potential for integrating traditional healing practices enriched with SI into modern healthcare systems. This can lead to innovative healthcare solutions that are culturally sensitive and holistic. This is consistent with the perspectives of Engel (1977). Engel proposed the biopsychosocial model emphasising the importance of addressing psychological and social factors alongside biological factors in healthcare.

Enhanced Healthcare Delivery



Incorporating SI into healthcare practices enables providers to offer more comprehensive and empathetic care. This approach improves patient outcomes and fosters patient satisfaction. It ultimately enhances the overall effectiveness of healthcare delivery. Incorporating SI into healthcare practices enables providers to offer more comprehensive and empathetic care. This approach enhances patient outcomes. It fosters satisfaction among patients. It ultimately increases the effectiveness of healthcare delivery. As noted by Sulmasy (2002) integration of spirituality into medical practice can lead to more compassionate care and better patient outcomes.

Promoting Innovation: Insights gained from traditional practices can inspire new approaches and innovations in healthcare. For example, incorporating spiritual practices into rehabilitation programs can enhance patient engagement and motivation. This can lead to better recovery rates. The insights gained from traditional practices can inspire new approaches and innovations in healthcare. For example, incorporating spiritual practices into rehabilitation programs can enhance patient engagement and motivation leading to better recovery rates. This perspective is supported by Koenig et al. (2012) who highlight potential benefits of incorporating spirituality into various aspects of healthcare to foster innovation and improve patient care.

Implications for Practice and Policy

Healthcare providers benefit from training programs incorporating SI principles. Understanding and integrating SI into their practices leads to more holistic and effective care. This approach proves particularly beneficial in multicultural settings. Traditional practices are highly valued. This alignment supports the recommendations of McSherry (2006). He advocates for the inclusion of spiritual care training in healthcare education.

Policy: Policymakers should consider the value of integrating traditional healing practices into mainstream healthcare that can enhance healthcare accessibility and effectiveness. Additionally promoting research on integration of SI in healthcare can provide further evidence. This is echoed by the World Health Organisation WHO (2002) which recognises the importance of integrating traditional medicine into national health systems.

The integration of SI into healthcare practices presents numerous opportunities for enhancing patient care. By exploring commercialisation opportunities, we can leverage SI to foster a more compassionate, effective, and innovative healthcare system. The SI assessment in Traditional TBPs represents profound discovery and innovation towards holistic healing in orthopaedic health care delivery. TBPs embody components such as CET PMP, TA and CSE that enhance effectiveness in treatment fostering trust, respect and patient satisfaction within communities. Moreover, the potential for bridging traditional and modern healthcare promoting patient-centred care, and inspiring innovative approaches underscores the transformative impact of SI integration in the new modern healthcare delivery.



CONCLUSION

In this research, an attempt is made to examine the involvement of SI in the practices of TBPs by employing King and DeCicco's SI model. TBPs prove and exemplify a humane and compassionate concern for the welfare of their patients. This reflects on the SI model, where there is a revival and strengthening of spiritual dimensions. They demonstrate commitment to assisting their patients through integrating SI during bone-setting. They address physical ailments and also focus on the client's emotional and spiritual needs. This goes a long way in supporting the holistic viewpoint of healthcare provision. Often, the spiritual and ethical input of the SI of TBPs plays a big role in their decision-making system. It also assists TBPs in making better decisions. The adoption of SI components such as CET PMP TA, and CSE by TBPs is evident in their practices. Therefore, integrating SI practices into modern orthopaedic healthcare presents a viable avenue toward realising comprehensive and transformative healing.

RECOMMENDATIONS FOR FURTHER RESEARCH AND ACTION:

Institutional Integration:

Medical and healthcare educational institutions should embrace the incorporation of SI training education. This will allow future healthcare professionals to understand the significance of addressing the spirituality and emotions of patients.

Research Funding:

Healthcare providers and governments should provide the necessary funds. Also encourages further studies on the effects of implementing SI into the health care systems. It can also offer objectivity and empirical evidence. The findings suggested policy revisions for healthcare efficiency.

Contributions to the Field of Technopreneurship and Innovation

There is a need to cultivate new ways of learning and thinking. The use of applications and platforms in particular may facilitate SI-based practices. This may include apps that develop or align with SI principles for practitioners in modern healthcare systems.

REFERENCE

Aderibigbe, S. A., et al. (2013). Determinants of utilisation of traditional bone setters in Ilorin, North Central Nigeria. *Journal of Preventive Medicine and Hygiene*, 54(1), 35-40. https://doi.org/10.15167/2421-4248/jpmh2013.54.1.369

Amram, Y., & Dryer, D. C. (2008). The Integrated SI Scale (ISIS): Development and preliminary validation. Paper presented at the 116th Annual Conference of the American Psychological Association, Boston, Institute of Transpersonal Psychology, Palo Alto, CA.

Covey, S. R. (2004). The 8th habit: From effectiveness to greatness. Free Press.



- Danfulani, Umar Habila Dadem. (2020). *African Healing Shrines, the Psychology of Wellness and Its Modern Trajectories Umar*. African Healing Shrines and Cultural Psychologies, edited by Matthew Michael et al., Regnum Books International, 1–247.
- Dossey, L. (1999). Reinventing medicine: Beyond mind-body to a new era of healing. HarperCollins.
- Ebrahimi, M., et al. (2015). Effectiveness of training of spiritual intelligence components on depression, anxiety, and stress of adolescents. *Journal of Medicine and Life*, 8(Spec Iss 4), 87-92.
- Emmons, R. A. (2000). Is spirituality an intelligence? Motivation, cognition, and the psychology of ultimate concern. *The International Journal for the Psychology of Religion*, 10(1), 3-26.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129-136.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly*, 14(6), 693-727.
- Habtom, G. K. (2018). Perceptions and attitudes of modern and traditional medical practitioners about traditional medical practice in Eritrea. *International Journal of Complementary and Alternative Medicine*, 11(2), 6-19. https://doi.org/10.15406/Ijcam.2018.11.00340
- 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. https://doi.org/10.24972/ijts.2009.28.1.68
- Koenig, H. G., King, D. E., & Carson, V. B. (2012). *Handbook of religion and health*. Oxford University Press.
- Kumma, W. P., et al. (2013). Complications of fracture treatment by traditional bone setters in Wolaita Sodo, Southern Ethiopia. *Journal of Biology, Agriculture and Healthcare*, 3(12), 95-101.
- McSherry, W. (2006). Making sense of spirituality in nursing and health care practice: An interactive approach. Jessica Kingsley Publishers.
- Nasel, D. D. (2004). Spiritual orientation in relation to SI: A consideration of traditional Christianity and New Age/individualistic spirituality (Unpublished doctoral dissertation). University of South Australia.
- Onuminya, J. E. (2004). The role of the traditional bonesetter in primary fracture care in Nigeria. *South African Medical Journal*, 94(8), 652-658. PMID: 15352590
- Puchalski, C. M., Vitillo, R., Hull, S. K., & Reller, N. (2014). Improving the spiritual dimension of whole person care: Reaching national and international consensus. *Journal of Palliative Medicine*, 17(6), 642-656.
- Sahebalzamani, M., et al. (2013). The relationship between spiritual intelligence with psychological well-being and purpose in life of nurses. *Iranian Journal of Nursing and Midwifery Research*, 18(1), 38-41. http://www.ncbi.nlm.nih.gov/pubmed/23983726%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC3748553
- Saremi, H., & Rajab Pur Farkhani, M. (2015). A study on the relationship between SI and organisational commitment for male teachers at elementary schools in academic year of 2013-



- 2014, in Quchan City, Iran. *International Journal of Life Sciences*, 9(6), 24-32. https://doi.org/10.3126/ijls.v9i6.12683
- Sina, O. J., et al. (2015). Alternative and integrative medicine traditional bone-setters and fracture care in Ekiti State, Nigeria. *Alternative and Integrative Medicine*, 4(1), 1-5. https://doi.org/10.4172/2327-5162.1000182
- Smith, B. (2012). SI: Definitions and measurements. *Saudi Medical Journal*, 33, 3-8. https://doi.org/10.1073/pnas.0703993104
- Skrzypińska, K. (2020). Does SI (spiritual intelligence) exist? A theoretical investigation of a tool useful for finding the meaning of life. *Journal of Religion and Health*. https://doi.org/10.1007/s10943-020-01005-8
- Sulmasy, D. P. (2002). A biopsychosocial-spiritual model for the care of patients at the end of life. *The Gerontologist*, 42(suppl_3), 24-33.
- Times, Reporter. (2014). Bone setting, just a chance practice. The New Times Rwanda, 4-7.
- Varghese, P. (2016). Impact of spiritual intelligence on job employees in the selected four cities of satisfaction and life satisfaction of IT South India.
- Vas, E. G. (2017). Spiritual intelligence: A secret key to employee engagement. *International Journal of Engineering Technology Science and Research*, 4(10), 441-449.
- World Health Organization (WHO). (2002). WHO traditional medicine strategy 2002–2005. WHO.
- Zohar, D., & Marshall, I. (2000). SQ: Spiritual intelligence, the ultimate intelligence. Bloomsbury Publishing.