



## **Cross Sectional Study of Spirituality Among Professional using Spirituality Scale at Kuwait Centre for Mental Health following Covid 19 Crisis**

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**Abstract**

**Introduction:** *The spiritual aspirations of individuals are not identifying with a particular faith, and it is held to be of no less importance as well as the viewpoint of those who hold that spirituality is independent of religion. It is an important aspect of individual health wellbeing among the patients, the careers, and the medical professional as well.*

**The Purpose:** *the purpose of this study is to evaluate the psychometric characteristic of the Spiritual scale (SS) among clinical psychologist and psychiatric nurses who worked at Kuwait Centre for mental health (KCMH) during and after Covid 19 crisis.*

**Methods:** *The Spirituality Scale used as a research instrument developed to measure and assess spirituality domains; relationship with religion, self, others and identifying the spiritual wellbeing needs affecting their life and practice in the field of psychiatry. It was completed by 54 nurses and psychologist who are randomly selected and worked at KCMH from 1<sup>st</sup> February to 30<sup>th</sup> May 2022.*

**Results:** *Data was collected in Likert like item style and analysed using SPSS ver.26. The demographic data results showed 89% of the sample were females and 11% are males with different age, educations, race, and ethnicity. Data results also showed multi ethnicities include Asian and Arab with multi religious background. The sample was adequate with using dimension reduction with factor analysis and descriptive statistic. The value of P was less than 0.001, having enough correlations for factor analysis and was statistically significant. When Data were analysed, it illustrated an important six factors that had been identified and shared by our staff. Those factors helped our staff to cope and managed their spiritual wellbeing and stress while working and looking after our patients during Covid 19 crisis.*

**Conclusion:** *The spiritual wellbeing is an essential part of individuals health wellbeing. It is very important to address and assess the spirituality of our staff such who were managing patients with mental illness to overcome their worries and anxiety following a major crisis. The ideas were promoting spirituality as an integrative approach to mental health care in order to help our clients, but it didn't include the staff spiritual support and needs in many developing countries. This is the first study to address the spirituality among professional at mental facility in state of Kuwait. This study emphasized the spiritual wellbeing needs are very important and should not be neglected or underestimated.*

## Introduction

Since 1991, the Royal College of Psychiatrists in UK urged an approach to mental healthcare that include body, mind, and spirit. It was encouraged to add spirituality to the care management plan of the patients and understand its role. In 1994, the newly published revision of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM–IV) included for the first time a category of ‘religious or spiritual problem.

It is known, the research in mental illness and religious belief developed during the 1990s from almost none to an accepted area of enquiry with research funding. But still research is needed for upcoming future to explore the relationship between spirituality, religion, and mental illness. The ideas that developed in the recent years, promoting a spirituality as an integrative approach to mental health care, helping our clients to feel supported but no mention about the staff spiritual support and needs in many developing countries.

Meanwhile, in the developed countries, the above issue was address and mention but still more research is needed to understand it association with health wellbeing of the staff.

The ideas of spiritual and religion in the practice of psychiatry and management of patients can be source of emotional conflict to the staff and patients. The medical staff who were dealing with a lot of stresses and emotional conflicts, should be aware of a religion and spirituality that can be a source of discord and conflict e.g. Looking at professional own faith and dealing with different faith (Sacks, 2002).

During the COVID-19 period, the pandemic negatively affects nurses' mental health. No studies have been conducted to determine the factors that affect nurses' and other staff psychological and spiritual

well-being in Kuwait. This is the first study to address the spiritual needs for medical staff who worked at Kuwait Centre for Mental Health during the Covid-19 period.

Our aim is to evaluate the characteristic of the Spiritual Scale (SS) among clinical psychologist and psychiatric nurses who worked at Kuwait Centre for mental health (KCMH) during and after Covid 19 crisis.

## **Methods**

We used The Spirituality Scale (as an research instrument developed in 2003 by C. Delaney, to measure and assess spirituality domains , such as personal relationship and identifying the spiritual wellbeing aspects affecting staff practice in the field of psychiatry. It is also to guide the professional for future spiritual interventions.

Spirituality Scale is Likert like items style, consist of 23 questions, indicating the level of agreement to each question by responding with the answer key: strongly disagree, disagree, mostly disagree, mostly agree, agree, and strongly agree.

### **1.The Data Sample:**

There were 54 individuals were randomly selected from nursing and Psychology Dept. who worked at Kuwait Centre for Mental Health from 1st February to 30th May 2022. It consists of 15 Clinical Psychologist (3 males & 12 females) and 39 nurses (3 males and 36 females) who were involved in the this study.

Demographic data was collected by using Demographic Questionnaire that developed in English language to record age, gender, educational level, ethnic identity, living arrangement , religion and Working Hours per week.

### **2. Data Collection:**

The data sample was collected from each nurse and psychologist following introduction and explanation of the research purpose and a consent was applied by a member of research team.

Looking at each variable in Spirituality Scale (SS); it is Likert like items scale with 6 points measurement and it was statistically analysed by using SPSS ver.26 using dimension reduction with factor analysis and descriptive statistic.

**Results**

**A. Demographic Data:**

Looking at the tables below showing the demographic data represented from our research study. In General, about 89% are females and 11% are males, 48.1% of sample have age of 31 years to 40 years. 64.8% has university degree and 5.5% has diploma qualifications. 74% of our sample were married and 38.3% were Asian and 16.6% were Arab, and other ethnicity were 35%. The sample shows 61% were Christian and 31% were Muslim with 9% has other religions.

**gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	7	13.0	13.0	13.0
	female	47	87.0	87.0	100.0
	Total	54	100.0	100.0	

The above table showed gender %: the sample total number was 54 (100%) with 13% male and 87 % females.

**age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30 years old	2	3.7	3.7	3.7
	31-40 years old	25	46.3	46.3	50.0
	41-50 years old	19	35.2	35.2	85.2
	more than 50 years old	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

The above table 2 showed age % : the second row was 46.3% of sample in the range of 31-40 years. Only 3.7% were in the range of 20-30 years. The last row showed 14.8% of the sample were older than 50 years who worked longer time at KCMH.

**education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high school	1	1.9	1.9	1.9
	diploma	3	5.6	5.6	7.4
	universtry degree	37	68.5	68.5	75.9
	Master degree	9	16.7	16.7	92.6
	doctor degree	2	3.7	3.7	96.3
	not mention	2	3.7	3.7	100.0
	Total	54	100.0	100.0	

Table 3 above showed the educational qualification % :68.5 % had finished university, 20.4% % had higher university degrees and only 1.9% had high school degree. 5.6% who worked at KCMH had diploma.

**religion**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	islam	17	31.5	31.5	31.5
	christianty	33	61.1	61.1	92.6
	hinduism , buddhism , others	4	7.4	7.4	100.0
	Total	54	100.0	100.0	

From the above table 4 showed religion % : 31.5% were Muslims, 61.1% were Christiane and 7.4% has other religions. Most of staff who look after psychiatric population are of multicultural and different ethnicities.

**ethnicity**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	arab	9	16.7	16.7	16.7
	asain	26	48.1	48.1	64.8
	others	1	1.9	1.9	66.7
	not mention	18	33.3	33.3	100.0
	Total	54	100.0	100.0	

The table 5 below showed ethnicity %: 16.7 % were Arab and 48.1 % were Asian from different countries. Other indicate Africa about 1.9% and 33.3 % did not report their ethnicities.

		maritalstatus			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	41	75.9	75.9	75.9
	single	10	18.5	18.5	94.4
	divorced/ others	3	5.6	5.6	100.0
Total		54	100.0	100.0	

The table 6 above showed the marital status % : 75.9% were married which indicate a stable relationship with 18.5% being single and 5.6% being divorced or separated.

		workinghrs			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 40 hours	7	13.0	13.0	13.0
	from 40-48 hours	45	83.3	83.3	96.3
	more than 48 hours	2	3.7	3.7	100.0
Total		54	100.0	100.0	

The table 7 below showed working hours% for the staff at KCMH: 13% worked for less than 40 hours, 83.3% worked for 40-48 hours per week and 3.7 % worked for more than 48 hours.

### Data Analysis

The collected Data from the questionnaires on Spiritual Scale (SS) had 23 items (variables) and answers were given on a scale represented by:

1 = Strongly disagree, 2 = disagree, 3 = Mostly disagree

4 = Mostly agree, 5 = agree, 6= Strongly agree.

The Data were analysed using the SPSS version 26. By using the Factor analysis, we looked at the relationship between different variables (twenty three questions) and their six answers.

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.690
Bartlett's Test of Sphericity	Approx. Chi-Square	830.020
	df	253
	Sig.	.000

The above **figure 1** (KMO and Bartlett's Test) displays two important statistics:

1. The value of Kaiser-Meyer-Olkin test (KMO) = 0.690, which means our sample size is sufficient and adequate.
2. The Bartlett's test of sphericity showed there are an adequate number of correlations between our variables for factor analysis.
3. The value is  $p < .001$ , which means that we have enough correlations for factor analysis, and it is statistically significant.

**Total Variance Explained**

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	8.267	35.945	35.945	8.267	35.945	35.945	5.975
2	2.468	10.729	46.675	2.468	10.729	46.675	5.143
3	1.875	8.150	54.825	1.875	8.150	54.825	2.117
4	1.651	7.179	62.004	1.651	7.179	62.004	3.364
5	1.351	5.876	67.879	1.351	5.876	67.879	1.711
6	1.147	4.987	72.867	1.147	4.987	72.867	3.243
7	.937	4.073	76.939				
8	.836	3.636	80.576				
9	.754	3.278	83.854				
10	.667	2.901	86.755				
11	.537	2.337	89.092				
12	.493	2.145	91.237				
13	.404	1.757	92.994				
14	.352	1.531	94.526				
15	.274	1.191	95.717				
16	.237	1.030	96.747				
17	.173	.751	97.497				
18	.153	.666	98.163				
19	.124	.541	98.704				
20	.102	.443	99.147				
21	.085	.370	99.517				
22	.067	.293	99.810				
23	.044	.190	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

**Figure 2** total variances explained

Looking at Figure 2 above, it showed the total Variance explained which has three key components:

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1. Initial Eigenvalues: The first three columns list all of twenty three factors that can be found within our data set.

The % of Variance column show how much of the variance in the dataset can be explained by each factor.

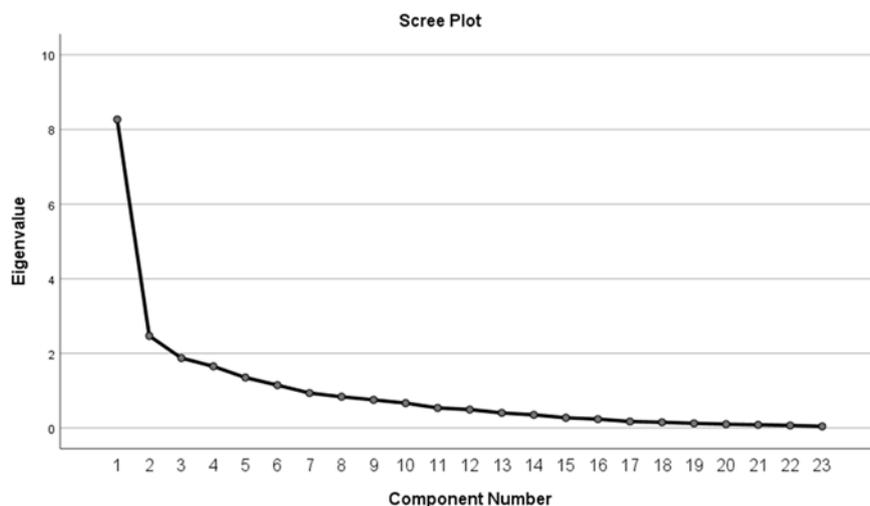
The first few factors account for relatively large proportions of the variance compared to the latter factors.

2. Extraction Sums of Squared Loadings: The middle set of columns is almost identical to the first, except it only displays the factors that account for a significant amount of variance in our data.

SPSS has extracted six factors as a result of the factor analysis.

3. Rotation Sums of Squared Loadings: The final set of columns gives the eigenvalues of the extracted factors after rotation has taken place.

By using Rotation, we maximises the loading of each of variables onto one factor, and this optimises the factor loadings which also brings the eigenvalues more into line with one another.



**Figure 3:** The Scree Plot

The above histogram (Scree Plot Graph) plots all 23 Component Number against Eigenvalue. It visualises which factors to keep and showed a point in the curve where the eigenvalues dropped off and level out. Scree plot curves appears to tail off after two factors: after 2 and another drop after 4.

So, using this method of extraction, it may be able to justify either 2 or 4 factor here.

**Rotated Component Matrix<sup>a</sup>**

	Component					
	1	2	3	4	5	6
SS20	.825					
SS12	.801					
SS17	.773					
SS10	.767					
SS14	.731					
SS19	.676					
SS21	.612		.470			
SS2		.875				
SS1		.853				
SS3	.454	.731				
SS4		.707				
SS5		.631				
SS8		.563		.515		
SS18			.790			
SS16	.452		.720			
SS15			.668			
SS7				.744		
SS11				.631		
SS6	.538			.580		
SS23					.783	
SS22					.767	
SS13						-.778
SS9						.710

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 8 iterations.

**Figure 4** Rotated Component Matrix

The above figure showed the most important table in our research. Each variable loaded onto each of six factors after rotation.

To establish what our factors might be, we need to look at all of the variables that load onto them and try to establish a common theme. Each factor was presented with different variables:

1. Factor One include seven variables (SS10, SS12, SS14, SS17, SS19 and SS20) that represent the relationship with others, the intimacy.
2. Factor Two, there are six variables loaded strongly in factor two : SS1, SS2, SS3, SS4, SS5 and SS8 and it presented the opinions and the attitude surrounding the meaning of living.
3. Factor Three, there are three variables (SS15 , SS16 and SS18) which presented as the relationship with God / Lord or higher power.
4. Factor Four, there are three variables ( SS6, SS 7 and SS11) presented as the individual relationship with nature.
5. Factor Five which has two factors (SS 23 and SS 22) presented as the harmony.
6. Factor six has two variables (SS 7 and SS13) presented as the inner peace.

In Summary: There are twenty three questions that present the beliefs and the attitudes about spirituality among our staff, within Spirituality Scale as a variables which analysed by using SPSS VER.26.

Kaiser-Meyer-Olkin measure of sampling adequacy was 0.69, above the commonly recommended value of .6, and Bartlett's test of sphericity was significant,  $p < .001$ .

Using both the scree plot and eigenvalues  $> 1$  to determine the underlying components, the analysis yielded six factors explaining a total of 72% per cent of the variance in the data.

## **Discussion**

This is first study about spirituality among our staff who worked at Kuwait Centre for Mental Health(KCMH) during and after Covid 19 crisis. The COVID-19 pandemic time negatively affects nurses' mental health and no studies had been conducted to determine the factors that affect nurses' psychological and spiritual well-being in Kuwait.

The Kuwait Centre for Mental Health is the only facility for treatment of mental illness all over Kuwait. It covers 6 major district areas with population of 4.500.0000.

It has over 600 bed and consist of different units: forensic unit, child & adolescent unit, general adult unit, rehab unit , sleep disorder unit , day care unit and Out Patient Dept.

There are more than 600 nurses, 75 psychiatrist and 80 psychologists.

In this research, random selected individual were involved who worked for 45 hours weekly at KCMH and none of them had mental illness or brain disorder. Most of them spoke English and Arabic languages because they lived in Kuwait for many years with their families.

While using SPSS ver.26, using Factor analysis enables us to group variables together to identify and interpret what those factors might be, which in turn helps us to better understand the variance in our data.

We looks for relationships between those different variables that show moderate-to-high correlations in our data by producing a Correlation Matrix.

We have an adequate number of correlations between variables and The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy tell us our sample size is sufficient. Bartlett's test of sphericity indicates we

have enough correlations. The outcome showed the sample was adequate and statically significant with a correlation of six subgroups and P value less than 0.001.

Looking at the previous studies in the field of spirituality and mental illness. It is known, the research in this field of mental illness and religious beliefs developed from almost none to an accepted area of research funding.

The ideas were promoting spirituality as an integrative approach to mental health care and were helping our clients to feel supported. Meanwhile, the staff spirituality and their spiritual wellbeing weren't address and supported in many developing countries.

The medical staff all ove should be aware of a religion that can be a source of discord and also be a form of conflict resolution such as Looking at our faith and dealing with different faith and acknowledging the integrity of, those who are not of our faith' (Sacks, 2002).

Recent research done in 2019 showed that mental health worker like nurses were uncertain about the acceptability of attention to spiritual issues as part of care and they were anxious about distinguishing between symptoms of mental illness and spiritual needs.

As a good practice in the time of crisis, we should be more organised and emphasised on both pragmatic and empathetic approaches (1).

The responsibility of healthcare professional for spiritual care in psychiatry and psychotherapy is still a controversial issue among some psychiatric professional groups. This is partially due to a lack of competency in this domain (2).

Patient satisfaction with religious or spiritual care during mental health treatment has been associated with a better treatment alliance (4). One study emphasized nurses' spiritual aspect during crises is equally important with the other aspects of a nurse's life.

From the results of this study, the spirituality of staff who worked at KCMH showed :

1. Our working staff with different race, religion and background share a common six Factors that presented by the relationship, the attitude about life, the relationship with God or higher power, the relationship with nature, harmony and the inner peace.
2. There are an agreement of the needs and necessity of spiritual wellbeing to build up the defence against psychological burn out and distress the during and after the Covid 19 crisis.
3. Moreover, policies and interventions in psychiatric hospitals must be implemented to ensure excellent levels of spiritual well-being among nurses(8).

So If the nurses spiritual wellbeing is impaired during the COVID-19 pandemic, the quality of nursing care and the nurses' performance may be negatively affected (9).

Spiritual wellbeing for professional can help them to face their fear and anxiety during any major and minor crisis. As we know, high spirituality protected against acute, chronic stress and anxiety. Faith and peace spirituality dimensions conferred protection against acute anxiety during the pandemic (10).

A very important study (14) was done recently showed the results highlighted a higher proportion of poor mental health outcomes such as anxiety, stress, depression, PTSD and insomnia among nurses from all over the world.

With poor mental health outcomes among nurses, the need to implement proactive psychological interventions to prevent the collapse of health care systems in responding to the pandemic and in particular all possible efforts should be undertaken to mitigate the risk factors. Health care organizations should provide support to nurses with sufficient flexibility.

## **Conclusion**

The spiritual wellbeing is an essential part of individuals health. It is very important to address and assess the spirituality of nurses and psychologist who deal with mental ill patients to help them to overcome their worries and anxiety during a major crisis. The study emphasizes the spiritual needs for professionals after crises are equally important and should not be neglected or underestimated.

The spirituality aspect of health wellbeing is for helping nurses and psychologists to overcome their adversities and safety to continue their important roles after the pandemic covid 19.

The upcoming policies and interventions in the hospitals must be implemented to ensure excellent levels of spiritual well-being among nurses, psychologists and other professionals who are appointed to assess and looking after our patient's needs and safety.

Still research is needed for upcoming near future to explore the relationship between spirituality, religion, and mental illness especially in developing countries.

The disaster preparedness plan envisaged by nations should have provisions to address the mental health of nurses and psychologists.

Greater investment in addressing the global shortage of nurses should be given priority in national health policies. Attractive salary packages should be offered to nurses to prevent their emigration from low- and middle-income countries (LMICs).

Future research is needed to explore the role of spirituality among professional in the field of medicine and psychiatry.

## **References**

1. Mental health nurses' understandings and experiences of providing care for the spiritual needs of service users: A qualitative study by Ruth Elliott, John Wattis & others- Journal of Psychiatry and mental health nursing-8/9/2019 /9/2019.
2. Spiritual competence in psychiatry and psychotherapy-Barriers and success factors by Eckhard Frick & others – May 2021.
3. Religious/spiritual care needs and treatment alliance among clinical mental health patients by Joke C. Van Nieuw & others - 05 September 2020.
4. Treatment alliance and needs of care concerning religiousness and spirituality: A follow-up study among psychiatric inpatients by Joke C van Nieuw & others – Int. Soc. Psych 2021
5. Spirituality and Psychiatry-Edited by Chris Cook, Andrew Powell, and Andrew Sims-2009.Published by RCPsych Publications.
6. Clarke J. (2013) Spiritual Care in Everyday Nursing Practice: A New Approach. Palgrave Macmillan, Basingstoke.
7. Does a Multi-Dimensional Concept of Health Include Spirituality? Analysis of Japan Health Science Council's Discussions on WHO's 'Definition of Health' (1998) by Masako Nagase, Japan- published in International Journal of Applied Sociology 2012, 2(6): 71-77.
8. Nurses' spiritual well-being and the COVID-19 pandemic: A thematic approach by Nahed Alquwez & others- an article published on 18 December 2021.
9. The relationship of nurses' psychological well-being with their corona phobia and work-life balance during the COVID-19 pandemic: A cross-sectional study- by Ayşegül Yayla & others – Journal of Clinic Nursing 2021.
10. Spirituality as a protective factor for chronic and acute anxiety in Brazilian healthcare workers during the COVID-19 outbreak-Julio Cesar TolentinoI & others, May 2022.
- 11.Coppola, I., Rania, N., & others: Spiritual wellbeing and mental health during the COVID-19 pandemic in Italy. Frontiers in Psychiatry, 12 (2021).

12. Measuring Spirituality and Religiosity in Clinical Settings: A Scoping Review of Available Instruments Philip Austin, Jessica Macdonald & others - Published: 4th March 2018.
13. Koenig, Harold G., Research on religion, spirituality, and mental health: A review. *Canadian Journal of Psychiatry (Revue Canadienne de Psychiatrie)* 54: 283–291 (2009)
14. The role of religion and spirituality in mental health by Samuel R Weber, Kenneth I Pargament- *Curr.Opin. Psychiatry*. 2014 Sep;27(5):358-63.
15. Puchalski, Christina M. 2001. The role of spirituality in health care. *Proceedings (Baylor University Medical Centre)*14: 352–57.
16. Paloutzian, R. F. and Ellison, C.W. (1982). Loneliness, spiritual well-being, and quality of life. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*. New York: Wiley.
17. Slater, W., Hall, T. W., & Edwards, K. J. (2001). Measuring religion and spirituality: Where are we and where are we going? *Journal of Psychology and Theology*, 29(1), 4-21.
18. Gültekin, A. & Kavak Budak, F. (2021). Does spiritual well-being affect medication adherence in individuals diagnosed with mental illness in Turkey? *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-021-01322-6>.
19. Varghese, A., George, G.& others (2021): Decline in the mental health of nurses across the globe during COVID-19: A systematic review and meta-analysis. *Journal of Globalization and Health*, published in 2021. <https://doi.org/10.7189/jogh.11.05009>.
20. Spiritual Well-Being and Its Relationship with Mindfulness, Self-Compassion and Satisfaction with Life in Baccalaureate Nursing Students: A Correlation Study by Monali D. Mathad, S. K. Rajesh & others – published at *J Relig Health*, 2017. <https://doi.org/10.1007/s10943-017-0532-8>.
21. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy*. New York: Wiley.
22. Slater, W., Hall, T. W., & Edwards, K. J. (2001). Measuring religion and spirituality: Where are we and where are we going? *Journal of Psychology and Theology*, 29(1), 4-21.