Religiousness: An Inter-Disciplinary, Multi-Demographical

and Multi-Regional Study

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Abstract

This study was based on an interdisciplinary paradigm for religious research, with the manifestation of inter-disciplinarity in terms of content (the specific field being the psychology of religion which traditionally coincide within two separate disciplines), as well as the methodology (embracing a true positivistic approach). Although 40 624 individuals from a large public service institution in South Africa participated in the study, only 32 413 datasets were usable for this study. *Religiousness*, comprising of two factors, namely Salience and Participation was measured. The instrument reported an acceptable internal consistency in terms of the Cronbach alpha coefficient and inter-item correlation. High reliability scores were reported on the eight Salience and three Participation items. Overall, religion was seen as an important aspect in the lives of all the participants. All the participants had a positive attitude towards religion and all agreed that religion played an important part in their family life, their wellness, their work performance and in their relationships with others. The overall participation in religious activities, including the involvement in Religious leadership roles, the frequency of Religious participation, as well as the extent of Religious expression, measured high. Religiousness (expressed as the aggregate score of the two factors) measured high, which is an indication that the participants generally believed in a higher power and had positive attitudes towards institutional/religion-specific practices. The participants also indicated that they valued religion as an important aspect of their lives. No meaningful inferences could be made in terms of the impact of race, gender, age and the specific religion on *Religiousness*.

Keywords: Interdisciplinary research, religion, religiousness, spirituality, psychology of religion



Source:www.cartoonmovement.com-Pitch Religiousness

Introduction

Various prominent scholars, such as Ellison and Sherkat (1995, as well as Rambo and Farris (2012), predicted the demise of religion as a consequence of secularisation and modernisation. According to them, this phenomenon would result from the triumphant rise of science and rational enlightenment. Hill, Pargament, Hood, Mccullough, Swyers, Larson and Zinnbauer (2000) indicated that social scientists (i.e. those who supported the secularisation model) were of the opinion that religion would gradually become less relevant or socially useful.

However, due to the resurgence of historic world religions, scholars now increasingly recognise the significance of conversion studies in understanding religion in the world of today. These studies highlight that the various religions tend to mobilise millions of people and thus play a critical role in the ethnic, social, political, and cultural spheres of life (Garcia-Zamor, 2003). The resurgence of religion is also relevant in the workplace. According to Garcia-Zamor (2003), the spiritual and associated religious revival in the workplace reflects a broader religious reawakening in the world in general. Dean, Fornaciari and McGee (2003) noted that this reawakening has resulted in a re-emergence of interest in the study of religion (Hillet al., 2000). Religion has withstood the test of time in its recognition of the value of human life, and has thus proven its relevance within the working environment (Witmer and Sweeney, 1992). However, the exact connection between specific religions and attitudes, including work-related attitudes, appears to vary from one decade to another, thus suggesting that our understanding of the relationship between religion and attitude can only benefit from further research (Chusmir and Koberg, 1988).

It has often been stressed that personal issues should be left at home and should not be allowed to interfere with an individual's work life. This is based on the compartmentalisation of the employee's life, resulting in a deliberate separation of work and personal life. This approach is simply not realistic, especially since people generally tend to link their personal self-image with whom and what they are in the workplace. Productivity, and in many instances, personal well-being and the feeling of belonging (person-organisational fit) (Grobler, 2014), often decrease because of the impact of employees' personal lives on their work. Religion and spirituality, previously regarded as taboo in the workplace, has now been reintroduced as an important component of a productive and healthy work force (Garcia-Zamor, 2003).This is further enhanced by a new management agenda, with employees endeavouring to find greater meaning in the work environment, while business leaders are seeking out more socially responsible approaches to business and exploring new ways to motivate and inspire their workers.

The term *religion* is commonly used to refer to a variety of beliefs, and cannot be isolated from other social categories. Even if it could be isolated, religion still seems to refer not so much to a single variable but to a cluster of variables that relate to many areas of an individual's life (Callaway, 2011). In this study, the perceived value of religion on motivation in the workplace, on the well-being of the employee, on the effect on family life and the lives of others, and on work performance, was investigated.

Dean et al. (2003), as well as Rambo and Farris (2012), suggested a move towards an intentional and systemic multi-disciplinary and interdisciplinary paradigm for religious research, specifically in terms of the psychology of religion. This will allow for the integration of the analytical strengths of the disparate scientific disciplines, the elimination of traditional gaps in terminology, and the development of a common methodology between the various scientific disciplines (Aboelela et al., 2007). Farris and Farris (2012) stated that psychology is not a

unified, monolithic discipline in itself. An interdisciplinary approach is crucial to explore the diversity of psychological, religious, and spiritual phenomena by applying disciplinary rigor. The inter-disciplinary nature of this research exists on two levels: firstly, on a construct level, and secondly, on a methodological level, in combination with the disciplines of religion and psychology (often referred to as the psychology of religion). This leads to a better understanding of the nature and function of religion and spirituality in human life. This is especially important in a rapidly changing world in which some earlier methods and theories are no longer taken for granted (Deanet al., 2003). This study differs from the traditional methods of research into religion, such as thematic analyses, biographical analyses (including biographical studies, autobiographies, and life and oral histories), grounded theory with focus group discussions, postmodern constant comparative methods, productive ambiguity, etc. By comparison, this study utilised a typical positivist approach not generally used for religious and spiritual studies (Dean et al., 2003). Dean et al. (2003) further postulated that a psychology of religion must explore religion and spirituality beyond Judaism and Christianity. The work of psychologists of religion can be enriched by an understanding of the ways in which various forms of religion and spirituality attempt to understand and explain human experience (thoughts, feelings, and actions).

The purpose of this study was to convert an existing instrument and dataset which focused mainly on describing the extent of religious participation (Joubert and Grobler, 2013), to a measure of religiousness. This study further aimed to determine the level of religiousness of the various groups of participants in combination, as well as of the different demographic groups.

Dean et al. (2003) recommended the inclusion of both conceptual and empirical research in the fields of religion and the psychology of religion. In order to conduct such studies, a clear conceptualisation of the definition of the constructs under investigation is required. Accordingly, the constructs of religion and spirituality, often used interchangeably, are more clearly defined in the present study (Deanet al., 2003). The relevant constructs are defined below.

Defining Religion and Religiousness

Religion is concerned with man's relation to a higher power, and man's belief in the supernatural. This relation has great impact on most human societies due to the commonly shared belief that the discovery of truth comes through revelation by supernatural power (Chusmir and Koberg, 1988).

Religiousness, by definition, is based on personal beliefs, such as the belief in a higher power, as well as on institutional beliefs and practices, such as church membership, church attendance and a commitment to the belief system of a church or organised religion (Hillet al., 2000). It is supported by four cues, three of which were used in this study, namely: (i) participation in formal or organised religion; (ii) personal religious practices, and (iii) the degree to which an individual derives support and or comfort from religious beliefs (Hillet al., 2000). The fourth cue, not explored in this study, relates to acts of altruism.

Spirituality on the other hand, is described more in terms of a connectedness to one's complete self, to others, and to the universe as a whole, and is therefore concerned with personal interconnectedness (Witmer and Sweeney, 1992).

Many scholars distinguish between religion and spirituality, but in recent years, according to Rambo and Farris (2012), the contemporary psychology of religion has initiated the inclusion of spirituality in the field of study. This is often associated with the practice of religion (Ashar and

Lane-Maher, 2004; Cacioppe, 2000; Hill and Smith, 2003). Despite the obvious links between spirituality, religion, and ethics, it is important to note that spirituality and religion, although related, is not synonymous (Adams, Bezner, Drabbs, Zambarano and Steinhardt, 2010). Similarities exist between the two constructs (Hill et al., 2000), particularly as it develops across an individual's lifespan, and both are inherently socio-psychological phenomena. Moreover, both these constructs are related to a cognitive dimension, as well as to affect and emotion, which are also relevant in the study of personality. Additionally, Hill et al. (2000) are of the opinion that both constructs are multidimensional, with many shared characteristics. Spirituality and religion can co-occur and are often difficult to separate and previous attempts to measure spirituality apart from religion proved to be problematic. The commonality is well-summarised in the proverbial Golden Rule: "Do unto others as you would have them do unto you." In this study, spirituality assumes certain life-enhancing beliefs about human dignity, human rights, and reverence for life (Witmer and Sweeney, 1992).

Even though the two constructs are closely intertwined and compatible, they are not identical since they may or may not coexist (Garcia-Zamor, 2003). Spirituality is a central and essential function of religion (Ashar and Lane-Maher, 2004; Cacioppe, 2000; Hill et al., 2000; Hill and Smith, 2003). For the purpose of this study, spirituality and religion are considered to have more in common than not, especially in terms of the effect these constructs have on peoples' perception of their direct outer world. Although these constructs are not identical, yet based on the prevalence of various commonalities and common relationships, including the possibility of similar outcomes such as wellness, improved family life, and improved individual and work performance, etc., it was nevertheless decided that they would be combined into a single construct/dimension.

Religion / Religiousness and Work

Work is a fundamental life task that provides economic, psychological and social benefits, and promotes the well-being of the individual and of others (Witmer and Sweeney, 1992). The workplace is considered to be a secular environment, particularly in western societies (Ashar and Lane-Maher, 2004; Cacioppe, 2000; Hill and Smith, 2003). However, organisations must realise that employees bring both personal and moral core values to the workplace, which are directly linked to their cultural background and religion (Garcia-Zamor, 2003). In contrast with the secularity principle, many organisations are promoting a humanistic work environment as this creates a win–win situation for both the employees and the organisation. If members of an organisation are content, they will be more productive, more creative, and more fulfilled. Personal fulfilment and high morale are closely linked to outstanding performance and, therefore, have a direct impact on an organisation's financial success (Morehead and Griffin, 2012). A dispirited workplace can manifest itself in low morale, high turnover, burnout, frequent stress-related illnesses, and rising absenteeism (Garcia-Zamor, 2003).

In a study by Chusmir and Koberg (1988), the relationship of specific religions and the effect of religious beliefs on various job-related attitudes and values, such as motivational needs, job satisfaction, work ethic, and work, job and organisational commitment, were studied. The results showed no significant relationship between work-related attitudes and specific religious affiliations or the degree of religious conviction. It was found, however, that in its organised form, religion does impact on business organisations (Chusmir and Koberg, 1988). Since it is generally accepted in organisational behaviour theory that group roles, statuses, and norms have a strong influence on employee behaviour, it is possible that membership to religious groups may equally impact work behaviour.

Petchsawang and Duchon (2012) found a strong relationship between spirituality and work performance, while Duchon and Plowman (2005), as well as Krahnke, Giacalone, and Jurkiewicz (2003), reported positive results on the correlation between the spiritual qualities of meaningfulness and joy at work, and improved work performance.

Religion / religiousness and motivation

Ellison and Sherkat (1995) indicated a lack of consensus among social scientists regarding the impact of religion on the psychological disposition of individuals, e.g. self-perception and selfesteem. They do, however, view religion (and religiousness) as a psychological resource that has a moderating effect on various modern-day challenges, such as stress and physical health. Religion and religiousness contribute to coping in general, as well as to motivation, since it provides a context in which the individual benefits from positive reflective appraisals. Religion and religious participation (religiousness) also contribute to the establishment of a sense of meaning, which is an essential component of motivation. Individuals with a high level of religiousness believe that they are working for the common good, that their work has special meaning, and that their role in life is to help other people (Ellison and Sherkat, 1995). They are also rewarded socially, economically, and politically for thinking that way, but ultimately they are rewarded spiritually in line with the precepts of the different religions. This is well underpinned by Vroom's expectancy motivation theory, consisting of the three elements of expectancy (the belief that increased effort will lead to better performance), instrumentality (the belief that if you perform well, you will receive a valued outcome), and valence (the importance an individual places on the expected outcome), (Morehead and Griffin, 2012).

Religion / Religiousness and Wellness

Perceived wellness is defined by Adams et al. (2010:169) as "the sense that one is living in a manner that permits the experience of consistent, balanced growth in the emotional, intellectual, physical, psychological, social, and spiritual dimensions of human existence." Miller (2005:85) defines wellness similarly "as a holistic concept of health combining physical, mental, spiritual and social well-being". The characteristics of wellness are expressed through the five life tasks of spirituality, self-regulation, work, love, and friendship, according to Witmer and Sweeney (1992).

A direct positive relationship between well-being (wellness), quality of life and religion was reported by Adams et al.(2010), while Ellison and Sherkat (1995), Karakas (2010), Mahoney and Cano (2014), as well as Witmer and Sweeney (1992), reported a positive relationship between spirituality and performance in organisations. Hillet al. (2000) stated that religion and spirituality are recognized as concepts that have important relationships, specifically with reference to mental health status. A higher level of religiousness, consisting of a supportive relationship with a higher power, and being more involved with a religious community, has been tied in cross-sectional and longitudinal studies to better psychological adjustment and lower levels of substance abuse.

Religion/religiousness and family life

Religion remains the primary social institution that aims to promote spirituality in peoples' daily lives. Accordingly, in many societies, people continue to seek out support for their own and their family's spiritual identities from one or more forms of religious processes (Mahoney and Cano,

2014), or through religiousness. Within this framework, the primary function of institutional religion is to promote the stability and functionality of families. Religious beliefs and values may affect all dimensions of family life ranging from gender roles, family power hierarchies, family ideals about marriage, family size, choices of familial behaviour, and family management techniques (Mahoney and Cano, 2014).

In studies on the manifestation of religious beliefs and practices in building strong, healthy families, conducted by D'Antonio, Newman, Wright (1982), Vela (1997) and Vermeer (2014), it was found that making right choices lead to more meaningful relationships. These religious families practiced the well-recognised constructs typical of strong families, namely clear, honest, and open communication; commitment; appreciation and affection; a focus on the quality and quantity of time spent together; coping with stress and crises successfully; and general spiritual well-being, including oneness with the higher power, the family, humankind, and the world at large.

Religion / Religiousness and Demographic Variables

According to Garcia-Zamor (2003) as well Hill et al. (2000), the manifestation of religion (religiousness) and spirituality may be affected by *culture/race*. In a specific culture/race, the natural attributes of spirituality and religious participation may be enhanced by religion, while in another culture/race, these attributes may be denigrated. Religiousness, therefore, should not be assumed to be a universal concept.

Furthermore, the way in which different *gender* groups express their religiousness and spirituality is quite distinctive (Garcia-Zamor, 2003).

Religiousness is equally impacted by *age* (Adams et al., 2010). In certain cultural groups, members of the younger generation have largely abandoned, not only the religion of their parents, but also the values inherent in that religion (Witmer and Sweeney, 1992).

As indicated before, and in support of the opinion of Dean et al. (2003), studies should also have a *multi-religional* approach in the sense that a psychology of religion must explore religion and spirituality beyond Judaism and Christianity. This is important so as to develop a proper understanding of human experience (thoughts, feelings, and actions) in terms of religion and spirituality across different religions.

Research Objectives

Research objective 1: The adaptation of the Religious Survey's 40 original items into a factorial/dimensional configuration of religiousness.

Research objective 2: To determine whether the participants regarded religion (religiousness) as a contributing factor to various aspects in their as well as other people's lives, specifically in terms of RO 2.1: work performance; RO 2.2: motivation; RO 2.3: family life; RO 2.4 wellness; RO 2.5: personal life and RO 2.6: other's lives in the workplace.

Research objective 3: To determine the participants' view on the importance of religion (religiousness).

Research objective 4: To determine the participants' general attitude towards religion.

Research objective 5: To determine the level of religiousness of the participants.

Research objective 6: To determine if there are differences between the race, age, gender and religional groups in terms of religiousness.

Research Design

This study utilised a typical positivist methodology based on an empirical approach, while using a cross-sectional design and quantitative analysis. Leedy and Ormrod (2010:186) highlighted the fact that a cross-sectional design involves sampling and comparing people from several different demographic groups. This approach enables the researcher to collect the required data at the same time.

Statistical Analysis

The statistical analysis was performed with the help of the Statistical Package for the Social Sciences (SPSS version 23). Descriptive statistics were calculated to provide information on the distribution, with the mean score as either the average, or as the precise centre of the amalgamated values, with the standard deviation as the measure of variability (Leedy and Ormrod, 2010). Skewness and kurtosis were also calculated to investigate the distribution of the data. The skewness value provides an indication of the symmetry of the distribution, while the kurtosis provides information about the peakedness of the distribution (Pallant, 2010). The critical values for these two statistics are 2 and 7 respectively (West, Finch and Curran, 1995).

The Cronbach alpha correlation was calculated to test the proportional variance error of the instrument, with the inter-item correlation as an indication of internal consistency. According to Clark and Watson (1995), the inter-item correlation is an important index for supplying information that supplements the alpha coefficients of a scale, and the parameters for an acceptable inter-item correlation is 0.15 < r > 0.50 (Clark and Watson, 1995). A score of α =.60 and α =.70 or higher, is considered respectively by Clark and Watson (1995) and also Nunally and Bernstein (1994) as acceptable. Other correlations between the items and constructs were also calculated, such as Pearson's product moment correlations and Spearman's rank order correlations, which can be used for data that is distributed either normally or not normally (Pallant, 2010).Multiple regression analysis was used to determine the beta values of each of the items, i.e. the amount of variance that is explained in the dependent variable, in this case the total religiousness score.

Since the sum of the scores of this sample are not normally distributed for all the variables involved in the current study (see Table 3), non-parametric statistical analysis methods would typically be recommended depending on the sample size. However, according to Hill and Lewicki (2006), parametric statistics may be used when the sample is larger than 100. The sample in this study was very large (*N*=32 413), hence parametric statistics were used; even though some of the variables were found to be not normally distributed. According to Hill and Lewicki (2006), it often makes little sense to use non-parametric statistics when the data set is large due to the central limit theorem. They concluded that parametric methods are usually much more sensitive or have more statistical power, and are therefore more appropriate for larger samples.

A one-way analysis of variance between groups was conducted to explore the impact of the specific demographic variables on the level of religiousness. Eta squared was reported to indicate the effect size, with Tabachnick and Fidell's (2007) parameters for the eta squared

values as .01 (small effect), .06 (medium effect) and .138 (large effect). The Chi-square statistic was utilised as the primary statistic and was used for testing the statistical significance of the cross-tabulation table. Chi-square tests whether or not the two variables are dependent or independent. If the variables are related (dependent on each other), then the results of the statistical test will be "statistically significant" and it will be possible to reject the null hypothesis, suggesting that it can be concluded that some relationship exists between the variables. The chi-square statistic, along with the associated probability of chance observation was computed for the categorical variables. Phi, as well as Cramer's V-values, was used to report the effect size of the differences. The phi coefficient follows the same parameters as Cohen's *d* with regards to effect size, with .10 being small, .30 medium and .50 large in terms of effect (Pallant, 2010). The effect size was interpreted using Cramer's V-test and was reported in accordance with the specific criteria set out by Pallant (2010:220).

Population and Sample

The population consisted of all employees of a large public service institution in South Africa (a total personnel establishment of \pm 180 000). A total of 40 624 individuals participated in the study (24% response rate). All available employees were identified as possible participants, subject to the geographical availability of the administrators (Grobler and Maree, 2009:3). The number of cases was reduced to 32 413 after the configuration of the data with reference to the dimension of religiousness, i.e.to 18% of the population.

		Frequency	Percent	Cumulative Percent	
	Missing	233	.7	.7	
	18-25yrs	2 901	9.0	9.7	
AGE	26-35yrs	12 923	39.9	49.5	
_	36-49yrs	14 045	43.3	92.9	
	50yrs+	2 311	7.1	100.0	
	Missing	184	.6	.6	
	African	21 624	66.7	67.3	
RACE	Coloured	3 827	11.8	79.1	
	Indian	960	3.0	82.1	
	White	5 818	17.9	100.0	
	Missing	224	.7	.7	
GENDER	Male	19 890	61.4	62.1	
	Female	12 299	37.9	100.0	
	Missing	513	1.6	1.6	
	African	4 614	14.2	15.8	
	Other	960	3.0	18.8	
	Atheism	14	.0	18.8	
	Bahaism	11	.0	18.9	
DELICION	Buddism	9	.0	18.9	
RELIGION	Christianity	25 517	78.7	97.6	
	Hindu	572	1.8	99.4	
	Islam	172	.5	99.9	
	Judaism	16	.0	100.0	
	Scientology	15	.0	100.0	

Table 1: Characteristics of the participants (N = 32413)

The best represented age group in the sample is the 36-49yrs group (43.3%), followed by the 26-35yrs group (39.9%). The African race group was best represented in this study by 66.7%, followed by the White group (17.9%), the Coloured group (11.8%) and the Indian group (3.05%). The sample consisted of more males than females, with 61.4% male and 37.9% female participants respectively. The religional categories included the 9 main religions, as well as an "other" category. The Christian religion was best represented (78.7%), followed by the African religions (14.2%).

Measuring instrument

The measuring instrument consisted of two parts, namely (i) demographics, and (ii) the religionrelated items (Grobler and Maree 2009; Joubert and Grobler, 2013). Both parts of the instrument were converted to a codified optical reader system. The items of the instrument were in the form of answers to multiple-choice questions on a specially developed optical reader answering sheet for easy and accurate processing. An instruction manual was circulated to all administrators (Grobler and Maree, 2009; Joubert and Grobler, 2013).

The first section of the questionnaire consisted of demographical variables such as age, race, gender and the specific religion. The next section measured the participants' opinions and perceptions regarding their participation in religious activities. The questions tested opinions concerning the religious services provided in the organisation, religious beliefs, participation in religious activities, etc. A 3-point answering scale was used (no, not sure and yes) which included specific checklist options or binary scales (Grobler and Maree, 2009; Joubert and Grobler, 2013). The instrument was reconfigured in line with the notion of religiousness, which is supported by four cues according to Hillet al. (2000), three of which were used in this study, namely (i) participation in formal or organised religion, (ii) personal religious practices, and (iii) the degree to which an individual derives support and or comfort from religious beliefs.

The instrument includes some elements (although not identical) of the concept of religious conviction (Hill et al., 2000) and some of the degree of religious conviction (Chusmir and Koberg, 1988), which constitute part of the broader concept of religiousness. The instrument was configured in accordance with Davidson and Caddell's (1994) definition of religious commitment, comprising a significant component of religiousness, and consists of two dimensions (i.e. a combination of the four cues developed by Hill et al. (2000), i.e. *salience* and *participation. Salience* refers to the importance people attach to religion, and participation refers to the individual's participation in formal or organised religion. The two dimensions consist of eight and three items/cues respectively.

		Salience		
	Cues	Code	Item	Scale
1.	Role of religion in work performance			No = 0
		S1	(53)	Not sure = 1
				Yes = 2
2.	Role of religion in motivation			No = 0
		S2	(27)	Not sure = 1
				Yes = 2
3.	Role of religion in family life		(57)	No = 0
		S3	converted	Not Sure = 1
			conventeu	Yes = 2
4.	Role of religion in wellness			No = 0
		S4	(51)	Not sure = 1
				Yes = 2

Table 2: Items/cues of the Salient and Participation dimensions of the instrument

5. 6.	Role of religion in personal life Role of religion in other's lives in the workplace	S5	(37) converted	No = 0 Not sure = 1 Yes = 2 No = 0
		S6	(36)	Not sure = 1 Yes = 2
7.	Attitude towards religion	S7	(38)	Negative = 0 Neutral = 2
8.	Importance of religion in general	S8	(24) converted	Positive = 3 No = 0 Not sure = 1 Yes = 2
	Partic	cipation		
1.	Religious leadership roles	P1	(26)	No leader role = 0
			converted	Leader = 1
2.	Frequency of religious participation	P2	(23)	Inactive / sporadic = 0
			converted	Active / regular = 1
3.	Religious expression	P3	(24)	No Expression = 0
			converted	Expression = 1

The instrument consisted of 11 items, divided into a *Salience* and *Participation* section, with eight and three items respectively. The *Salience* section has a 3-point scale, while the *Participation* section has a binary scale.

Results

Table 3 includes the descriptive statistics, beta values as well as the collinearity statistics of the items of the instrument, and responds to research objectives 1 and 2.

	N	Min	Max	Maan	00	Skownooo	Kurtasia	Dete	Collinearity Sta	atistics
	IN	IVIIN	wax	wean	50	Skewness	KUROSIS	вета	Tolerance	VIF
					Sal	lience				
S1	32 413	0	2	1.71	.60	-1.87	2.30	.28*	.74	1.36
S2	32 413	0	2	1.44	.75	94	62	.27*	.77	1.30
S3	32 413	0	2	1.92	.40	-4.62	19.34	.14*	.95	1.05
S4	32 413	0	2	1.90	.36	-3.80	14.48	.13*	.70	1.43
S5	32 413	0	2	1.61	.62	-1.38	.74	.23*	.78	1.289
S6	32 413	0	2	1.47	.74	98	49	.27*	.84	1.19
S7	32 413	0	2	1.68	.48	95	59	.18*	.85	1.18
S8	32 413	0	2	1.96	.25	-6.28	41.44	.09*	.87	1.15
					Partie	cipation				
P1	32 413	0	1	.66	.47	67	-1.55	.17*	.94	1.07
P2	32 413	0	1	.63	.48	55	-1.70	.18*	.93	1.08
P3	32 413	0	1	.98	.14	-6.95	46.31	.05*	.99	1.01
Total score:	22 442	1	10	15.05	2.76	1 40	2 72	Cr	onbach alpha	.68
RELIGIOUSNESS	32 413	I	19	15.95	2.70	o -1.42	2.12	Inter-	item correlation	.33
*: <i>p</i> < .001										

Table 3: Descriptive statistics, beta values and collinearity statistics of each of the items of the instrument

To a large extent, the mean scores reported in Table 3 relate to the questions under research objectives 1 to 6. All the mean scores are above the average of 1.0 in terms of *Salience*, and .50 in terms of *Participation*. The highest score on *Salience* was reported in terms of the

Importance of religion in general (1.92); followed by the Role of religion in family life (1.92), the Role of religion in wellness (1.90) and the Role of religion in work performance (1.71) respectively. The participants' general attitude towards religion is positive (1.68). All items related to Participation measured well above the average score, with Religious expression reporting .98, followed by Religious leadership roles at .66 and Frequency of religious participation at .63 respectively.

The skewness and kurtosis values of the items *Role of religion in family life*, *Role of religion in wellness*, *Importance of religion in general*, as well as *Religious expression* exceed the critical values of 2.00 and 7.00 respectively (Westet al., 1995), which is an indication that the data is not normally distributed, with the majority of the values being negative and thus residing in the high quartile of the distribution. The mean score on the total *Religiousness* scale was reported as 15.95, which is high considering that the maximum on the total scale is 19. The total score does not exceed the critical values of 2.00 and 7.00 for skewness and kurtosis respectively (West et al., 1995), which is an indication of normality in terms of the distribution of the individual scores obtained by the 32 413 participants. Tolerance, as well as the variance inflation factor (VIF), was calculated to test possible multicollinearity. The tolerance values were found to be relatively high, indicating non-multicollinearity value of 10. It may, therefore, be concluded that there is no violation of the multicollinearity assumption.

The dependent variable namely *Religiousness*, was set as the total score, with the 11 items (S1-S9 and P1-P3) as independent variables. This gave an explanation of the unique variance in *Religiousness* as determined by each of the items ranging from .28 (S1) to .05 (P3).

The Cronbach alpha correlation reported on the total scale, i.e. *Religiousness*, was α =.68, which is acceptable according to Clark and Watson (1995) who regard Cronbach alpha coefficients above .60 as acceptable. The inter-item correlation values were within the acceptable range of 0.15 *<r>* 0.50 (Clark & Watson 1995). In order to determine the relationship between the respective items of the instrument, a correlation matrix was calculated. It further served as a test of multicollinearity and is reported on in Table 4.

	S1 [†]	S2 [†]	S3 ^{††}	S4 ^{††}	S5 [†]	S6 [†]	S7 [†]	S8 ^{††}	P1 [†]	P2 [†]	P3 [†]
S1 [†]	1.00	.32	.13	.43	.30**	.26**	.25	.20**	.11**	.15	.02**
$S2^{\dagger}$.32	1.00	.09**	.24	.29 **	.35	.23	.16	.19	.19	.03
S3 ^{††}	.19 ^{**}	.08**	1.00	.17**	.10**	.07**	.08**	.13**	.003	.06**	.01*
S4 ^{††}	.44**	.25	.17	1.00	.30	.22**	.25	.32	.10**	.16	.04 **
$S5^{\dagger}$.30**	.29**	.12**	.33**	1.00	.21**	.28**	.23**	.16**	.20**	.03**
S6 [†]	.26**	.35**	.07**	.21**	.21**	1.00	.18 ^{**}	.12**	.10**	.12**	.02**
S7 [†]	.25	.23	.09**	.27	.28	.18	1.00	.16	.16	.15	.01 [*]
S8 [†]	.22**	.17**	.13 ^{**}	.32**	.21**	.13 ^{**}	.16 ^{**}	1.00	.08**	.13**	.04**
$P1^{\dagger}$.11	.19	.003	.10	.16	.10	.16	.07	1.00	.12	.07**
$P2^{\dagger}$.15**	.19**	.06**	.16**	.20**	.12**	.15**	.13**	.12**	1.00	.001
P3 ^{††}	.02**	.03**	.01 [*]	.04**	.02**	.02**	.007	.04**	.07**	.001	1.00

Table 4: Correlation matrix with all items of the instrument

*: Correlation is significant at the .05 level, and **: Correlation is significant at the .01 level (2-tailed).

[†]:Pearson product moment correlation, and ^{††}: Spearman's rho

With: S1: Role of religion in work performance; S2: Role of religion in motivation; S3: Role of religion in family life; S4: Role of religion in wellness; S5: Role of religion in personal life; S6: Role of religion in other's lives in the workplace; S7:Attitude towards religion; S8: Importance of religion in general;
P1:Religious leadership roles; P2: Frequency of religious participation, and P3: Religious expression

The correlation matrix with all the items in Table 4 is based on Pearson's product moment correlations for those items that reported a normal distribution, and Spearman's rank order correlation for those items that violated the normal distribution assumptions (see Table 2 for the skewness and kurtosis values).

Statistically significant correlations are reported (p < .01) between the majority of items. The only exception is P3 which reported low correlations with the other items. It is also evident that the *Salience*-related items (S1-S8) are correlated, although not within the range of multi collinearity.

Differences between demographic groups

In this section, the differences between the demographical variables in terms of *Religiousness* (the total score on the construct) will be reported by means of a one-way analysis of variance, followed by differences between groups on the *Participation* factor's binary items. This section is specifically related to research objective 6.

RACE	Mean Std. Deviation			Ν				
African	16.15	2.69		21623				
Coloured	15.27	2.70		3827				
Indian	15.59 2.86			960				
White	15.73	2.95		5818				
Total	15.95	2.76	2.76 32228					
Eta		.112						
Eta Squared		.01	2					
	Sum of Squares	df	Mean	Square	F	Sig.		
Between Groups	2064.00	2	4004.07		125.69	pc 001		
(Combined)	3004.99	5	102	1.07	133.00	μ<.001		
Within Groups	242646.96	32224	7.	53				
Total	245711.95	32227						

Table 5: The impact of race on the level of religiousness – one-way analysis of variance

A one-way analysis of variance between groups was conducted to explore the impact of race on the level of *Religiousness*. Participants were divided into the four acknowledged race groups within the South African context. There was a statistically significant difference at p < .05 level in the total score (*Religiousness*) for the four race groups: $F(3, 32\,224)$, p < .001, and eta square =.012 (small effect) (Pallant, 2010). Despite reaching statistical significance, the actual difference in mean scores between the groups was relatively small. The African group (*M*=16.15) measured higher than the other race groups, particularly the Coloured group (*M*=15.73).

GENDER	Mean	Std. Deviatio	n	Ν				
Male	15.81	2.95		19 890				
Female	16.17	2.40	12 299					
Total	15.95	2.76		32 189				
Eta		.064						
Eta Squared		.004						
	Sum of Squares	df	Mean Square	F	Sig.			
Between Groups (Combined)	992.64	1	992.64	130.75	<i>p</i> <.001			
Within Groups	244352.93	32187	7.59					
Total	245345.57	32188						

Table 6: The impact of gender on the level of religiousness - one-way analysis of variance

A one-way analysis of variance between groups was conducted to explore the impact of gender on the level of *Religiousness*. Participants were divided into the 2 gender groups, namely male and female. There was a statistically significant difference at p < .05 level in the total score of *Religiousness* for the two gender groups: $F(1, 32\ 187)$, p<.001 and eta square =.004 (no effect) (Pallant, 2010). Despite reaching statistical significance, the actual difference in mean scores between the two groups was very small. The female group (M=16.17) measured higher than the male group (M=15.81).

Table 7: The impact of age on the level of religiousness – one-way analysis of variance

AGE	Mean Std. Deviation				Ν	
18-25yrs	15.61	2.69	2900			
26-35yrs	15.80 2.69 1292			12923		
36-49yrs	16.05	2.85			14045	
50yrs+	16.54	2.62			2311	
Total	15.95	15.95 2.76 32179				
Eta	.080					
Eta Squared		.006	6			
	Sum of Squares	df	Mean S	Square	F	Sig.
Between Groups (Combined)	1566.40	3	522.13		68.89	<i>p</i> <.001
Within Groups	243863.56	32175	7.58			
Total	245429.95	32178				

A one-way analysis of variance between groups was conducted to explore the impact of age on the level of *Religiousness*. Participants were divided into four groups according to their relative ages (Group1: 18-25yrs; Group 2: 26-35yrs; Group 3: 36-49yrs, and Group 4: 50yrs+). There was a statistically significant difference at p < .05 level in the total score, namely *Religiousness*, among the four age groups: F(3, 32, 175), p < .001.

Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. The mean scores obtained increase steadily with the increase in age, with the 18-25yrs group reporting the lowest mean score (M=15.61) and the 50yrs+ measuring the highest (M=16.15); the effect is, however, minute with an eta square of .006 (no effect) (Pallant, 2010).

RELIGION	Mean	Std. Deviation	n	N		
African	15.27	3.20			4 614	
Other	14.61	3.76			960	
Atheism	4.50	3.90			14	
Bahaism	15.27	3.00				
Buddism	10.89	4.29			9	
Christianity	16.17	2.54			25 517	
Hindu	15.23	2.63			572	
Islam	14.72	3.25		172		
Judaism	14.81	3.73		16		
Scientology	11.13	4.69		15		
Total	15.96	2.75			31 900	
Eta		.18	3			
Eta Squared		.03	4			
	Sum of Squares	df	Mean S	Square	F	Sig.
Between Groups (Combined)	8115.64	9	901	.74	123.34	<i>p</i> <.001
Within Groups	233139.70	31890	7.3	7.31		
Total	241255.34	31899				

Table 8: The impact of the specific religion on the level of religiousness - one-way analysis of variance

A one-way analysis of variance between groups was conducted to explore the impact of the specific religion on the level of *Religiousness*. Participants were divided into the nine main religions, as well as a category for "others". There was a statistically significant difference at p < .05 level in the total score, i.e. *Religiousness*, for the ten groups: $F(9, 31\,890)$, p<.001 and eta square =.03 (small effect) (Pallant, 2010).

Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small, except for the Atheism group (M=4.50) compared with the other religions, and the mean score for the total group of 15.96. The Christian group reported the highest mean score (16.17) followed by the African as well as the Bahai religions(15.27).

Tables 9 to 12 report on the proportion of the demographic categories relative to the items *Participation, Religious leadership roles, Frequency of religious participation* and *Religious expression.*

		Religious leade	ership roles	Frequency of religi	ous participation	Religious expression	
RACE		No Leader	Leader	Inactive/sporadic	Active/regular	No Expression	Expression
African	Count	5742	15882	7798	13826	466	21158
	Expected Count	7382.4	14241.6	7947.4	13676.6	420.7	21203.3
	% within RACE	26.6%	73.4%	36.1%	63.9%	2.2%	97.8%
Coloured	Count	1960	1867	1646	2181	80	3747
	Expected Count	1306.5	2520.5	1406.5	2420.5	74.5	3752.5
	% within RACE	51.2%	48.8%	43.0%	57.0%	2.1%	97.9%
Indian	Count	361	599	442	518	7	953
	Expected Count	327.7	632.3	352.8	607.2	18.7	941.3
	% within RACE	37.6%	62.4%	46.0%	54.0%	0.7%	99.3%
White	Count	2940	2878	1959	3859	74	5744
	Expected Count	1986.3	3831.7	2138.3	3679.7	113.2	5704.8
	% within RACE	50.5%	49.5%	33.7%	66.3%	1.3%	98.7%

Table 9: The impact of race on the Participation items - cross-tabulation with Chi square

Total	Count	11003	21226	11845	20384	627	31602
	Expected Count	11003.0	21226.0	11845.0	20384.0	627.0	31602.0
	% within RACE	34.1%	65.9%	36.8%	63.2%	1.9%	98.1%
Pearson C $\chi^{2}(3)$	Chi-Square -	1750.18	<i>p</i> <.001	128.31	<i>p</i> <.001	26.68	<i>p</i> <.001
Likelihood	l Ratio	1709.69	<i>p</i> <.001	126.31	<i>p</i> <.001	30.78	<i>p</i> <.001
Phi		.23	<i>p</i> <.001	.06	<i>p</i> <.001	.03	<i>p</i> <.001
Cramer's	V	.23	<i>p</i> <.001	.06	<i>p</i> <.001	.03	<i>p</i> <.001

There was a significant association between race and *Religious leadership roles*– $\chi^2(3)=1$ 750.18, *p*<.001. The African group reported a higher proportion (73.4%) compared to *participants* not assigned to a *Religious leadership role* (within the African race category). The African group is followed by the Indian group (62.4%), with the White and Coloured groups reporting close to 50% proportional representation (medium effect) (Cramer's V value = .23). There was a further significant association between race and *Religious participation* of $\chi^2(3)=128.31$, *p*<.001.

The frequency, however, of *Religious participation* is very similar between the White (66.3%) and African (63.9%) groups, followed by the Coloured and Indian groups with 57.0% and 54.0% respectively (small effect). The high proportional representation of all the race groups (ranging from 97.9% to 99.3%) on *Religious expression,* contributes to the minor difference, as well as to the small effect size reported ($X^2(3)=26$, p<.001).

		Participation items						
		Religious leade	ership roles	Frequency of religi	ous participation	Religious expression		
OLINDEIX		No Leader	Leader	Inactive/sporadic	Active/regular	No Expression	Expression	
Male	Count	6329	13561	7924	11966	369	19521	
	Expected Count	6801.4	13088.6	7315.5	12574.5	386.2	19503.8	
	% within GENDER	31.8%	68.2%	39.8%	60.2%	1.9%	98.1%	
Female	Count	4678	7621	3915	8384	256	12043	
	Expected Count	4205.6	8093.4	4523.5	7775.5	238.8	12060.2	
	% within GENDER	38.0%	62.0%	31.8%	68.2%	2.1%	97.9%	
Total	Count	11007	21182	11839	20350	625	31564	
	Expected Count	11007.0	21182.0	11839.0	20350.0	625.0	31564.0	
	% within GENDER	34.2%	65.8%	36.8%	63.2%	1.9%	98.1%	
Pearson	Chi-Square - $X^2(1)$	130.48	<i>p</i> <.001	209.56	<i>p</i> <.001	2.04	<i>p</i> =.15	
Continui	ty Correction ^a	130.20	<i>p</i> <.001	209.21	<i>p</i> <.001	1.93	<i>p</i> =.17	
Likelihoo	od Ratio	129.74	<i>p</i> <.001	211.44	<i>p</i> <.001	2.03	<i>p</i> =.16	
Phi		064	<i>p</i> <.001	.081	<i>p</i> <.001	01	<i>p</i> =.15	
Cramer's	s V	.064	<i>p</i> <.001	.081	<i>p</i> <.001	.01	<i>p</i> =.15	
a. Comp	uted only for a 2x2 ta	able						

Table 10: The impact of gender on the Participation items - cross-tabulation with Chi square

There was a significant association between gender and *Religious leadership roles*– $\chi^2(1)=130.48$, *p*<.001. The male group reported a higher proportional representation on *Religious leadership roles* (68.2%) compared with the female group with 62.0% (small effect). A further a significant association between gender and *Religious participation* was reported – $\chi^2(1)=209.56$, *p*<.001.

The frequency of *Religious participation* as opposed to *Religious leadership roles* indicated that females reported a proportional representation of 68.1% with frequent *Religious participation,* compared to the 60.2% of the males (small effect). All the gender groups reported a high proportional representation (ranging from 97.9% to 98.31) on *Religious expression* resulting in the small difference, as well as the small effect size ($X^2(1)=2.04$, p<.001).

AGE		Participation items							
		Religious leadership roles		Frequency of religious participation		Religious expression			
		No Leader	Leader	Inactive/sporadic	Active/regular	No Expression	Expression		
18-	Count	1163	1737	1144	1756	71	2829		
25yrs	Expected Count	991.0	1909.0	1067.1	1832.9	56.1	2843.9		
	% within AGE	40.1%	59.9%	39.4%	60.6%	2.4%	97.6%		
26-	Count	4790	8133	5049	7874	285	12638		
35yrs	Expected Count	4416.2	8506.8	4755.2	8167.8	250.2	12672.8		
	% within AGE	37.1%	62.9%	39.1%	60.9%	2.2%	97.8%		
36-	Count	4456	9589	4951	9094	223	13822		
49yrs	Expected Count	4799.7	9245.3	5168.0	8877.0	271.9	13773.1		
	% within AGE	31.7%	68.3%	35.3%	64.7%	1.6%	98.4%		
50yrs+	Count	588	1723	697	1614	44	2267		
	Expected Count	789.7	1521.3	850.4	1460.6	44.7	2266.3		
	% within AGE	25.4%	74.6%	30.2%	69.8%	1.9%	98.1%		
Total	Count	10997	21183	11841	20339	623	31557		
	Expected Count	10997.0	21183.0	11841.0	20339.0	623.0	31557.0		
	% within AGE	34.2%	65.8%	36.8%	63.2%	1.9%	98.1%		
Pearson Chi-Square - X ² (3)		209.58	<i>p</i> <.001	96.26	<i>p</i> <.001	17.95	<i>p</i> ≤.001		
Likelihood Ratio		212.58	<i>p</i> <.001	97.66	<i>p</i> <.001	18.04	p≤.001		
Phi		.08	<i>p</i> <.001	.06	<i>p</i> <.001	.024	p≤.001		
Cramer's V		.08	<i>p</i> <.001	.06	<i>p</i> <.001	.024	p≤.001		

Table 11: The impact of age on the *Participation* items – cross-tabulation with Chi square

There was a significant association between age and *Religious leadership roles*– $X^2(3)=209.58$, *p*<.001. The proportionality of the *participants* who are in *Religious leadership roles* from the different age categories steadily increases from 59.9%, 62.9%, 68.3% to 74.6% for the 18-25yrs, 26-35yrs 36-49yrs and the 50yrs+ group respectively (small effect) (Cramer's V value=.08). The frequency of *Religious participation* follows the same pattern, with a slight increase from 60.9% for the 18-25yrs group to 69.8% for the 50yrs+ group ($X^2(3)=96.26$, *p*<.001). All the race groups reported a high proportional representation (ranging from 97.6% to 98.4%) on *Religious expression* resulting in the minute difference as well as the small effect size ($X^2(3)=17.95$, *p*<.001).



Source: http://www.sott.net/image/s2/58303/full/Feeling_of_Religiousness.jpg

		Participation items							
RE	LIGION	Religious leadership roles		Frequency of religious participation		Religious expression			
		No Leader	Leader	Inactive/sporadic	Active/regular	No Expression	Expression		
African	Count	1193	3421	2016	2598	110	4504		
	Expected Count	1569.8	3044.2	1692.1	2921.9	87.8	4526.2		
	% within RELIGION	25.9%	74.1%	43.7%	56.3%	2.4%	97.6%		
Other	Count	341	619	440	520	46	914		
	Expected Count	326.6	633.4	352.1	607.9	18.3	941.7		
	RELIGION	35.5%	64.5%	45.8%	54.2%	4.8%	95.2%		
Atheism	Count	10	4	13	1	4	10		
	Expected Count	4.8	9.2	5.1	8.9	.3	13.7		
	RELIGION	71.4%	28.6%	92.9%	7.1%	28.6%	71.4%		
Bahaism	Count	1	10	5	6	0	11		
	Expected Count	3.7	7.3	4.0	7.0	.2	10.8		
	RELIGION	9.1%	90.9%	45.5%	54.5%	0.0%	100.0%		
Buddism	Count	5	4	6	3	0	9		
	Expected Count	3.1	5.9	3.3	5.7	.2	8.8		
	% within RELIGION	55.6%	44.4%	66.7%	33.3%	0.0%	100.0%		
Christianity	Count	9027	16490	8787	16730	441	25076		
	Expected Count	8681.4	16835.6	9358.1	16158.9	485.5	25031.5		
	% within RELIGION	35.4%	64.6%	34.4%	65.6%	1.7%	98.3%		
Hindu	Count	195	377	321	251	3	569		
	Expected Count	194.6	377.4	209.8	362.2	10.9	561.1		
	% within RELIGION	34.1%	65.9%	56.1%	43.9%	0.5%	99.5%		
Islam	Count	70	102	89	83	2	170		
	Expected Count	58.5	113.5	63.1	108.9	3.3	168.7		
	RELIGION	40.7%	59.3%	51.7%	48.3%	1.2%	98.8%		
Judaism	Count	1	15	9	7	0	16		
	Expected Count	5.4	10.6	5.9	10.1	.3	15.7		
	% within RELIGION	6.3%	93.8%	56.3%	43.8%	0.0%	100.0%		
Scientology	Count	10	5	13	2	1	14		
	Expected Count	5.1	9.9	5.5	9.5	.3	14.7		
	% within RELIGION	66.7%	33.3%	86.7%	13.3%	6.7%	93.3%		
Total	Count	10853	21047	11699	20201	607	31293		
	% within	10000.0	21047.0	11099.0	20201.0	007.0	31293.0		
	RELIGION	34.0%	66.0%	36.7%	63.3%	1.9%	98.1%		
Pearson Chi-Square - X ^e (9)		188.55	p<.001	339.21	<i>p</i> <.001	115.00	<i>p</i> <.001		
Phi		.08	p<.001 p<.001	.10	p<.001	.06	p<.001		
Cramer's V		.08	<i>p</i> <.001	.10	<i>p</i> <.001	.06	<i>p</i> <.001		

Table 12: The impact of religion on the Participation items - cross-tabulation with Chi square

There was a significant association between religion and *Religious leadership roles*- $X^2(9)=188.55$, *p*<.001. The religional groups that reported the highest proportional

representation on the *Religious leadership roles*, are Judaism (93.8%) followed by Bahaism (90.9%). The mean frequency across the religional groups is 66%, with the lowest percentage reported for Atheism (28.6%) and 33.3% for the Scientology groups. The highest frequency of *Religious participation* was reported for the Christian *participants* (65.6%) followed by the African religions (56.3%). The lowest proportional representation on this aspect was reported for Atheism (7.1%) and for Scientology (13.3%) (X^2 (9)=339.20, *p*<.001). All the *Religion* groups reported a high proportional representation on *Religious expression*, resulting in the small difference, with only 71.4% of the Atheism *participants* indicating that they are expressing their religion compared to the 98.1% of the total sample (X^2 (9)=115.00, *p*<.001).

Conclusions

This study was based on an interdisciplinary paradigm for religious research, with the manifestation of inter-disciplinarity in terms of content (the specific field being the psychology of religion, which traditionally represents two distinct disciplines), as well as the methodology (entailing a true positivistic approach).

This study, which is well represented in terms of the South African population (N = 32413). utilised an existing instrument (Religious survey) (Joubert and Grobler, 2013) which was reconfigured to measure the construct *Religiousness*. It consists of two factors, namely *Salience* (referring to the importance people attach to religion in general, and in the various spheres of life, namely work life, family life and wellness), and Participation (referring to the individual's participation in religion, including the involvement in religious leadership roles, the frequency of participation, as well as religious expression). The instrument reported acceptable technical properties, including acceptable internal consistencies (Cronbach alpha and inter-item correlation coefficient). The participants reported high scores on all Salience (8) and Participation (3) items. Overall, religion was seen as an important aspect in the lives of the participants, and they displayed a positive attitude towards religion; it plays an important part in their family life, wellness, work performance and their relationships with others. The overall participation in religious activities, including the involvement in *Religious leadership* roles, the frequency of *Religious participation*, as well as the extent of *Religious expression*, measured high compared to the mean score of the scale utilised. Contrary to the general notion of secularisation, the total level of *Religiousness* measured high, which is an indication that the participants generally believe in a higher power and have positive attitudes towards institutional/religion-specific practices. They also value religion as an important aspect of their life.

Finally, one of the objectives of this study was to establish whether there were differences between the race, age, gender and religional groups in terms of religiousness. Although statistically significant differences were reported between the four race groups, the two gender groups, the four age categories, as well as the groups representing different religions (p<.001), this had a relatively small effect, which is an indication of the comparative strength of the relationship. As a result of this weak relationship of the demographic variables with the level of religiousness, no real inferences were made, except for the fact that a high level of religiousness is a universal phenomenon, regardless of race, gender, age and the specific religion.

Limitations

This study had some shortcomings which should be acknowledged. A cross-sectional design was used, with the result that no causal relationship between the variables could be determined over time. The causal relationship was interpreted at a specific point in time, without analysing the effect over time. The measurements resulted from self-reporting, which could give rise to method-variance, especially since the results were not verified using objective criteria. This study should be duplicated and even enhanced in the broader South African population and by means of more traditional methods related to religious studies.

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