

# THE RELATIONSHIP BETWEEN RELIGIOUS ORIENTATION AND PERCEIVED RISK OF HIV INFECTION IN MEMBERS OF THE MUSLIM COMMUNITY IN JOHANNESBURG, SOUTH AFRICA

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## ABSTRACT

It has been suggested that Muslim individuals have significantly lower prevalence rates of the Human Immunodeficiency Virus (HIV) infection than other religious groups around the world. This is attributed to the strict adherence of Islamic laws that are seen to inhibit the disease. Therefore, this study sought to investigate the possibility of an association between religious orientations and the way in which this influences Muslim individuals' perceptions of the likelihood of contracting the HIV infection. A questionnaire consisting of a religious orientation scale as well as a perceived risk scale was administered to Muslims in Lenasia, South of Johannesburg and surrounding areas. Results revealed correlations between intrinsic religious orientation and perceived risk. This remained the case after controlling for the age, gender, marital status and level of education of the participants. This means that the more Muslims rely on

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religion for guidance and religious tenets for personal gratification, the greater their awareness of their perceived risk to HIV.

**Keywords:** AIDS; HIV, Islam, religious orientation, risk, spirituality

Since its discovery, HIV and AIDS have been a topic that is extensively researched within different contexts around the world. Most of the literature revealed a central premise— although the disease does not discriminate against colour or creed, the Muslim world purports a differing view intimating that it is not affected by the disease. There seems to be the inherent belief amongst the global Muslim community that the HIV and AIDS virus has nothing to do with them (Kelley & Eberstadt, 2005; Rai, Warriach, Ali & Nerurkar, 2007). Muslims follow the religion of Islam, which is based on the Quraan (Holy Book of Islam) and the Shariah (teachings of the Prophet Muhammed p.b.u.h). Both the Quraan and Shariah promote certain laws and ways of living which impact directly on behaviours in relation to the contraction of HIV and AIDS. More specifically, it has been hypothesized that individuals of the Muslim faith will have a much lower prevalence rate of infection than of other religious groups based on the fact that the behavior prescribed for a Muslim by the Quraan and Shariah would ensure that this group is less vulnerable than other groups.

Gray (2004) set out to test this hypothesis, drawing on 38 Sub-Saharan African countries and including over 1 million people in his analysis. The results of his study concluded in support of this hypothesis. Devotees of the Islamic faith are obliged to adhere to strict codes of conduct. These include the prohibition of sexual relations outside the sanction of marriage, the prohibition of alcohol consumption and drug use, the act of circumcision in Muslim males and general genital hygiene (Balogun, 2010; Gatrad & Sheikh, 2004; Gray, 2004). A Muslim who does not adhere to the laws of Islam is not considered a “good person and a good Muslim” (Beckmann, 2010). Similar attitudes exist amongst Islamic governments and religious leaders as they view people inflicted with the HIV and AIDS disease as a “punishment from Allah” for the violation of religious laws (Abu-Moghli, Nabolsi, Khalaf & Suliman, 2010, p.658). HIV and AIDS are thus attributed to people’s sins of sexual promiscuity and immorality in the Muslim world (Balogun, 2010, p. 460). Most Muslim countries like Nigeria, Tanzania (Zanzibar) and the Arab world all hold this position on HIV and AIDS, thus explaining their chosen secrecy and hesitance to confront the disease. While open and public campaigns for condom use, for instance, may contribute to HIV prevention, the Muslim world sees this as encouraging unlawful premarital sexual relations (Balogun, 2010). Thus this study explored the relationship between religious orientation and perceived risk of HIV infection in members of the Muslim community in Johannesburg, South Africa.

## RELIGIOUS ORIENTATION

Religion was defined by Lenski (1961) as “a system of beliefs about the nature of the force(s) ultimately shaping man’s destiny, and the practices associated therewith, shared by the members of a group” (p.298). The present study is not concerned with religion as an institution, but with *religiosity*—its individual representation. The multi-dimensional nature of religiosity has been conceptualised in many ways. Together with behaviours, deeds, actions and institutional affiliations are also ‘motives’ which are not independent of religiosity itself (Flere, Edwards, & Klansjek, 2008). This notion underpins Allport’s theory of *religious orientation*. Beginning with the concepts of immature and mature religiosity, he arrived at the typologies of intrinsic and extrinsic religiosity (Allport & Ross, 1967). Extrinsic religiosity is seen in individuals who turn to God, but without turning away from the self (Laher, 2007). Thus, extrinsic individuals use religion to fulfil self-serving needs. Conversely, an intrinsic religious orientation involves religion itself as a motive and other needs are accommodated according to religious views and values. Individuals consider religion as an end in itself and internalise these religious values, using them as guidance throughout their lives (Laher, 2007). Allport and Ross (1967) developed the Religious Orientation Scale (ROS) to measure these religious orientations.

One of Allport’s earliest critics, Batson argued that the “dichotomy of extrinsic and intrinsic leaves no room for the existential aspect of personal religion” (Ji & Ibrahim, 2007, p.190). He asserted that there is another group of people who value “religious doubts, tentativeness and openness in conjunction with their religious life” (Ji & Ibrahim, 2007, p.190). This is an additional dimension to religious orientation that is known as ‘quest’ religion. Quest was defined as a seeking, doubting and “unfinished” religiosity that is linked to the healthy personality type (Flere, Edwards & Klansjek, 2008).

Ji and Ibrahim (2007) argue that most studies using these scales have been largely applied to Christian samples taken primarily from English-speaking American, British and Canadian populations. Therefore the need arose to assess the cross-cultural validity of the ROS by extending the scale to other religions— one such religion being Islam. In keeping with the infrequency of the study of Islamic religion relative to religious orientation, Ji and Ibrahim (2007) conducted a study to address this problem and took it a step further— the development of an Islamic Doctrinal Orthodoxy measure. Their rationale was based on the thesis of Christian doctrinal orthodoxy having generated substantial research as well as having developed psychological tests that have measured the degree to which individuals commit to their religious doctrinal beliefs. However, this has not been done for those affiliated to Islam. They intended to fill this research gap by applying the

three dimensions of religious orientations (extrinsic, intrinsic and quest) to Islamic religion. Their aim was to measure whether Allport and Ross's (1967) scales of intrinsic and extrinsic religiosity and Batson's scale (1993) of quest religiosity are psychometrically adequate and useful for the application to Islamic religiosity. In addition, a psychological inventory of the Islamic Orthodoxy Scale was developed. Ji and Ebrahim (2007) combined these four dimensions in their revised Religious Orientation Scale and it is this revised scale which was used for the purposes of this study.

## PERCEIVED RISK TO HIV AND AIDS

A single question has often been deemed adequate to assess perceived risk to HIV – “Do you think your chances of getting HIV are small, moderate, great or no risk at all?” (Bradley, Tsui, Hindin, Kidanu, & Gillespie, 2011, p.1043). However, people may feel at risk of HIV infection for many reasons including both high-risk behaviour and anxiety associated with heightened awareness of HIV as mentioned above. For the purposes of this study, perceived risk is defined as one's personal assessment of the possibility that one will become infected with HIV based on knowledge about the disease and personal behaviour (Bradley et al., 2011). This should not be confused with perceived vulnerability, which is one's felt susceptibility to HIV infection as this does not correlate with behaviour. A study done by Bradley et al., (2011) has produced findings that these two concepts should in fact be measured separately. The current study is interested in the ways in which Muslim individuals perceive themselves to be at risk of contracting HIV based on their religious orientations. Thus the perceived risk scale developed by Bradley et al., (2011) was used to measure risk in this study.

## RELIGIOUS ORIENTATION AND HIV AND AIDS

Religiosity in terms of its orientation is deemed relevant in attempting to explain how various groups of people conceptualise life-threatening diseases such as HIV and AIDS. Previous research has shown that individuals' attitudes towards HIV and AIDS in general may be influenced by their religious beliefs (Crawford, Allison, Robinson, Hughes, & Samaryk, 1992). Related to religious orientation, however, individuals with high scores on the extrinsic scale are predicted to have more negative attitudes towards HIV patients. Therefore, based on the stigma attached to HIV and

AIDS patients, and the humiliation that they have to endure, extrinsically religious persons should have negative attitudes. Furthermore, Reed and Meyers (1991) posit that intrinsic religiosity is related to more conservative sexual attitudes and extrinsic religiosity is associated with more liberal sexual attitudes. Similarly in adolescents, intrinsically religious individuals who show high levels of religious behaviour have the lowest levels of premarital sexual activity patterns (McMillen, Helm & McBride, 2011). This implies that religious orientation may protect young people from sexual risk-taking. A study done by Haerich (1992) purports that the more intrinsically oriented individuals depend on religion and this will result in an increased religious influence on their patterns of sexual behaviour. Conversely, extrinsic individuals will use sexual intimacy as a means of personal comfort and security, leading to a positive relationship between extrinsic religiosity and sexual promiscuity (Haerich, 1992).

The stance of the Muslim world regarding HIV is gradually shifting from one of denial and disregard to understanding and tolerance. No study has dispelled conceptions around the assertion that the prevalence of HIV and AIDS in Muslim communities around the world is substantially lower than others. In addition, this is primarily acknowledged due to the various Islamic laws that work to inhibit the disease.

## METHODS

### Sample

Using non-probability, convenience sampling, a total of 100 responses were obtained using self-administered questionnaires in and around predominantly Muslim areas. Participants were recruited on a voluntary basis. Since the researcher lives in Lenasia, a predominantly Muslim area, questionnaires were mainly distributed in Lenasia and surrounding areas in the South of Johannesburg. Other participants were recruited from areas in central Johannesburg in the vicinity of Fordsburg and surrounding areas. The age of the participants ranged from 18 to 72 years with a mean age of 32.84 (SD=13.03). The characteristics of the sample as shown in Table 1 illustrate that this sample was predominantly Indian (n=95%) and consisted of 32 male and 68 female participants. More than half of the sample had some form of tertiary education (64%), were married (57%), employed (64%) and lived in Lenasia, South of Johannesburg (52%).

**Table 1:** Demographic information of sample

Variable		Frequency (n)	%
Gender	Male	32	32.0
	Female	68	68.0
Race	Indian	95	95.0
	Coloured	1	1.0
	Asian	3	3.0
Marital Status	Single	41	41.0
	Married	57	57.0
Level of Education	Secondary	32	32.0
	Tertiary	64	64.0
Place of Residence	Lenasia	52	52.0
	Johannesburg	19	19.0
	Missing	5	5.0

## Instruments

A questionnaire consisting of a demographics section, Ji and Ibrahim's (2007) religious orientation scale, and a perceived risk scale was used (Bradley et al., 2011). Participants were asked to provide their age, gender, race, marital status, education and place of residence. This information was used for descriptive purposes only.

## Religious Orientation Scale

To measure the various religious orientations, Ji and Ibrahim (2007) combined eight items from the Batson Religious Life Inventory and 12 items from the Allport-Ross Religious Orientation Scale. They adapted items from these scales to suit an Islamic population. For example, words like *church* and *the Bible* were replaced with *mosque* and *the Quraan*. Ji and Ibrahim (2007) also added an Islamic Orthodoxy Scale which measures the degree to which individuals commit to the basic Islamic beliefs of Allah, the Prophet Mohammed (pbuh), the Qur'aan, the day of judgment and the five pillars of the Islamic lifestyle. All items are responded to on a 5-point Likert response format from 'Strongly Disagree' (1) to 'Strongly Agree' (5). Reliability estimates were .84 and .90 for intrinsic religiosity and doctrinal orthodoxy composite scores respectively. Extrinsic religiosity scores had internal consistency estimates of .69 and .76. Internal consistency reliability coefficients of .88 for the Intrinsic scale, .79 for the Extrinsic scale, .68 for the Quest scale, and .77 for the Doctrinal scale were found.

## Perceived risk scale

Perceived risk was measured using a scale developed by Bradley et al. (2011). The scale consists of 15 items on a four-point Likert scale. Participants describe their chances of becoming infected with HIV from four options: 1=“small”, 2=“moderate”, 3=“great” or 4=“no risk at all”. A Cronbach’s alpha of .89 was obtained among the Ethiopian sample in the Bradley et al. (2011) study. High construct validity is also reported in Bradley et al. (2011). In this study, item 7 (*“in your daily life are you more likely to contract HIV or TB?”*) was not appropriately answered by most participants and decreased the reliability of the scale. Thus perceived risk was calculated using only 14 items. The 14-item scale yielded a Cronbach’s alpha coefficient of .90.

## Procedure

Ethics clearance for this study was obtained from the Human Research Ethics committee (HREC Non-Medical) of the University of the Witwatersrand (Protocol no. HONS/12/011 IH). Questionnaires were distributed to willing participants in the Johannesburg and Lenasia areas. The data collected was then subjected to statistical analysis using the SPSS programme (Version 19.0).

## Data Analysis

Data was analysed using descriptive statistics – frequencies for nominal variables (categorical) such as gender, and means, standard deviations, minimum and maximum values for the interval variables. Skewness coefficients were used to analyse normality of the variables. As the variables were not normally distributed, non-parametric correlational techniques were necessary. Hence Spearman’s Correlation Coefficients was used to analyse the relationships between the religious orientation variables and perceived risk.

## RESULTS

### Perceived risk of contracting HIV in the Muslim community

Table 2 shows the means, standard deviations, minimum and maximum values and the frequency counts of the Perceived risk scale. Scores are within the range but are negatively skewed hence the use of non-parametric Spearman’s correlation coefficients. The skewness is also clearly evident from the responses to each item. The majority of the sample responded “No Risk At All” for all of the 14 items. However, items 7 and 12 showed a significantly lower response rate in the “No Risk at All” category than the rest of the items. These items asked *“How likely is it that you have ever been exposed to HIV (at any time in the past)?”* and *“How likely is it*

that you have been ‘caught’ by HIV because of being cut with a sharp instrument?’” respectively. As indicated in Table 2, 19 and 29 participants considered themselves as having a “Small” chance of being exposed to both situations.

**Table 2:** Descriptive statistics for the perceived risk scale

Risk Item	N	Frequency				Min	Max	̄X	SD	Skewness
		Small	Moderate	Great	No Risk					
1	95	10	4	2	79	1	4	3.58	.985	-2.068
2	95	7	4	-	84	1	4	3.69	.864	-2.597
3	95	7	1	1	86	1	4	3.75	.812	-3.038
4	97	7	3	3	84	1	4	3.69	.846	-2.623
5	96	8	8	7	73	1	4	3.51	.962	-1.767
6	97	14	8	2	73	1	4	3.38	1.131	-1.417
7	97	19	7	3	68	1	4	3.24	1.231	-1.116
8	94	10	3	3	78	1	4	3.59	.977	-2.116
9	91	4	4	3	80	1	4	3.75	.739	-2.931
10	87	2	2	6	77	1	4	3.82	.581	-3.601
11	98	4	3	2	89	1	4	3.80	.688	-3.394
12	97	29	2	3	63	1	4	3.03	1.373	-.772
13	96	10	1	1	84	1	4	3.66	.938	-2.457
14	94	9	2	2	81	1	4	3.65	.924	-2.413
<b>Risk (Total)</b>	100	-	-	-	-	0	56	47.54	11.716	-2.000

## Descriptive Statistics for the Religious Orientation Scales

Table 3 summarises the minimum and maximum values, mean scores, standard deviations and skewness of the Religious Orientation scales. The Intrinsic scale had a mean score of 18.9700 (SD=1.97691); the Extrinsic scale had a mean of 33.18 and a standard deviation of 8.432; the Doctrinal scale with a mean of 39.6600, SD=1.12115 and the Quest scale with a mean score of 31.0800, SD=7.02762. Their minimum and maximum values were 11 and 20; 14 and 55; 34 and 40 and 18 and 53 respectively. As shown in Table 3, participants strongly agreed to both Doctrinal and Intrinsic religious orientations. They showed mixed responses regarding extrinsic values and contrary to Doctrinal and Intrinsic response patterns, participants strongly disagreed with most of the items on the Quest scale.



**Table 3:** Descriptive statistics for the IRO, ERO, DO and Q scales

Scale	Item	N	Frequency (n=100)					Min	Max	x	SD	Skewness
			SD	D	N	A	SA					
<b>IRO</b>	<b>IRO1</b>	<b>100</b>	-	<b>1</b>	<b>1</b>	5	93	2	5	4.90	.414	-5.041
	IRO2	100	-	-	8	19	73	3	5	4.65	.626	-1.600
	IRO3	100	-	-	7	16	77	3	5	4.70	.397	-1.853
	IRO5	100	-	-	9	10	81	3	5	4.72	.621	-2.057
	TOTAL	100	-	-	-	-	-	11	20	18.9700	1.97691	-2.175
<b>ERO</b>	<b>ERO1</b>	<b>88</b>	<b>2</b>	<b>5</b>	<b>19</b>	<b>18</b>	<b>44</b>	<b>1</b>	<b>5</b>	<b>4.10</b>	<b>1.073</b>	<b>-.951</b>
	ERO2	83	6	2	20	21	34	1	5	3.90	1.185	-.980
	ERO3	96	32	30	18	8	8	1	5	2.27	1.244	.808
	ERO4	83	24	24	22	6	7	1	5	2.37	1.217	.656
	ERO5	98	51	21	10	13	3	1	5	1.94	1.200	1.034
	ERO6	96	21	21	22	18	14	1	5	2.82	1.361	.149
	ERO7	96	51	22	9	9	5	1	5	1.91	1.215	1.227
	ERO8	99	39	24	16	13	7	1	5	2.24	1.294	.716
	ERO9	99	38	24	11	16	10	1	5	2.35	1.395	.631
	ERO10	100	12	20	13	28	27	1	5	3.38	1.384	-.364
	ERO11	99	6	13	10	30	40	1	5	3.86	1.254	-.901
	ERO12	99	4	8	12	32	43	1	5	4.03	1.120	-1.128
	TOTAL	100	-	-	-	-	-	14	55	33.18	8.432	.071
<b>DO</b>	DO1	99	-	-	1	5	93	3	5	4.93	.295	-4.546
	DO2	100	-	-	-	-	100	5	5	5.00	.000	-
	DO3	100	-	-	-	1	99	4	5	4.99	.100	-10.000
	DO4	100	-	-	1	3	96	3	5	4.95	.261	-5.775
	DO5	100	-	-	1	3	96	3	5	4.95	.261	-5.775
	DO6	100	-	-	-	7	93	4	5	4.93	.256	-3.422
	DO7	100	-	-	-	1	99	4	5	4.99	.100	-10.000
	DO8	100	-	-	-	3	97	4	5	4.97	.171	-5.595

	TOTAL	100	-	-	-	-	-	34	40	39.6600	1.12115	-3.680
Q	Q1	92	25	14	23	17	13	1	5	2.77	1.399	.123
	Q2	97	36	21	21	15	4	1	5	2.28	1.231	.510
	Q3	99	47	30	10	7	5	1	5	1.92	1.149	1.273
	Q4	99	57	26	12	2	2	1	5	1.65	.918	1.574
	Q5	97	41	28	13	10	5	1	5	97	2.07	1.201
	Q6	95	24	17	31	13	10	1	5	2.66	1.285	.228
	Q7	96	30	24	23	14	5	1	5	2.38	1.216	.459
	Q8	100	35	26	12	16	11	1	5	2.42	1.394	.579
	Q9	100	19	13	8	22	38	1	5	3.47	1.560	-.513
	Q10	98	10	15	12	25	36	1	5	3.63	1.380	-.631
	Q11	99	11	12	24	24	28	1	5	3.46	1.320	-.452
	Q12	100	11	21	34	14	20	1	5	3.11	1.262	.066
	TOTAL	100	-	-	-	-	-	18	53	31.0800	7.02762	.358

### Relationship between Religious Orientation and Perceived risk

To examine the relationship between Religious Orientations and perceived risk of contracting HIV, *Spearman's Rho* correlations were calculated as shown in Table 4. A significant relationship was found was between IRO and perceived risk. This was a positive, moderate correlation ( $r=.441$ ;  $p=.000$ ;  $r^2=.194$ ). The remaining three scales i.e. ERO, DO and Q yielded non-significant results.

**Table 4:** Correlations between the Religious Orientation Scale and Perceived Risk Scale

	Spearman's correlation	IRO	ERO	DO	Q
RISK	$r_s$	.441	.051	.135	-.022
	P	.000*	.615	.180	.829
	$r^2$	.194	-	-	-

\*  $p<0.05$ ,  $n=100$

## DISCUSSION

The aim of this study was two-fold: 1). To ascertain the extent to which the Muslim community in Johannesburg perceives themselves to be at risk of becoming infected with HIV and 2). To investigate the possibility of an association between religious orientations and the way in which this influences Muslim individuals' perceptions of the likelihood of contracting HIV.

### Perceived risk of contracting HIV in the Muslim community

The findings of this study revealed that the Muslim population (in Lenasia and some surrounding areas in Johannesburg) do not perceive themselves to be at risk of contracting HIV. As an insider to this area, the researcher is familiar with the dynamics inherent within the community as she is part of it. Therefore, some plausible explanations for this could be that the sample was predominantly Indian and from Lenasia. These results were expected given the conservative nature of the Indian population and because, as shown in the previous section, the Muslims in this sample aligned themselves strongly with Intrinsic and Doctrinal religious beliefs.

However, as noted in the results section, items 7 and 12 asked: "*How likely is it that you have ever been exposed to HIV (at any time in the past)?*" and "*How likely is it that you have been 'caught' by HIV because of being cut with a sharp instrument?*" respectively. Participants responded significantly lower in the "No Risk At All" category as they indicated a "Small" chance of being at risk to both situations. It should be emphasized that both these questions have no sexual link and this implies that individuals in this sample only perceive themselves to be at risk for contracting the disease as a result of external risk factors. This concurs with the findings presented in the literature review of Muslims and the Muslim world not perceiving themselves to be at risk.

### Perceived risk of contracting HIV and its relationship to Religious Orientations in the Muslim community

Results indicated that the intrinsic religious orientation shared a relationship with perceived risk, although these were moderately correlated. The implication is that strong religious views and adherence to Islamic values plays a role in the way in which Muslim individuals personally assess themselves to be at risk of becoming infected with HIV. Thus, more intrinsic individuals tended to have a greater perception of risk. This may be accounted for by Reed and Meyers (1991) suggestion that intrinsically-inclined individuals have more conservative sexual attitudes. The more they depend on their religion for guidance and choose to abide by religious principles for personal gratification, the higher the influence of religion on their patterns of sexual behaviour.

Moreover, individuals who score higher on measures of religiousness are less likely to engage in risky behaviours that may put them at risk of contracting HIV. These risky behaviours include premarital and extramarital sexual intercourse, alcohol and drug consumption and unwanted pregnancies resulting from sexual relationships outside the sanctions of marriage. Islam places great emphasis on the value of chastity, prohibiting sexual intercourse outside marriage. Adultery, homosexuality and the use of intoxicants are also forbidden (Hasnain, 2005). Therefore, individuals who are intrinsic are considered more religious and diligently subscribe to these teachings. Furthermore, religious individuals see their body as a 'temple' of which spirituality, modesty, and sexual morality are enshrined. In Islam, women are expected to adhere to a particular dress code in which only their hands, face and feet may be exposed in public (Winter & Williams, 2002). These factors may lead to a greater awareness of intrinsic individuals' perceptions of risk to the HIV infection due to their familiarity and appreciation of the ways in which they are protected by their religion from the transmission and contraction of HIV.

## CONCLUSION

The results of this study have produced mixed findings in relation to current research literature on the perceived risk of Muslim individuals and its association to Religious Orientation. Indeed, Muslim individuals in Johannesburg (predominantly Lenasia) do not perceive themselves to be at risk of contracting HIV. This finding is in line with research literature (Gray, 2004; Obermeyer, 2006; Rai et al., 2007). They may however perceive themselves as having a small chance of contracting the disease through external risk factors such as sharp, contaminated instruments. Furthermore, their Intrinsic Religious inclination proved to have an association to the way in which they perceive themselves to be at risk of becoming infected with HIV. Whilst useful, these findings are based on a small sample in a specific area of South Africa. Hence it is recommended that future studies be conducted with a larger and more representative.

It is possible that the scale used to measure religious orientation was not appropriate. Some of the questions were not correctly phrased and produced some confusion for participants. For example, an item in the Quest subscale was problematic as participants were unsure on the meaning of the statement. Other questions were irrelevant to the practices of South African Muslims especially pertaining to females in this study. This mainly pertained to the extrinsic subscale in which statements regarding mosque attendance and religious services were made. This was a problem because most women in the sample do not go to mosque as this is predominantly

a male obligation in the community. Hence other studies can incorporate other scales together with the one used in the study to ensure validity of the measure. The Religious Commitment Inventory-10 by Worthington et al., (2003) which measures the degree to which individuals adhere to religious values, beliefs and practices and apply them in their daily lives may be used in future studies.

Odoms-Young (2008) found that religious people tend to judge themselves and others based on spiritual characteristics. Hence studies can be expanded to consider the concept of spirituality (Laher, 2007). Spirituality occurs on a more individual and experiential level, whereas religiosity occurs on a more social level and includes shared belief systems that encompass cognitive and cultural factors (Pargament, 1997).

The impact of acculturation would yield an interesting investigation in this regard as South African Muslims are also integrated within South Africa's diverse society. Acculturation can occur at both individual and community levels and may influence the extent to which cultural differences exist or are expressed (Eaton & Louw, 2002). Moosa (2009) also alluded to the prospect of acculturation as he acknowledged the integration of local Muslims into the larger community. This would be a valuable contribution in a study conducted with a larger and more representative sample.

Additionally, qualitative approaches should be employed to unpack the reasons behind the hesitance to address this topic, considering the modernisation of the Muslim population and the consequent expectation that the Muslims of today are somewhat more open-minded and expressive. This could be done by conducting focus groups or due to the nature of this subject, individual interviews may be more useful to ascertain the possible reasons behind the males of this study perceiving themselves to be at high risk of contracting HIV. This may give rise to other aspects not examined in this study such as divorce, remarriage, polygamous marriages and other social and psychological issues that may contribute to this. The sensitive nature of the topics to be addressed might have a stigma attached to them which has the potential to influence participation and non-participation in various ways. For example, if sexual promiscuity is viewed as a sin, participants may not feel comfortable discussing this in an interview.

This study further affirmed that the nature of this topic in this predominantly Indian-Muslim community is still a "taboo" one and this may stunt our intervention options and support structures for newly infected Muslims in South Africa. There is a need for psycho-education in this community. The rate of HIV and AIDS may not be as prevalent as it is in other communities but it is a reality and the community needs to learn to acknowledge and understand the disease and the risks associated with it.

## BIOGRAPHICAL NOTE



**AQEELA MAHOMED** is currently completing her Masters in Clinical Neuropsychology at UCT. She is passionate about cognitive rehabilitation in the pediatric sector in particular and her masters' research is focused on the rehabilitation of executive functioning following pediatric traumatic brain injury. Aqeela is dedicated to the implementation of successful rehabilitation interventions for the remediation of cognitive deficits experienced by South African children.



**SUMAYA LAHER** is an Associate Professor in the Department of Psychology, University of the Witwatersrand. Her research interests are in the field of psychological assessment, particularly personality theory and assessment, cross-cultural issues in relation to mental health and illness and the interface between religion and psychology.

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