Effect of religious orientation and social support on health locus of control among undergraduates of University of Jos

Ojih, Emmanuel Eche[1], Dashit, Samson Ishaya[2], Tanko, TsokaDanbaba[3]

[1]Relief & Hope Foundation
#7A Tafawa Balewa Street,
P.O. Box 1465, Jos, Plateau State
Email:ojiheche@gmail.com Phone: 08034589883

[2]Email: samishaya2003@yahoo.com Phone: 08036331865
[3]Email: autatsoka57@yahoo.com Phone: 08024778679

[2&3]Department of Social Science,
Kaduna Polytechnic, Kaduna.

Abstract

This study examined the effect of religious orientation and social support on health locus of control among undergraduates in Nigeria. It was hypothesized that: (1) there will be a main effect of religious orientation on health locus of control, (2) that there will be a main effect of social support on health locus of control, and (3) that there will be an interaction effect of religious orientation and social support on health locus of control. One hundred and fifty-seven (157) participants, with 76 males and 81 females with a mean age of 30.04 years and a standard deviation of 9.2 participated in this study. The study employed a 2x2 factorial design. Using the analysis of variance (ANOVA), results showed that there was a significant main effect of religious orientation on health locus of control, $F(1, 153) = 10.010$, $p = 0.002$ $(p<.05)$; however, the study found no significant main effect of social support, $F(1, 53) = 0.306$, $p = 0.581$ $(p>.05)$; and no significant interaction effect of religion and social support, $F(1, 53) = 1.013$, $p = 0.316$ $(p>.05)$. It was therefore recommended among others, that health care providers and school administrators shouldcreate more religious awareness which is meaningful and related to their lives.

Keywords: Religious orientation, Social support, Health locus of control, Intrinsic, Extrinsic.

INTRODUCTION

Social relationships serve important social, psychological, and behavioural functions across the lifespan. More importantly, both the quantity and quality of social relationships have been reliably related to morbidity and mortality. An important issue concerns the potential mechanisms responsible for the epidemiological links between social relationships and such long-term health consequences. Social support affects health-promoting behaviours. The members of a social support network who are sources of positive and negative feelings may have detrimental physiological consequences on health (Richmond & Ross 2008). Social support has been viewed as integral to health promotion because of its assistance in reaching an individual's physical and emotional needs, as well as buffering the effects of stressful events on the quality of life (Bomar, 2004). According to Pender (1996), social support is identified as "a subjective feeling of belonging, being loved, esteemed, valued, and needed for oneself, not for what one can do for others".

Everywhere, the quest for health easily shades into issues of morality and religion because the latter plays a significant aspect of social life. An increased interest in the effects of religion on mental health and psychological well being is apparent in psychological literature. Longitudinal studies show that regular religious attendance led to much less psychological distress and depression in different spheres of life (Uchino, 2009).

Religiosity plays a major part in the life of an individual. It can provide hope in despair. In daily life, people report that they are able to experience deep peace even in the midst of mental distress, such as psychosis, prejudice, self-esteem and intelligence. There are some studies which report that religion is also associated with some indicators of poor mental health (Stanke, 2004). The influence of religion on the lives of people cannot be overemphasized. A Cursory observation of the Nigerian society shows that religion plays a central role in our daily lives and functioning. There also seems to be a breakaway from orthodox / traditional religious groups, to those that offer financial independence, fullness of health and so on. The popularity of new spiritual groups offering a variety of pathways to transcendence calls for a new perspective on the part of observers attempting to discern guidelines for continuing healthy psychological development through life.

Health is the main aspect of human life. Although a healthy life is the desire of everyone, the reality is that everyone is not healthy. An essential aspect of preserving health is to identify the factors that enable or prevent people from making healthy choices in either their life-styleor their use of medical care and treatment, the underlying assumption being that

behaviour is best understood in terms of an individual's perception of their social environment. Sheeram and Abraham (1996) categorized the range of behaviours that has been examined using health belief model into three broad areas: preventive health behaviour, sick role behaviour and clinic use. In this type of model, individual beliefs offer the link between socialization and behaviour. When individuals make decisions in relation to their health, they weigh up the potential risks or benefits of a particular behaviour. They do so in a way that is influenced by their immediate physical environment, social rootedness, life-style, religious belief and their whole outlook on life generally (Orubuloye, 2003).

Many hypotheses have been proposed to explain the phenomenon of health behaviour. One of these is the health belief model. The health belief model postulates that health behaviours are expressions of health beliefs. The model is designed to predict a person's health behaviours, which include the use of health services, behaviours that justify an intervention strategy / program, as well as alteration of maladaptive behaviours. The health belief model components include the person's own perception of their susceptibility to disease, perceived likelihood of contracting a disease, perceived benefits of care, perceived barriers to preventive behaviour, and internal and external stimuli that enable appropriate health behaviours (Rosenstock,

1996). In other words, the health belief model predicts health-related behaviours in terms of certain belief patterns. Based on this model, adherence to a medical regimen for example, depends on the individuals' belief about certain aspects of his/her illness. Therefore, the person's belief with regards to perceived susceptibility to illness, severity of illness, and the benefits and risks of adherence, play an important role in whether or not an individual would comply with a treatment regimen.

Rotter (1966) defined locus of control as a person's belief about the location of controlling forces in their lives. It is believed that human behaviour is caused by many factors, but people differ in their beliefs about what causes it. Some people believe that events in their lives are caused by their own attitudes and behaviour, while others believe that they are controlled by forces outside themselves. This belief as the cause of behaviour or events has yielded two dimensions of location of causality, hence we have an internal dimension and an external dimension.

The internal dimension seems to imply an active and controlling approach to life. An internally-oriented person is one who approaches situations with a direct and alert posture. The individual believes that events in their life are under their own control and that what happens to them results from their own actions, personality characteristics, innate predispositions, and abilities.

Externally-oriented persons, on the other hand, believe that events in their lives are controlled by external forces, such as fate, luck, God, or imperatives that are beyond their control. Internally-oriented individuals feel effective in pursuit of their goals, and are ready to take responsibility for the outcome of their actions, whereas externally-oriented individuals believe that efforts do not necessarily result in reward. Moreover, individuals who tend to perceive reinforcement as contingent upon their own behaviours, are more likely to engage in adaptive behaviours in order to improve themselves and are likely to attend to, learn, and remember information that will affect future goals. Thus, locus of control in the health setting implies a generalized expectation about whether one's health is controlled by one's behaviours or by forces external to self.

Locus of control has been linked to a wide range of behaviours, with internality associated with a number of adaptive behaviours, taking steps to improve health, ability to stop smoking, ability to lose excess weight, get dental check-ups, and adherence to the recommendations arising from a medical check-up (Omeje & Nebo, 2011). Morowatisharifabadi, Mahmoodabad, Baghiannimoghada and Tonekaboni (2010) found that a positive association exists between internal locus of control and adherence to a treatment regimen in diabetic patients. Because previous studies have shown that locus of control correlates positively with behaviours that affect human health, the present study investigated the effect of locus of control on adherence to a treatment regimen by patients diagnosed with hypertension in the Igbo cultural environment in Nigeria.

In recent times, a great deal of research has linked internal locus of control to positive health beliefs and behaviours. While not all attempts to correlate the two have been successful, it is widely accepted that health-related locus of control is significantly associated with a variety of health behaviours and outcomes like the ability to stop smoking, ability to lose weight, and adherence to a medical regimen and rate of recovery from sickness. The importance of health locus of control beliefs on health makes crucial the need to understand factors that influence it.

The health care sector in Nigerian has been plagued with a lot of problems ranging from poor financing, inadequate staffing and unqualified staff. This has impacted negatively in a great deal on the health of the populace. Added to this are issues of poor adherence to medication among the general population in hospitals (Ajala, 2008). Studies have assessed individual levels of spirituality, health locus of control, and participation in wellness / health related behaviours that have greatly improved the rate of adherence to medication among patients (Levin,2004); these kinds of study

have not been done in this part of the world. This study therefore endeavours to investigate the effect of social support and religiosity on the health locus of control of individuals in Nigeria. The study however, seeks to understudy the following specific objectives:

i.   To investigate the effect of social support on health locus of control of individuals

ii. To examine the effect of religiosity on health locus of control of participants

iii. To determine the interaction effect of social support and religiosity on health locus of control beliefs.

Hypotheses

The following hypotheses were stated in the study:

H1: There will be a significant main effect of religious orientation on health locus of control

H2: There will be a significant main effect of social support on health locus of control

H3: There will be a significant interaction effect of religious orientation and social support on health locus of control

METHOD

Design

The study employed a 2X2 factorial design. There were two independent variables: Religious orientation with two levels (intrinsic and extrinsic); and social support,

which has two levels (low and high). The dependent variable in the study was health locus of control.

Participants

The participants used in this study were 200 undergraduates from the University of Jos who were between the age range of 18-35; the mean age of participants was 30.04 years (SD = 9.173). The probability sampling method of simple random selection was used to select the participants.

Instruments

The following instruments were used as measures in the study:

The Religious Orientation Scale: The Religious Orientation Scale (ROS) was developed by Allport& Ross, (1967). The 12-item short scale was used, which was scored on 5-point Likert ranging from *strongly disagree* to *strongly agree*. Scores could range from 12-60 with higher scores (37 and above) indicating extrinsic religious orientation, and lower scores (36 and below) indicating intrinsic religious orientation. The scale has reliability coefficient of .91 for intrinsic and .85 for extrinsic.

The Multidimensional Scale of Perceived Social Support: Developed by Zimet, Powell, Farley, Werkman and Berkoff, (1990), the scale measures perceived social support. The short form has 12-items scored on 7-point Likert were; very strongly

Disagree = 1; Strongly Disagree = 2; Mildly Disagree = 3; Neutral = 4, Mildly Agree = 5; Strongly Agree = 6 and Very Strongly Agree = 7.

The Multicultural Health Locus of Control Scale (MHLC): The scale was developed by Wallston and Wallston (1978); the MHLC is a six-point Likert scale. The MHLC is an 18-item scale classified into three subscales: internal HLC, Powerful-others HLC, and Chance HLC. Each sub-scale contains six questions. For each question, participants choose one out of six answers ranging from "strongly agree" to "strongly disagree". The Cronbach alpha of the MHLC scale, was within the range 0.62 and 0.76.

Procedure for Data Collection
The researcher went to Bauchi road and permanent site campuses of the University of Jos where he met and explained the purpose of the research to undergraduates, the researcher assured participants of the study confidentiality and administered questionnaires to those that agreed to participate. A total of two hundred valid questionnaires were retrieved from participants. Completed and valid questionnaire were then scored and analysed for statistical significance.

RESULTS
The results are outlined and explained mainly with the use of descriptive and inferential statistics using the Statistical Package for Social Sciences (SPSS 20) computer software. In analysing the collected data, the 2-way analysis of variance (ANOVA) statistical tool was used to analyse the hypothetical statements in the study. The 0.05 significance level was adopted for hypothesis testing in the study. The summary of the descriptive and inferential results are presented below:

Table 1: Socio-demographic Characteristics of Participants

		Frequency	Percent %
Gender	Male	76	48.4
	Female	81	51.6
Religion	Christianity	144	91.7
	Islam	13	8.3
Marital status	Single	123	78.3
	Married	34	21.7
Religious orientation	Intrinsic	74	47.1
	Extrinsic	83	52.9
Social support	Low	66	42.0
	High	91	58.0

Table 1 shows that out of the total number of participants, males were 76 (48.4%) and females were 81 (51.6%). Ninety-one point seven percent of the participants were Christians and 8.3% were Muslims; also, 78.3% of the participants were single and 21.7% were married. The data further indicates that 47.1% of the participants had intrinsic religious orientation (a score < 30) and 52.9% had extrinsic religious orientation (a score 30); data on social support responses indicated that 42% of the participants reported low social support and 58% reported high social support.

Hypotheses stated in the study were tested with the 2-way Analysis of Variance (ANOVA). The tables below show the means, standard deviations and the ANOVA outcomes

Table 2: 2-way ANOVA Source table

Source	Type III Sum of squares	df	Mean square	F-ratio	Sig.
Corrected Model	1821.604	3	1821.604	4.420	0.005
Intercept	868646.088	1	868646.088	6322.490	0.000
Religious orientation	1375.221	1	1375.221	10.010	0.002
Social support	42.083	1	42.083	0.306	0.581
RelOrient*Social support	139.157	1	139.157	1.013	0.316
Error	21020.651	153	137.390		
Total	919670.000	157			
Corrected Total	22842.255	156			

Hypothesis One

Results indicate that there was a significant main effect of religious orientation on health locus of control, $F_{(1, 153)} = 10.010$, $p = 0.002$ (p<.05); with health locus of control means scores of 78.988 and 72.942 for participants with intrinsic and extrinsic religious orientation respectively. Table 3 shows the summary of the mean scores.:

Table 3: Means and standard deviation for religious orientation

Religious orientation	Mean	Standard Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Intrinsic	78.988	1.363	76.295	81.681
Extrinsic	72.943	1.339	70.298	75.588

Hypothesis Two
Results showed that there was no significant main effect of social support on health locus of control, $F(1, 53) = 0.306$, $p = 0.581$ ($p > .05$); with health locus of control mean scores of 76.494 and 75.437 for participants with low and high levels of social support respectively. Table 4 shows the summary of means

Table 4: Means and standard deviation for social support

Social support	Mean	Standard Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Low	76.494	1.449	73.632	79.357
High	75.437	1.246	72.976	77.898

Hypothesis Three
The results indicated that there was no significant interaction effect of religious orientation and social support on health locus of control, $F(1, 53) = 1.013$, $p = 0.316$ ($p > .05$). Table 5 shows the summary of the mean scores.

Table 5: Means and standard deviation for interaction effect

Religious orientation	Social support	Mean	Standard Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Intrinsic	Low	78.556	1.954	74.696	82.415
	High	79.421	1.901	75.665	83.178
Extrinsic	Low	74.433	2.140	70.206	78.661
	High	71.453	1.610	68.272	74.634

DISCUSSION
Findings from hypothesis one testing indicated that there was a significant main effect of religious orientation on health locus of control. Results of this study suggested that people in the sample for whom religion tended to be very meaningful also tended to believe that what occurred in their life tended to be contingent upon their own actions. This is in line with the study of Kunst, Bjorck, and Tan (2000) which found that more religious individuals made greater attributions for uncontrollable, extremely negative events to God's will, whereas less religious subjects made more attributions to chance and forces of nature.

Cirhinlioglu and Ozdikmenli-Demir(2012) examined the relationships among intrinsic

and extrinsic religious orientations, locus of control and depression levels of 430 Turkish Muslim university students and found that locus of control dimensions are related to participants' religious orientations. Adekeye, (2011) also assessed the combined effects of locus of control, religiosity, and physical exercise constructs on the global health outcome in depressed patients, and found there was a positive relationship between all measures, religiosity and locus of control.

However, Adams, (2000) examined the relationship between religiosity, academic achievement, and locus of control, and found no significant relationship between locus of control and religiosity. Furthermore, Hart, Tinker, Bowen, Satia-About and McLerran, (2004)in their study indicated that intrinsic and extrinsic religious orientations do not appear to be mutually exclusive with respect to dietary behaviours. Stanke (2004) also examined two possible correlates of superstition: religiosity and locus of control, and analyses revealed a positive relationship between external or chance loci of control and superstitious beliefs, but no relationship for internal locus of control with superstitious or paranormal belief. Gonnerman, Lutz, Yehieli and Meisinger (2008) studied the roles religious and health promoting behaviours play in bolstering positive physical and emotional health. There was an apparent lack of connection between respondents' attitudes about faith

and healing and their actual experiences.

The outcome of this study hypothesis could be argued that it is possible that this result may have been due to the use of an instrument specifically designed for people with some form of religious involvement, with a sample of subjects not representative of the latter. Also, religious belief and practice contribute substantially to the formation of not only personal moral criteria and sound moral judgment, but belief in fate and events being under the control of a supreme being, and as such nothing happens by chance (Fagan, 2006). This explains the various types of attributions that individuals make concerning their health. Thus, individuals with intrinsic religiosity believe that they do not have control over events that affect them, especially their health.

Results of hypothesis two indicated that social support was not found to have a significant main effect on health locus of control. This finding contrasts the studies that have identified positive relationship of social support and health behaviours (Gillis, 1993). Chen, Deng and Chang, (2001) compared the health locus of control (HLOC) and perceived social support levels, and found that Social support was positively associated with internal HLOC and negatively associated with chance HLOC. And Cannella, (2006) examined the association between social support and positive health practices in pregnant

women, and results showed that social support was positively related to positive health practices. Furthermore, Johnston andBrosi (2008) examined the impact of social support on older adults' perceived sense of control and resultant feelings of empowerment, and their findings showed that social support was a significant predictor of perceived sense of control; and Bekele, Rourke, Tucker, Green, Sobota, andKoornstra, (2013) examined the direct and indirect effects of perceived social support on physical and mental health, and they found that perceived social support had significant direct effects on mental health attribution.

The outcome of the hypothesis two in the study could be attributed to the fact that social support operates by bolstering internal locus of control beliefs, that is the relationship between support and perceived control is nonlinear. The increase in social support tends to increase feelings of control, but only up to a certain threshold. Beyond this point, additional support tends to decrease feelings of personal control. In hypothesis three, the interaction between religious orientation and social support was not significant. Health locus of control is a state and not a trait, as such, the particular state of health locus of control of an individual could be different at different times depending on prevailing factors that are influencing the individuals, such as significant others, environment and physiological factors.

Conclusion

This study has revealed that religious orientation had a significant main effect on health locus of control of participants; however, no support was found for social support, and there was no significant interaction effect of religious orientation and social support. The information gained from this research is clinically relevant. Knowledge gained from research on religiousness assist clinicians in better understanding of clients' lives from a broader perspective.

Recommendations

Based on the findings in the study the following recommendations are made:

i. Researchers could examine whether or not certain combinations of levels of religiousness relate to mental health outcomes.

ii. There is need for health care providers and school administrators to create more religious awareness which are meaningful and related to their lives and which they have control over the outcome.

iii. A social support policy should be developed by the government which builds on individual religiosity.

iv. Considering the limitations in the study, future studies should use larger sample size and consider a qualitative research approach.

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