ORIGINAL ARTICLE:
ASSOCIATION OF RELIGIOUS ORIENTATION WITH DEPRESSION, ANXIETY AND STRESS AMONG MALE PATIENTS WITH SUBSTANCE USE DISORDER IN PAKISTAN

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ABSTRACT

OBJECTIVES
Religion has been discussed in numerous research studies with reference to its significance in mental health outcomes. It has gained its attention of researchers due to its pivotal role in the lives of human kind. Present study aims to investigate the predictive relationship of religious orientation with mental health problems including depression, anxiety & stress) in male patients with substance use disorder (SUD).

STUDY DESIGN
This study was conducted by using a Cross-sectional study design.

PLACE AND DURATION OF STUDY
Study was carried out from April- July, 2018 in Karachi Pakistan.

PARTICIPANTS AND METHODS
The sample included 200 Muslim male patients with SUD. The age ranges between 18 to 45 years (M =28.14; SD =6.55) were taken from substance use treatment and rehabilitation centers located in Karachi, Pakistan using purposive sampling. Personal Information Form and Urdu translations of the scales including Muslim Attitude towards Religion Scale (MARS)[1] and Depression Anxiety and Stress Scale (DASS-21)[2] were used to conduct this study.

RESULTS
Results revealed a significant association of religious orientation with the variables of psychological distress, i.e., depression (adj R^2=.994, F (4, 196) =5424.24, P < .01), anxiety (adj R^2=.97, F (4,196) =1309.5, P < .01), and stress (adj R^2 =.991, F (4,196) =3854.2, .00 P < .01).

CONCLUSION
Religion has significant role in wellbeing of its believers in general, and specifically among patients with SUD. Present findings also show that religious orientation has significant contribution in psychological distress such as, “depression”, “anxiety” and “stress” in male patients with SUD. Substance use treatment practitioners may develop interventions by considering the cultural and religion aspect for better treatment outcome and to improve their wellbeing. Further, religious orientation may serve an important variable to have better treatment outcome, and to address mental health issues which may also improve their wellbeing.

KEY WORDS

Religious orientation, Muslim attitude towards religion, depression, anxiety, stress, substance use disorder

INTRODUCTION

Religion has attracted scholars from different fields and it has significant role in shaping the individual's life. Religion has a substantial effect on mental health and scholars in the Western world are taking their interest in studying religion[3]. Religion is an intricate and broader subject and it need to be studied in a refine way to purify the mind, and to improve the way of life of its believers. Researcher[4] defined religion as "norms, values or a way of life of an individual or community for spiritual guidance for day to day life." It is further explained that religion instills optimistic belief in individuals, and assure them of reason for their existence in this temporary world.

In 1967, researchers[5] have categorized "religious orientation" into two classes (i.e., intrinsic & extrinsic). According to authors, person with "intrinsic religious orientation" is one who finds a real inspiration in religion, and considers others need as less vital and meaningful. Further, it was found that person with intrinsic religious orientation exercise religion for his/her safety/refuge, and conviviality[6]. In other words, with intrinsic religious orientation, an individual sacrifices his/her own needs and feels himself or herself close to God. However, other researchers found that person with "extrinsic religious orientation" turn towards God without ignoring on his/her needs[7]. These views show that both intrinsic and extrinsic religious orientation has significant role in shaping the lives of individuals.

In the health related concerns religious beliefs and religious orientation is considered to play a pivotal role. Researchers found the religious orientation to be positively associated with health outcomes[8], religion and spirituality shows greater association with mental as well as physical health[9]. There is robust evidence which demonstrated that religious commitment has significant contribution to reduce the psychological distress than those who are less committed to religion. Study finding by researchers[10] found that young people committed to religious affairs, have chance to experience less anxiety[10]. This was further explained that religious beliefs create a sense of safety and establish a mental composure. It cultivates hope by creating a sense of power and control to cope with anguishes and pain and motivates the believers to live the life with hope[11]. In addition to this, it is considered to be important to provide direction and meaning in life and meaning of existence[12].

Gartner and colleagues[13] and further Koenig along with Larson[14] studies religion with reference to different ages and socioeconomic status beyond the differences of religions and found that it has significant impact despite of different background. Mental health issues are common among patients with Substance Use Disorders. Researchers put forwarded that psychological distress and drug-related disorders are closely linked with each other which create the burden on society[15,16]. Due to stigma and fear of being labeled with addiction, people with SUD are more likely face difficulty to avail proper services which again linked with their high level of distress. However, based on the review of clinical and mental health researches on faith, researcher[17] came to a conclusion that religion has protective role and it can reduces the psychological distress and improves the wellbeing. Research shows that strong religious beliefs are considered

to play a protective role against adverse health conditions like problems related substance use. It has also been studied that adolescents with strong religious orientation, compared to ones with low in religious orientation, have less consumption of alcohol and other drugs[18]. Similar findings were extracted in study of adolescents who are more likely attending religious places like church are less likely use smoking compared to those who are not attending such places[19]. Recently, Khan and colleagues[20] *found a significant association of meaning in life with mental health problems (i.e., stress, anxiety & depression) in SUD.* Moreover, findings highlighted the importance of high religious orientation with reduction of drug usage and risky activities like sexual activities[21]. Similar findings were shown by the study of Omari and associates[22], indicating religious affiliation and involvement to be linked with less likely engagement in unhealthy habits including alcohol and other drug use. Further the significance of religious in the areas of health was highlighted and stated that religion discourages its believer's involvement in the drug use and its affiliation reduces substance use[23]. Thus religion is considered as one of the buffering factors against mental health issues including substance use, and it protects people against the precarious environment[24].

Researchers have found that religion helps its believers in getting rid of emotional distress[17]. Other studies explored strong religious belief and involvement most likely results in diminutions of trauma symptoms[25].

Association of religion with mental health has been found in the western literature, and researchers have found the role of religion on well-being. In Pakistan, previously, researchers have found the significant association of mental health problems, i.e., depression, anxiety and stress will wellbeing of patients with SUD[26], with emotion regulation[27]. However, in Islamic countries such literature is limited[28]. Due to the dearth of research in this important domain, present study was planned to understand the role of religious orientation in patients with SUD in local context. Keeping in view the literature related to significance of religious orientation in general, and in SUD in particular, current research aims to explore the predictive relationship of religious orientation, with the variable of anxiety, depression and stress in adult males with SUD in Pakistani context. Drugs not only affect the individual using it but also it affect the social fabric of individuals such as their family including children, and they are negatively affected by their loved ones drugs use[29]. Findings may also be beneficial to identify these variables as protective factors against SUD and to cope with the psychological distress. Thus incorporation of religious orientation in the practice by the professionals may help to understand the problem from different perspective and to address the issues with such strategies where applicable.

MATERIALS AND METHOD

PARTICIPANTS

Inclusion/exclusion criteria

Only those patients were included who completed at 21 days in rehabilitation/hospital setting. Those who were able to understand and comprehend instructions were included. Those who are

not with comorbid serious mental health issues (i.e., psychosis). Further, patients with minimum age of 18 and maximum age of 45 were included.

200 adult males (using poly drug) with ages between 18 to 45 years (M= 28.14, SD= 6.55) seeking treatment from four treatment and rehabilitation facilities for SUD (i.e., Al Haq Center, Parvarish Recovery Centre & Addicare Treatment and Rehabilitation Centre) were recruited for this study. From each center, on average forty patients were recruited.

MEASURES

a) Socio Demographic Information Form

Personal information was obtained through sections including; age, education and marital status of the participant. Further academic qualification, area of residence, family related information like income and earning members were also taken into consideration. Drugs related information consisted of drug of choice, drug inception, history related to interval or reversions were considered important. Moreover, a history of medical illness, drug use in family etc. was gathered.

b) Muslim Attitude towards Religion Scale

The MARS[1] is rating scale with 14 items. It is related to Muslim's interpretation of the applicability of the religion in life. It is about the belief of affirmative consequences of being Muslim or level of involvement in the religious practices, thus representing personal declaration to Islam. This scale is a 5 point rating scale with score ranging from 1 "strongly agree" to 5 "strongly disagree". Few sample items are "Allah helps me;" the five prayers helps me a lot." It is highly correlated with intrinsic and extrinsic religious orientation scale[5]. This scale has a Cronbach's coefficient alpha of 0.78. Chronbach alpha for Urdu version of MARS is 558, and test retest reliability is .94[30].

Depression Anxiety and Stress Scale-Short Form (DASS-21)

This is a self-report inventory developed by Lovibond and Lovibond[2] and translated by Shahzad and colleagues. This is a 21 item self-reporting tool with three sub domains including Depression, Anxiety, and Stress. It is a 4-point "likert scale" in which "not at all" is scored as 0 and "all the time" as 3, and each subscale has 7 items., for depression sample items procedure is silent about mode of data collection are "I felt downhearted and blue", and "I felt I wasn't worth much as a person". Similarly for anxiety subscale items are; "I was aware of dryness of my mouth" and "I experienced trembling (e.g. in the hands)", and for stress ". "I found it hard to wind down", and "I tended to over-react to situations". The possible score range from 0 to 63. Higher score indicates higher levels of depression, anxiety, and stress. The Chronbac alpha for Urdu version of DASS-21 is .94, for subscales i.e., Depression= .85, Anxiety=.90, and Stress = .84, respectively. Similarly the test retest reliability for DASS-21 is 73, Depression = .82, Anxiety = .89, and Stress = 87, respectively.

Procedure

The study procedures and material was accepted by Advance Studied and Research Board, University (xxx). To recruit the sample, researchers identified the drug addiction treatment and

rehabilitation centers. The authorities of those centers were contacted to get formal permission along with the research protocols for data collection. After obtaining permission researchers approached the patients with SUD and they were briefed about the aims and objectives of the study and took informed consent from each participant in written form. After taking written informed consent from participants, researchers then approached only those who met the pre-requisite criteria; they were then briefed and guaranteed the safety of their information, data and confidentiality and privacy of participants. Data was collected through in person interviews. After building rapport with the participants, Personal Information Form was filled followed by the administration of MARS and DAAS-21. All the participants were thanked for their willingness to be part of the research study.

Statistical Analysis

To get the statistical picture of data Statistical Package for Social Sciences (SPSS-V.22) was used. Descriptive statistics was applied to analyze socio-demographic information of the participants. Multiple linear regression model was used to study the association of the variables in participants with SUD.

Ethical Considerations

Researchers took every step to follow the research ethics. Confidentiality of the information was ascertained and participants respect and dignity was maintained. Further, researchers ensured the security and flexibility of timing was also ensured.

RESULTS

Table 1

Descriptive statistics of the demographic characteristics of patients receiving treatment for SUD.

	N	Min	Max	M	SD
Age	200	18	45	28.14	6.559
Education	200	0	16	8.39	4.794
Daily expenses for drug use	200	100	5000	1149	2355.97
Age onset of substance use	200	8	41	18.78	5.894
Family monthly income	200	7000	500000	88100.00	97675.65

Table 2

Multiple regression analysis for the predictive association of religious orientation and Depression in patients receiving treatment for SUD

Model	Unstandardized Coefficients		standardized Coefficients			95.0% Confidence Interval for B				
	B	S.E	Beta	T	Sig	Lower Bound	Upper Bound	Adj R^2	F	Sig
(Constant)	26.40	.25		103.51	.000	25.90	26.91	.994	5424.24	.000[b]
Muslim Practice	-.29	.05	-.30	-5.58	.000	-.39	-.18			
Personal Help	.24	.04	.31	4.94	.000	.14	.34			
Muslim World View	-.52	.08	-.21	-6.07	.000	-.70	-.35			
MARS Total	-.15	.04	-.38	-3.54	.000	-.23	-.068			

a. Dependent Variable: Depression
Predictors: (Constant), , Muslim practice, personal help, Muslim Worldview, MARS Total

Table 3

Multiple regression analysis for the predictive association of religious orientation and anxiety in patients receiving treatment for SUD

Model	Unstandardized Coefficients		Standardized Coefficient			95.0% Confidence Interval for B				
	B	Std. Error	B	T	Sig	Lower Bound	Upper bound	Adj R^2	F	Sig
(Constant)	21.82	.397		54.94	.000	21.04	22.61	.97	1309.51	.000[b]
Muslim Practice	-.30	.081	-.40	-3.71	.000	-.46	-.14			
Personal Help	.28	.077	.47	3.74	.000	.13	.43			
Muslim World View	.28	.135	.15	2.10	.036	.01	.55			
MARS Total	-.49	.067	-1.59	-7.31	.000	-.62	-.36			

a. Dependent Variable: Anxiety

b. Predictors: (Constant), Muslim Practice, Personal Help, Muslim Worldview MARS Total

Table 4

Multiple regression analysis of the predictive association of religious orientation and stress in patients receiving treatment for SUD

Model	Unstandardized Coefficients		Standardized Coefficient		95.0% Confidence Interval for B				
	B	Std. Error	B	T	Sig.	Lower Bound	Upper Bound	Adjusted R Square	F	Sig.
(Constant)	25.003	.25		96.65	.000	24.49	25.51	.991	3854.25	.000[b]
Muslim Practice	-.14	.05	-.17	-2.65	.009	-.24	-.03			
Personal Help	.20	.05	.31	4.18	.000	.11	.30			
Muslim World View	-.62	.08	-.30	-7.13	.000	-.80	-.45			
MARS Total	-.19	.04	-.57	-4.50	.000	-.28	-.11			

Dependent Variable: Stress

b. Predictors: (Constant), Muslim Practice, Personal Help, Muslim Worldview MARS Total

DISCUSSION

The finding of the study show a negative predictive association of religious orientation and depression in patients with SUD (adj R^2=.994, F (4, 196) =5424.24, P < .01), anxiety (adj R^2=.97, F (4,196) =1309.5, P < .01*)*, and stress (adjR^2=.991, F (4,196) =3854.25, P< .01). These findings are supported by other studies which emphasize religion to have significant preventive factor which plays a buffering effect against depression in people using drugs or substance[32]. It is further explained that existence of religious beliefs is one of the integral factor to get social support and consequently a person enjoys an enhanced mental health and wellbeing[24]. In connection to these findings previous literature also shows that religious involvement and attendance to religious places is one of the correlates of low level of anxiety[33]. This could give them a sense of relief when they approach their creature to help them resolve their issues.

Moreover, strong belief in faith or a religion is a source of hope and which reduces the risk of distress. Such associations are explained by Tataro and associates[34] by describing the relationship between prayer and forgiveness and a low level of reactivity to cortisol. Spirituality and religiosity was considered to be a fundamental aspect in relapse prevention of substance use disorders[35]. In the context of substance use problems people usually are unable to accept it as an illness rather it is considered an issue of character and for which sufferer is always blamed and hence these issues are tabooed and stigmatized. In such circumstances getting help and support for the issues from such society is very challenging. Therefore in cultures like Pakistan religious belief and practices is the major coping against such issues. It is largely because Identifications

help from a super power in a very demanding circumstances and a belief that high powers other than themselves can direct and create order in their life inculcate confidence and safety[36]. The focus of several studies on religious belief and spirituality signify the protective role of religion in treatment and relapse prevention[37]. Rugs Summing up the findings of previous studies which found that religious orientation is highly associated with both physical and mental wellbeing among people[9]. These findings are valuable addition to the literature in local context to be used to enhance treatment outcomes and improve the wellbeing of patients with SUD. It should be noted that practicing could be one of important domain in people's life but practicing religion with understanding is significant, incorporate its guidelines that has been established for its followers, and apply its essence in daily practices.

The present study determined the impact of religious orientation on mental health issues including "depression, anxiety and stress" among patients receiving treatment for their issues related to SUD. Results highlight the importance of religious orientation in the psychological and mental wellbeing of an individual with SUD. It is a fact that people around the globe more or less inclined themselves towards their religious beliefs to help themselves cope with unavoidable and demanding circumstances of life; therefore, incorporation of this important aspect of life has remarkable advantages in the improvement of psychological health. For most of the people religion embedded in itself several solutions to the problems and inculcates hope to fight with them resulting into low level of mental health problem. So, while designing and implementing interventions in local context, clinicians should design individualized treatment plans and adds this variable if it plays a role in their positive treatment outcome and wellbeing.

As far as the limitations of present research is concerned, there are few things which need to be improved in future researches. For generalizability of the findings, large size of sample is recommended. Representation of both male and female population is highly recommended for future research by including sample from different religious background and comparing it to see its influence on wellbeing. Utilization of qualitative research design can give more accurate and comprehensible findings in the future research.

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Undertaking Form

Sr. #	Author(s) Name	Author(s) Affiliation	Contribution	Signature
1.	Muhammad Ali Khan	Institute of Clinical Psychology, University of Karachi	Idea generation, writeup, method, results, and discussion	
2.	Salman Shahzad	Institute of Clinical Psychology, University of Karachi	Write up in introduction, method, part of results and discussion	
3.	Nasreen Bano	Institute of Clinical Psychology, University of Karachi	Part of Manuscript writing, introduction and discussion	
4.	Mahreen Siddiqui	Department of Psychology, University of Balochistan	Part of Manuscript writing, review and references	
5	Ahmad Ali	Institute of Business Administration, Karachi	References and Manuscript review