

Religiosity and Optimism as Predictors of Psychopathology and Mental Health

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Abstract

The present study aimed at determining the role of religiosity and optimism as predictors of psychopathology and mental health. A convenience sample of 942 individuals was gathered from Peshawar, Islamabad, and Lahore. The sample included non-clinical (n=746) and psychiatric patients (n=196). Multi Dimensional Personality Inventory (MDPI; Zeb, 2013) was used to investigate if religiosity and optimism play a significant role in enhancing mental health and overcome the development of psychopathology. Statistical analysis computed via t-test ($t(488)=16.99$, $p<.000$) as well as multiple regression analysis ($\beta=-.21$, $p<.000$) suggest that low religiosity is a significant predictor of psychopathology. On the other hand, high religiosity contributes significantly to enhance mental health ($\beta=.24$, $p<.000$). Our results suggest that the higher the religiosity the lower the chances of developing psychopathology and the higher the mental health. Optimism, on the other hand, appears to serve as a buffer against psychopathology ($\beta=-.65$, $p<.000$), whereas, it did not contribute towards mental health ($\beta=.01$, $p>.01$).

Keywords: personality inventory, religiosity, optimism, psychopathology, mental health.

Introduction

The relationship between religion and mental health has been debated for centuries. Freud and other mental health scholars believed that less religious persons tend to be mentally healthier as compared to those who were more religious (Ellis, 1980, 1988). A well known psychiatrist Walters (1992) attributed the development of low self-esteem, depression, and even schizophrenia to religiosity. However, assumptions about the relationships between religiosity and mental health have dramatically changed during the recent years, uncovering a strong positive relationship between the two variables (Braam et al, 2004). The advocates of this viewpoint believe that high religiosity can promote spiritual, cognitive, psychological, and social resources that not only exert positive impact on mental health but they mutually reinforce each other. As a result people will learn to be more optimistic and hopeful when faced with stressful situations (Yeung & Chan, 2007). Previously psychopathology and mental health were considered to be the opposite pole of the same characteristic i.e., the absence of psychopathology was considered as an index of mental health and vice versa. Recent studies provide a clear distinction between the two constructs, both with their own separate definitions (Greenspoon & Saklofske, 2001). For example, Psychopathology is defined as an abnormal pattern of functioning that may be described as deviant, distressful, dysfunctional, and/or dangerous (Comer, 2004, p.4). Whereas, mental health refers to the capacity of rational and logical thinking, a capability of coping effectively with stress and challenges throughout the life course, and demonstrating emotional stability and growth (Sarason & Sarason, 2002). According to the new perspective mere absence of

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psychopathology does not mean that a person is mentally healthy. To be considered a mentally healthy person, one need to possess other positive characteristics like self acceptance, empathy, etc. The present study considers psychopathology as a set of clinical symptoms, whereas, mental health includes positive behavior traits. The role of religiosity and optimism in the development of these constructs is the focus of the present study.

Religiosity can be defined as a belief in a Supreme Deity and an adherence to a ritual community (Wulf, 1996). Islamic perspective relates the onset of psychopathology with the distance from God and the fellow beings, whereas, a close bond with God is believed to lead to mental well-being (Zeb, Riaz, & Farhana, 2013). Numerous researches support this approach, that is, it is concluded that individuals high on religiosity have less psychological problems and are mentally more satisfied. Alojoki (1998), for example, concluded that active religious participation is related with clearer meaning of life, more spiritual stimuli, closer relationship to God, less traumatic experiences, and more satisfaction in life. He argued that living in accordance with religion, creates harmony with God, ourselves and other people, which keeps us happier. Similarly Ruqayya (2008) found significant negative correlation between intrinsic religious orientation and psychoticism, extraversion and neuroticism. Hirsch, Nsamenang, Chang, and Kaslow (2014) studied the relationship between spirituality, optimism and depression among a group of African American suicide attempters. The researchers found that greater religious and existential well-being was correlated negatively with pessimism, and positively with optimism which in turn developed fewer depressive symptoms. Ahmed, Abdel-Khalek, and Eid (2011) concluded that religiosity has a negative correlation with depression. They recommended that religiosity may be incorporated in therapy for treating Muslim patients.

Bergin's (1991) review of empirical literature demonstrated positive associations between religious affiliation and psychological functioning. Lun and Bond (2013) studied the relationship among religion, spirituality, and subjective well-being in different cultures. Results indicated that life satisfaction and happiness were positively associated with multiple measures of religion and spirituality. Radheyshyam and Devi (2007) studied the role of religiosity, religious performance and helping behaviour with life satisfaction in elderly. The result revealed religiosity to be the most significant predictor of life satisfaction. Abdel-Khalek (2007) applied self rating scales of happiness, mental health, physical health, religiosity, anxiety and depression on a Muslim sample. The results showed that religiosity was positively correlated with happiness, mental health, and physical health, whereas, negatively correlated with anxiety and depression scores.

Like religiosity, optimism is also considered to have a positive impact on mental health and a negative influence on psychopathology. Derlega, Winstead, and Jones (2005) have defined *Optimism* as a positive set of cognitive beliefs. Evidence suggests that optimistic people experience a higher quality of life as compared to people with low levels of optimism (Scheier & Carver, 2003). Smith, Young, and Lee (2004) examined the influence of optimism and health-related hardiness on well-being. The result showed that optimism seems to contribute to well-being. Similarly, review of the literature shows that optimism plays a positive role in hindering the development of psychological problems. Researchers suggest a negative relationship between optimism and psychopathology. For example, Zeb, Riaz, and Farhana (2013) found that higher scores on optimism were negatively associated with psychological problems. Similarly Hirsch, Wolford, LaLonde, Brunk, and Morris (2007) studied the moderating role of dispositional optimism on the relationship between negative life experiences and suicidal ideation and attempts. Individuals with greater optimism had reduced risk of suicide ideation and attempts in the face of low to moderate negative life events; however, this association was not influential at the highest levels of negative life events.

Keeping in view the Islamic approach of personality development, the present study aimed to explore the contributory role of religiosity and optimism in the development of psychopathology and mental health.

Hypotheses

1. Individuals scoring high on Religiosity Scale will be mentally healthier than low religiosity group.
2. Individuals scoring low on Religiosity Scale will be higher on psychopathology as compared to high religiosity group.
3. Religiosity and optimism will have a negative impact on psychopathology.
4. Religiosity and optimism will have a positive impact on mental health.
5. Individuals suffering from Psychological problems will obtain lower scores on optimism as compared to non-clinical group.

Methodology

Sample

As the content of Religiosity scale of MDPI is based on Islamic perspective, the sample consisted of only Muslim respondents, including 747 individuals from general public and 196 diagnosed psychiatric patients. Psychiatric patients were included in the sample after assessing their mental stability; the psychiatrist had certified that they were mentally stable to undergo testing when the assessment procedure started. Only those in-patients were selected who were on medication from a long time. Patients with minor problems were selected from outpatient department of psychiatry (like depression, anxiety, OCD etc) who were willing to participate in the study. Convenience sampling technique was used as it was not possible to select clinical sample by probability sampling methods.

The sample was taken from Lahore, Islamabad and Peshawar. The sample consisted of 55% men and 45% women. Age range of the sample was from 16-60 years ($M=25.06$, $SD=9.42$). The sample varied in education, occupation, marital status as well as types of psychological problems. Majority of clinical group were schizophrenics ($n=47$); 47 were suffering from anxiety disorders; 35 were diagnosed having bipolar and another 35 were suffering from depression. The remaining 38 were suffering from different kinds of disorders but their number was very small e.g., OCD ($n=8$); co-morbidity ($n=8$); and schizoaffective ($n=4$).

Instrument

Multi Dimensional Personality Inventory (Zeb, 2013) was used to collect data. It is composed of 187 items with four subscales, viz, Religiosity, Psychopathology, Mental Health, and Optimism. There are 62 items in Religiosity Scale, 66 items in Psychopathology Scale, 46 items in Mental Health Scale, and 13 items in Optimism Scale. It is a four point Likert scale. The score range from 0-3. The cut off points for identification of high and low scorers on Religiosity Scale and Optimism Scale are 75th and 25th percentile respectively. Thus, all the respondents who scored *equal to or less than* P_{25} on these two subscales were placed in the low group, whereas, all those who scored *equal to or greater than* P_{75} on these two subscales were placed in the high group.

Procedure

As the study used convenience sampling technique, the clinical sample was contacted at indoor and outdoor psychiatry departments of Hospitals as well as private clinics of psychiatrists, whereas the non-clinical group was selected from educational institutions, and residences of the known respondents. After a formal introduction the researcher requested the participants to fill in the questionnaire. Privacy and confidentiality of the data was assured and MDPI was administered on all those who agreed to participate in the study. It is a self administered inventory; the instructions are printed on the first page. Respondents read the

instructions and filled the record forms accordingly. Depending on the availability of participants, MDPI was administered individually or in group sessions. Individual and group administrations were both carried out on students and hospitalized patients. Student sample consisted of 30-40 respondents, whereas the clinical group consisted of 4-7 individuals.

Results and Discussion

Table 1

t-value showing differences between high and low religious groups on Psychopathology, and Mental Health Scales

Measures	Low scorers on Religiosity Scale (n=237)		High scorers on Religiosity Scale (n=273)		<i>t</i> (424)	<i>p</i>	95 % CI		Cohen 's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
Psychopathology	72.48	37.33	25.60	19.90	17.31	.00	41.54	52.19	1.56
Mental Health	95.43	24.03	108.32	17.43	-6.84	.00	-16.59	-9.18	-0.61

The above table shows significant differences between high and low religiosity groups on psychopathology and mental health. The high religiosity group earned significantly higher scores on Mental Health Scale and lower on Psychopathology Scale and vice versa.

Table 2

Hierarchical Multiple Regression Analysis showing Religiosity and Optimism as predictors of Psychopathology

	<i>B</i>	<i>SE</i>	β	<i>T</i>	<i>p</i>
Step 1					
(Constant)	199.802	7.098		28.14	.000
Religiosity	-.970	.044	-.583	-21.98	.000
Step 2					
(Constant)	177.60	5.29		33.57	.000
Religiosity	-.36	.03	-.21	-9.24	.000
Optimism	-2.81	.10	-.65	-27.94	.000

Note: $R^2=.64$ for step 1, $\Delta R^2= .30$ for Step 2 ($p < .001$)

Table 2 shows both religiosity and optimism as significant predictors of psychopathology, optimism being more influential than religiosity.

Table 3

Hierarchical Multiple Regression Analysis showing Religiosity and Optimism as predictors of Mental Health

	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Step 1					
Constant	61.472	5.201		11.81	.000
Religiosity	.254	.032	.248	7.85	.000
Step 2					
Constant	62.17	5.22		11.89	.000
Religiosity	.246	.039	.24	6.33	.000
Optimism	.029	.100	.01	.290	.772
Note: $R^2= .06$ for Step 1, $\Delta R^2=.000$ for Step 2 ($p > .001$)					

Table 3 shows religiosity as a determiner of mental health but optimism does not depict a contributory role.

Table No 4

t-value showing differences between clinical and non-clinical groups on Religiosity and Optimism Scales

Measures	Non-clinical group (n=746)		Clinical group (n=196)		<i>t</i> (940)	<i>P</i>	95 % CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
Religiosity	162.98	16.83	147.13	23.80	10.67	.000	12.93	18.76	.76
Optimism	27.91	6.66	21.39	8.64	11.39	.000	5.39	7.63	.84

Table 4 shows significant differences between Clinical and non-clinical groups in scores on Religiosity and Optimism Scales. The non-clinical group is significantly higher than clinical group on both religiosity as well as optimism.

Discussion

The aim of the present research was to determine the impact of religiosity and optimism on the development of psychopathology and mental health. It was assumed that religiosity and optimism play a positive role in the development of mental health and deter the development of psychological problems. Results derived from t-test and multiple regression analysis revealed that religiosity is a significant predictor of mental health but optimism does not appear to exert any significant influence on mental health. However, it seems that optimism and religiosity both are contributing towards creating a buffer against the development of psychopathology (optimism being a stronger determiner than religiosity).

Our first hypothesis assumed that individuals scoring high on Religiosity Scale will be mentally healthier than low scoring group. Data presented in table 1 clearly support our hypothesis. Out of a total of 510 respondents, 237 were classified as low scorers and 273 formed the high scoring group on Religiosity Scale. The results revealed a significant difference between the two groups, i.e., subjects high on religiosity scored high on mental health too ($t(424) = 6.84, p < .000, d = .61$). In other words, we can safely assume that being high on religiosity makes a significant difference in mental health of people. The results further yield support to our second hypothesis which assumed that individuals scoring low on Religiosity Scale will score higher on Psychopathology Scale as compared to high scorers on Religiosity Scale. Table 1 clearly demonstrates a significant difference between the two groups ($t(424) = 17.31, p < .000, d = 1.56$). These findings support our assumption that high religiosity group is significantly higher on mental health and low on psychopathology.

Multiple regression analysis (see table 2) also supported our third assumption that religiosity ($\beta = -.21, p < .000$) and optimism ($\beta = -.65, p < .000$) can be the buffers against psychopathology, the impact of optimism being more than religiosity. Both of the factors together accounted for 63% of the variance in psychopathology. Our fourth hypothesis assumed that religiosity and optimism will have a positive impact on mental health (see table 3). Results demonstrate that religiosity had a significant positive impact on mental health ($\beta = .24, p < .000$) but optimism did not ($\beta = .01, p > .05$) contribute towards its growth. Only 6% of the variance is explained by religiosity and optimism as predictors of mental health.

Our fifth hypothesis assumed a significant difference between non-clinical and clinical group vis-a-vis optimism. It was hypothesized that clinical group will score low on Optimism Scale as compared to non-clinical group. An examination of table 4 shows non-clinical group (n=747) scored significantly higher on optimism scale as compared to clinical group (n=196). These findings clearly lend support to our hypothesis.

Several studies investigated the relationship between religion and psychopathology. For example, Ross (as cited in Kaldestad, 1994) found lower distress level in people with

strong belief in their religion. Chu and Klein (1985) found lower rates of re-hospitalization in religiously practicing schizophrenics. Stark (1971) reviewed data associating religious commitment and mental health in clinic out patients of Carolina. He concluded that individuals diagnosed with psychopathology were less likely to be religiously affiliated and less likely to belong to church. Cothran and Harvey (1986) found that schizophrenics were low in their religious commitment than the general population. Similarly, Francis and Pearson (1985) found that religious commitment was negatively correlated with psychoticism. Gupta, Avasthi, and Kumar (2011) found that level of religiosity was inversely related to depression, hopelessness and suicidal intent in the depressed patients. Abdel-Khalek (2007) conducted a study on Muslim sample. Self rating scales of happiness, mental health, physical health, religiosity, anxiety and depression were administered on them. The result indicated religiosity scores were positively correlated with happiness, mental health, and physical health, whereas, they were negatively correlated with anxiety and depression scales.

The influence of religion on controlling the development of psychopathology can be explained by the works of Muslim philosophers. According to Ghazali (as cited in Rizvi, 1989) the closer we are to God the more satisfied will we be and the larger the distance is between man and God the greater will be the psychopathology. Similarly, Krause and Hayward (2015) suggested that increased church attendance leads to wisdom, which creates awe for God, it in turn develops closer connections with people, which leads to more satisfaction with life. Religion provides strong footing to the people, in troubles of life one can make use of external attribution to God and can relieve oneself. It is a common practice in Pakistan that when any calamity befalls people relate it to *taqdir* (destiny) and prefers patience (*sabar*) over complaints. The stronger one is in *tawakal* (reliance on God) the less depressed the person gets. Clements and Ermakova (2012) reached to the same conclusion that surrender to God is related with lower stress level. Similarly Exline (2003) also suggested that positive relation with God controls psychopathology and develops mental health characteristics. Among the different roles religion can provide, Spilka, Hood, and Gorsuch (1985) suggested that religion can control the deviant behaviour through religious socialization.

Further support for our assumptions is provided by the multiple regression analysis carried out for religiosity and optimism (see table 2), it clearly showed that one standard deviation decrease in religiosity is related with .21 increase in psychopathology, whereas, one standard deviation decrease in optimism is related with .65 increase in psychopathology. Results of hierarchical multiple regression reveals optimism as a stronger predictor of psychopathology than religiosity. An explanation extended for this result is that optimistic individuals focus more on the positive aspect of experiences. They search for positive aspects of even negative life experiences which keep them from developing psychological problems. Conversano et al (2010) suggested that optimism can influence mental and physical well-being through promoting a healthy lifestyle, adaptive behaviours and cognitive responses that are associated with greater flexibility, problem-solving capacity and an efficient elaboration of negative information.

The present study revealed that religiosity is a significant predictor of mental health, whereas, optimism does not contribute in its development. Literature review also support the positive impact of religiosity on mental health. Koenig, McCullough, and Larson (2001) examined the association between religious involvement and measures of well-being, happiness, and life satisfaction. About 80% of the studies reported a positive correlation. Similarly, Jamal and Badawi (1993) conducted a study on Muslim immigrants in North America, Multiple regression analysis revealed that religiosity was significantly and positively associated with fewer psychosomatic symptoms, more happiness in life, greater job satisfaction, greater job motivation, more organizational commitment, and less turnover

motivation. Religiosity also served as a buffer against the dysfunctional consequences of job stress. Tiliouine, Cummins, and Davern (2009) explored the relationship between Islamic religiosity and satisfaction with a diverse range of life and health domains, religiosity had a strong positive relationship with Subjective Well-Being (SWB), whereas, health deficiencies did not affect scores on SWB.

Suhail and Chaudhry (2004) conducted a study on 1,000 Pakistani Muslims. They found that religious affiliation better predicted subjective well-being. Similarly Abdel-Khalek (2006) found significant positive correlations between the self-rating-scales of happiness, physical health, mental health, and religiosity among a sample of Kuwaiti Muslim college students. According to Idler (1987) religion fosters health through the functions of cohesion, coherence, meaning giving, and better health-related behaviour which is important for the development of mental health.

According to the results, multiple regression revealed optimism as a weak predictor of mental health. This finding is contrary to many of the early studies, the reason why optimism was not serving as a predictor can be that optimism is composed of positive over view of the world but mental health asks for many other factors that must be present in the person e.g., being forgiving and productive etc. It is not necessary that an optimist will be more productive. It is possible that one's exaggerated optimism is keeping one to have an objective picture of himself/herself which creates a hindrance in the development of positive behavior characteristics.

Conclusion and Recommendations

The findings reveal that religiosity is a strong predictor of psychopathology and mental health, whereas, optimism has an overpowering influence on psychopathology but not on mental health. According to the results religion seems to have a significant contribution in controlling psychopathology and developing positive behavior traits, it is suggested that clinicians should incorporate religion in their therapy which may prove beneficial. A recent research (Saunders, Petrik, & Miller, 2014) conducted on the doctoral students of clinical and counseling psychology also suggests that clinical students consider religiosity as an important factor in psychotherapy for which proper training should be given to them and its inclusion in a treatment plan can be beneficial. Similarly, pessimism- the negative mind set of the patients, should be treated which seems to be the major cause of the development of psychological problems.

References

- Abdel-Khalek, A. M. (2006). Happiness, health and religiosity: Significant relations. *Mental Health, Religion and Culture*, 9, 85–97.
- Abdel-Khalek, A. M. (2007). Religiosity, happiness, health, and psychopathology in a probability sample of Muslim adolescents. *Mental Health, Religion & Culture*, 10(6), 571-583.
- Ahmed, M., Abdel-Khalek., & Eid, G. K. (2011). Religiosity and its association with subjective well-being and depression among Kuwaiti and Palestinian Muslim children and adolescents. *Mental Health, Religion & Culture*, 14(2), 117-127.
- Alojoki, P. (1998). *Faith promotes psychological well-being*. Retrieved from <http://www.om.org/relay/stories/1-98wellbeing.html>
- Bergin, A. E. (1991). Values and issues in psychotherapy and mental health. *American Psychologist*, 46, 394-403.
- Braam, A.W., Hein, E., Deeg, D.J., Twisk, J.W., Beekman, A.T., & Van Tilburg, W. (2004). Religious involvement and 6-year course of depressive symptoms in older Dutch

citizens: Results from the Longitudinal Aging Study Amsterdam. *Journal of Aging Health* 16(4), 467-489.

- Chu, C., & Klein, H. E. (1985). Psychological and environmental variables in outcome of Black schizophrenics. *Journal of the National Medical Association*, 77, 793-796.
- Clements, A. D., & Ermakova, A. V. (2012). Surrender to God and stress: A possible link between religiosity and health. *Psychology of Religion and Spirituality*, 4(2), 93-107.
- Comer, R. J. (2004). *Abnormal psychology*. (5th ed.). New York: Worth Publishers.
- Conversano, C., Rotondo, A., Lensi, E., Vista, O. D., Arpone, F., & Reda, M. A. (2010). Optimism and Its Impact on Mental and Physical Well-Being. *Clinical Practice Epidemiological Mental Health*, 6, 25-29.
- Cothran, M. M., & Harvey, P. D. (1986). Delusional thinking in psychoses: Correlates of religious content. *Psychological Reports*, 58, 191-199.
- Derlega, V. J., Winstead, B. A., & Jones, W. H. (2005). *Personality: Contemporary theory and research*. (3rd ed.). London: Thomson Wadsworth.
- Ellis, A. (1980). Psychotherapy and atheistic values: A response to A. E. Bergin's "Psychotherapy and religion values". *Journal of Consulting and Clinical Psychology*, 48, 635-639.
- Ellis, A. (1988). Is religiosity pathological? *Free Inquiry*, 148, 27-32.
- Exline, J. J. (2003). Frequency of negative feelings toward God. *Psychology and Religion Newsletter*, 29(1). Retrieved from <http://www.apadivisions.org/division-36/publications/newsletters/religion/2003/12-issue.pdf>
- Exline, J. J., Yali, A. M., & Lobel, M. (1999). When God disappoints: Difficulty forgiving God and its role in negative emotion. *Journal of Health Psychology*, 4, 365-379.
- Francis, L. J., & Pearson, P. R. (1985). Psychoticism and religiosity among 15 -year-olds. *Personality and Individual Differences*, 6, 397-398.
- Ghazali, A. H. (1226). *Ihya Ulum ad Din* (Vol 1-4). Cairo.
- Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research*, 54(1), 81-88.
- Gupta, S., Avasthi, A., & Kumar, S. (2011). Relationship between religiosity and psychopathology in patients with depression. *Indian journal of psychiatry*, 53(4), 330-335.
- Hirsch, J. K., Nsamenang, S. A., Chang, E. C., and Kaslow, N. J. (2014). Spiritual well-being and depressive symptoms in female African American suicide attempters: Mediating effects of optimism and pessimism. *Psychology of Religion and Spirituality*, 6(4), 276-283.
- Hirsch, J. K., Wolford, K., LaLonde, S. M., Brunk, L., & Morris, A. P. (2007). Dispositional optimism as a moderator of the relationship between negative life events and suicide ideation and attempts. *Cognitive Therapy & Research*, 31(4), 533-546.
- Jamal, M., & Badawi, J. (1993). Job stress among Muslim immigrants in North America: Moderating effects of religiosity. *Stress Medicine*, 9, 145-151.
- Kaldestad, E. (1994). Religious orientation, religious activity and mental health. In Grzymala-Moszczynska & Beit-Hallahmi. (Eds.), *Religion, psychopathology and coping* (pp. 210-224). Amsterdam: Rodopi.
- Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and health*. New York: Oxford University Press.
- Krause, N., & Hayward, R. D. (2015). Assessing whether practical wisdom and awe of God are associated with life satisfaction. *Psychology of Religion and Spirituality*, 7 (1), 51-59.

- Lun, V. M., & Bond, M. H. (2013). Examining the relation of religion and spirituality to subjective well-being across national cultures. *Psychology of Religion and Spirituality*, 5(4), 304-315.
- Radheyshyam, & Devi, P. (2007). Religiosity, religious performance, helping behaviour and life satisfaction in aged. *Disabilities and Impairments*, 21(1), 10-18.
- Rizvi, A. A. (1989). *Muslim traditions in psychotherapy and modern trends*. Lahore: Institute of Islamic Centre.
- Ruqayya, H. (2008). *Relationship between religious orientation and personality traits of students of English medium schools and Deni madaris* (Unpublished Masters thesis). National Institute of Psychology, Quaid-e-Azam University Islamabad, Pakistan.
- Saunders, S. M., Petrik, M. L., & Miller, M. L. (2014). Psychology doctoral students' perspectives on addressing spirituality and religion with clients: Associations with personal preferences and training. *Psychology of Religion and Spirituality* 6(1), 1-8
- Sarason, I. G., & Sarason, B. R. (2002). *Abnormal psychology: The problem of maladaptive behavior*. New Delhi: Pearson Education Inc.
- Scheier, M. F., & Carver, C. S. (2003). Self-regulatory processes and responses to health threats: Effects of optimism on well-being. In J. Suls & K. A. Wallston. (Eds.), *Social psychological foundations of health and illness* (pp. 395–428). Blackwell: Oxford.
- Smith, N., Young, A., & Lee, C. (2004). Optimism, Health-related Hardiness and Well-Being among Older Australian Women. *Journal of Health Psychology*. 9(6), 741-752. doi: 10.1177/1359105304045373
- Spilka, B., Hood, R. W., & Gorsuch, R. L. (1985). *The psychology of religion. An empirical approach*. Englewood Cliffs, New Jersey: Prentice Hall.
- Stark, R. (1971). Psychopathology and religious commitment. *Review of Religious Research*, 12, 165-176.
- Suhail, K., & Chaudhry, H. R. (2004). Predictors of subjective well-being in an Eastern Muslim culture. *Journal of Social and Clinical Psychology*, 23, 359–376.
- Watters, W. (2004). *Deadly doctrine: Heath, illness, and Christian God- talk*. Buffalo, New York: Prometheus Books.
- Wulff, D. M. (1996). The psychology of religion: An overview. In E. P. Shafranske. (Ed.), *Religion and the clinical practice of psychology* (pp. 43-70). Washington, DC: American Psychological Association.
- Yeung, W. J., & Chan, Y. (2007). The positive effects of religiousness on mental health in physically vulnerable populations: A review on recent empirical studies and related theories. *International Journal of Psychosocial Rehabilitation*, 11 (2), 37-52.
- Zeb, R. (2013). *Development and standardization of a multi dimensional personality inventory* (PhD dissertation). Shaheed Benazir Bhutto Women University, Peshawar, Pakistan.
- Zeb, R., Riaz, M. N., & Jahangir, S. F. (2013). Development and standardization of multi dimensional personality inventory. *FWU Journal of Social Sciences*, 7(2), 113-123.