RELATIONSHIP BETWEEN LIFE ORIENTATION (OPTIMISM/PESSIMISM) AND MENTAL HEALTH

Taseer Fatima, Saima Ambreen*, Mussarat Jabeen Khan, Waseem Fayyaz*****

Foundation University of Medical Sciences, Islamabad Pakistan, *University of Balochistan, Quetta Pakistan, **International Islamic University, Islamabad Pakistan, ***Government Gordon College, Rawalpindi Pakistan

ABSTRACT

Objective: To study the relationship between Life Orientation (optimism/pessimism) and Mental Health.
Study Design: Cross-sectional study design.
Place and Duration of Study: The clinical sample was taken from Armed Forces Institute of Mental Health, Rawalpindi and Fauji Foundation Hospital, Rawalpindi. The sample of non-clinical individuals was selected from the areas of Rawalpindi and Islamabad, from Jan 2016 to Sep 2016.
Methodology: The researcher used translated versions of the two instruments, Life Orientation Test (LOT), and Mental Health Inventory (MHI). Sample comprised of 90 adults (n=45 for both men and women) ranging from 18-50 years of age. Sample was further divided into clinical (n=45) and normal population (n=45). The clinical population comprised of patients with the diagnosis of mood (n=22) and anxiety disorders (n=23).
Results: The results revealed that life orientation and mental health were significantly correlated to each` other (r=0.78). For confirming the relationship of life orientation with mental health further covariance of age, gender and education was controlled through Analysis of Covariance (ANCOVA). Results revealed that life orientation explained 97% of the variance in mental health initially but after partialling out the covariance of demographic variables, life orientation still significantly accounted for 55% of variance in mental health scores.
Conclusion: The manner through which one orients his or her life optimistically or pessimistically can have deterministic effects on one's mental health.

Keywords: Life orientation, Mental Health, Optimism, Pessimism.

INTRODUCTION

In daily life every human being faces many stressors. Depending upon thinking styles, the same stressor has different meanings for different people. These patterns of thoughts are called response styles or life orientation, which include the traits of optimism or pessimism. Optimism is defined as an inclination to expect the best possible outcome for actions or events. Pessimism, on the other hand, is the inclination to expect the least favorable or worst outcomes[1]. In Pakistan there is a common observation that distressing factors have increased and mental health has declined. Some researches have examined the relationship between some positive constructs as Aslam[2] found a significant relationship between mental health, social support and personality type. Some researches have explored the hopelessness and life orientation as predictors of suicide ideation among Pakistani adolescents[3]. Some studied the relationship of parental mental health with children's behavioral problems[4,5].

Mental health is a special area of concern in the field of psychology. Through this study, we will come to know how mental health is influenced differently by optimism and pessimism while controlling the covariants like age, gender and education. These covariants can influence the relationship between life orientations and mental health directly or indirectly[6]. For example, Felton, Gibson, and Sanbonmatsu[7] indicated that men and women not necessarily differ in level of optimism, but they may differ in the way they may give meaning to optimism. Similarly, these covariants may not look significant alone but they may have an interactional effect[8].

Correspondence: Dr Mussarat Jabeen Khan, Department of Psychology, IIUI Islamabad Pakistan
Email: mussarat.jabeen@iiui.edu.pk
Received: 14 Feb 2018; revised received: 19 Apr 2019; accepted: 06 May 2019

Life orientation and mental health are issues that need deep understanding on behalf of the psychologist and he or she should probe their independent and associative influences upon individuals. The right diagnosis or problem identification is half way to remedy. The implication for community workers and family care givers is that they can take the protective measures to avoid the harmful impacts of pessimism on mental health. They can induce positive thinking in children and vulnerable adults. The main objectives of the study were to explore the influence of life orientation on mental health, to have an insight about the alterations of health patterns, in individuals with pessimistic approach towards life and to explore if variables like age, gender and education influence one's mental health along with life orientation[9].

METHODOLOGY

This cross-sectional study was conducted to study the relationship of life orientation (optimism/pessimism) and mental health after controlling the covariants. Purposive sampling technique was used to collect data. Sample size was calculated using WHO calculator for sample size determination keeping confidence level at 95% and power of test at 80%. Sample included 90 individuals (n=45 for both men and women) and was equally divided into clinical and non-clinical sub-samples. The clinical sub-sample of 45 (n=21 for women, n=24 for men) was further divided into two diagnostic groups including 22 patients having mood disorder and 23 anxiety disorder. The diagnostic groups were chosen on the basis of hospital record and non-standardized checklist based on DSM-IV TR criteria. The clinical sample was taken from Armed Forces Institute of Mental Health, Rawalpindi (AFIMH) and Fauji Foundation Hospital, Rawalpindi (FFH). The sub-sample of 45 non-clinical individuals (n=24 for women, n=21 for men) was selected from Rawalpindi and Islamabad. The sample was selected by informed consent. The hypothesis of the present study was there was a positive correlation between the life orientation and mental health. Individuals having optimistic life orientation have better mental health than individuals having pessimistic life orientation. The life orientation have sufficient influence on mental health after controlling the influence of age, gender and education. Translated version of Life Orientation Test (LOT)[9] was used to measure Life Orientation (Optimism/Pessimis). It was translated and validated by Ayub[3]. It has four positively worded items (e.g., I'm always optimistic about my future), four negatively worded items (e.g., I hardly ever expect things to go my way), and four filler items (e.g., I enjoy my friends a lot). Item 3, 8, 9, & 12 are negative. The four positively keyed include items 1, 4, 5, & 11. There were five response options ranging from Strongly Agree to Strongly Disagree. The score range is 8-40 for 8 test items, higher scores indicating more optimistic outlook. The alpha coefficient for the translated version is 0.76. Mental Health Inventory (MHI) 4 is a 38 items instrument. Each item asks respondents to rate on a six point frequency scale how they had been feeling during the past few months. Responses range from 1 = all of the time to 6 = none of the time. The inventory was translated by Khan[4]. The alpha coefficient for this version is 0.98. These instruments were used in a lot of earlier studies[10-12]. Permission for clinical data was sought from AFIMH and FFH. Informed consent was taken from every participant for data collection. Scales were administered individually. Descriptive and inferential statistics were used to analyze the data by using statistical package for social science (SPSS IBM Version 21). Descriptive statistics (i.e. means and standard deviations) and Psychometric properties (i.e. reliability coefficients of instruments) were calculated. Inferential statistics (i.e. Bivariate correlation, t-test and ANCOVA) were used to measure correlation, mean differences and Analysis of Covariance across variables.

RESULTS

The participants were literate, and their age ranged from 18 to 50 years 34.06 ± 1.18 (Mean ± SD). Alpha reliability coefficients of Life Orientation Test-LOT (0.68) and Mental Health

Inventory-MHI (0.97) are quite satisfactory. The correlation coefficient of 0.78 (p<0.001) showed significant positive relationship between life orientation and mental health.

Table-I showed the Mean Differences on Mental Health by Optimistic and Pessimistic Life Orientation (LOT) group of individuals. The researchers decided for a cut-off score of 24 on life orientation scores. The individuals scoring 24 and above were considered as having optimistic life orientation and individuals scoring below 24 were considered as having pessimistic life orientation. The mean and standard deviations of the two groups (optimistic & pessimistic) differ significantly (t (88) = 9.36, p<0.001) on their mental health scores. Subjects in optimistic group had high score on mental health (M=169.72 ± 28.43) than the subjects of pessimistic group (M=115.22 ± 24.80). Table-II indicated the Mean Differences of the Non-clinical and two Clinical sub-samples on Mental Health Inventory (MHI). The mean differences on mental health inventory scores for the three groups including non-clinical individuals, individuals having mood disorder and having anxiety disorder was significant (F (2,87) = 90.027; p<0.001). Table-II clearly indicated that the non-clinical group has significantly higher mental health score than the two clinical groups.

Means and standard deviations of demographic variables were also computed for the groups of diagnosis, gender, age and education on MHI. Mean differences of the two age groups (18-34 & 35-50) were non-significant. Mean differences on gender were non-significant. Mean differences of the two educational groups (Matric & Above-matric-till-graduation) were significant (t (88) = 3.185; p<0.01).

Table-I: Mean differences of the two life orientation groups on scores of mental health inventory (n=90).

	n	Mean	SD	T (88)	95% CI		Cohen's d
					LL	UL	
Optimistic L.O	54	169.72	28.43	9.36***	42.93	66.06	2.04
Pessimistic L.O	36	115.22	24.80		43.23	65.77	

Note. L.O= Life orientation; M= Mean; SD= Standard deviation. ***p<0.001

Table-II: Mean differences of the three diagnostic groups on mental health inventory scores (n=90).

Diagnostic group	n	Mean ± SD	F
Non-clinical	45	178.51 ± 19.13	90.027***
Mood disorder	22	109.77 ± 25.40	
Anxiety disorder	23	124.56 ± 23.58	

***p<0.001; df=2, 87.

Table-III: Effect of life-orientation on mental health scores after controlling for education, gender & age (n=90).

Sources	SS	Df	MS	F	p-value
Education	2106.76	1	2106.76	2.89	0 .093
Gender	34.53	1	34.53	0.047	0.828
Age	78.46	1	78.46	0.108	0.743
Life Orientation (Optimism-pessimism)	76928.755	2	38464.37	52.85	0.001
Error	61853.91	85	727.693	-	-

Mean and standard deviation of demographic variables were also computed for the groups of gender, age and education on LOT. Mean differences of the two age groups were non-significant. Mean differences by age are non-significant. Mean differences of the two educational groups were highly significant (t (88) = 3.717; p<0.001).

Table-III indicated the Effect of Life Orientation on Mental Health after Controlling the Covariates through ANCOVA. Holding the homogeneity of regression and homogeneity of variance assumptions, analysis revealed that

without controlling for variance of age, gender and education, life orientation accounted for 97% (as indicated by Partial Eta Squared) of variance in Mental health with significant mean differences on mental health for individuals having pessimistic and optimistic life orientation (F (2)= 1389.46, p<0.001). This explained that variance in mental health scores due to life orientation got reduced to 55% after controlling the covariance of age, gender and education as indicated by Partial Eta squared values (table-III). Analysis revealed that even after controlling for covariance of education, gender, and age, mental health scores differ significantly (F(2)= 52.85, p<0.001) among optimistic and pessimistic individuals.

DISCUSSION

The present research was conducted to find relationship of life orientation and mental health after controlling the covariant. The two scales used in the research were Life Orientation Test (LOT) 9 and Mental Health Inventory (MHI)[4]. Their reliability coefficients were satisfactory.

Results revealed significant positive relationship between life orientation and mental health. This result verified the first hypothesis which predicted a positive relationship between life orientation and mental health. The relationship between life orientation and mental health was also evident by past researches like Russello[13], who stated that mental health, over time, low self-esteem and low self-confidence, general pessimism, and lack of relationships, may erode an individual's mental health. Several other studies have also emphasized the importance of optimistic and pessimistic life orientation in the domain of health; like optimists are less likely to become depressed[14]. Creed, Patton, and Bartrum[15] stated that people with high optimism report high self-esteem and low psychological distress. Researches also indicated that mental health may also influence an individual's level of optimism and pessimism (for example, Constantin[16]). In general, physically and mentally healthy people are more optimistic than those who have health problems.

Considering the second hypothesis predicting a positive relationship between optimistic life and mental health, the current researchers decided for a cut off score so that it would be possible to distinguish between optimists and pessimists. The mean and standard deviation values showed the superiority of optimists over pessimists in mental health status and this confirmed the second hypothesis. Review of past researches also revealed the role of optimism in promoting mental health. Janet *et al*[17]. found that optimism was negatively associated with anxiety, depression, and distress and positively associated with psychological adjustment during stressful life events. The consistent positive association between optimism and mental health has been found for healthy, chronically ill, and cancer populations. In many studies positive relationship of optimism, mental health and emotional wellbeing was reported[18].

Mean differences of demographic groups (age, gender, and education) were also computed on LOT. Mean differences on the variable of age (18-34 & 35-50) and gender were non-significant on the LOT. Felton, Gibson, and Sanbonmatsu[7] also disclose somewhat similar facts about gender; it was not that men were significantly more optimistic than women; it was this trait that leads to different behavioural tendencies in men and women. This suggested that being optimistic means different for men and women. El-Anzi[19] also revealed that there were no differences between males and females on pessimism. Mean differences of two education groups (Matric & Above-matric-till-graduation) on LOT were highly significant. So people with higher education may exhibit more optimism than people having lower education. Past researches have acknowledged that optimism and pessimism play a considerable role in the lives of individuals with respect to educational, occupational, and psychological adjustment. Limited evidence suggested that prescription for learning schemes increase confidence, self-esteem, and result in greater sense of control, hope and optimism and improved health behaviors[20].

Mean differences of demographic variables on MHI were also computed. Mean differences of three diagnostic groups displayed supremacy of normal individuals over individuals with mood or anxiety disorders in mental health status. Mean differences of demographic variables of age and gender were non-significant. Mean differences were significant on the variable of education. The mean values on MHI revealed that people having education above matric have better mental health than individuals having education till matric. This result can be supported by other studies. For example, Chevalier and Feinstein[21] found that education reduces the risk of poor mental health and also reduced the risk of transition to depression and improved mental health. The effect was significantly stronger for women. Hammond[22] presented facts about impact of learning. Participation in lifelong learning had effects upon a range of health behaviours: well-being, protection and recovery from mental illnesses, and the capacity to deal with distressing conditions like illness and disability.

The third hypothesis proposed sufficient influence of life orientation on mental health after controlling the influence of age, gender and education. Previous analyses have indicated that the variables like age, gender and education can have direct or indirect influence on life orientation and mental health. They may show non-significant direct relationship with dependent variable, but can interact with each other and with independent variable (can co-vary with it) to moderate its direct relationship with dependent. ANCOVA revealed that without controlling for variance of age, gender and education, life orientation accounted for 97% of variance in mental health. It got reduced to 55% after partialling out the covariance of age, gender and education; that still indicates sufficient impact. So a significant part of any person's mental health may be attributed to the way he or she orients his or her life despite his/her particular gender, age, or literacy group.

Past research has linked optimism to better mental health as correlational studies show an association between pessimism and depression[21,22]. Similarly, Anthony, Kritz-Silverstein, Barrett-Connor[22] in a longitudinal study on psychological wellbeing found that living in the present, experiencing life as meaningful and being optimistic, individuality, adaptability, close relationship, continued growth, and spirituality contributed to individual's psychological well-being; and all these variables are indices of mental health.

LIMITATION OF STUDY

In present study, the data was collected by using only self report measures and sample size was small, so in future it is recommended to use other measures as well with larger samples.

CONCLUSION

It life orientation contribute significantly to mental health even when we control other influential factors like age gender and education. On the basis of the results obtained, it can be suggested that one can add an element of prevention to his or her life by adopting an optimistic orientation in life.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

REFERENCES

1. Kim ES, Smith J, Kubzansky LD. Prospective study of the association between dispositional optimism and incident heart failure. Circ Heart Fail 2014; 7(3): 394-400.
2. Aslam S. Relationship between mental health and social support and moderating effect of age and personality on their relationship (Unpublished M.Sc. theses). Foundation University, Islamabad, Pakistan 2010.
3. Ayub N. Measuring hopelessness and life orientation in Pakistani adolescents. J Crisis Interven Suicide Preven 2009; 30(3): 153-60.
4. Khan MJ. Relationship of parental mental health with children's behavioral problems and role of moderating factors (Unpublished M. Phil. Dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan 2008.
5. Ayub N. Interplay of personality traits, hopelessness, life orientation, and social support in predicting suicidal ideation (Unpublished M. Phil. Dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan. 2004.

6. Fernández-Abascal EG, Martín-Díaz MD. Dimensions of emotional intelligence related to physical and mental health and to health behaviors. Frontiers Psychol 2015; 6(1): 317-21.
7. Felton J, Gibson B, Sanbonmatsu DM. Preference for risk in investing as a function of trait optimism and gender. J Behav Finan 2004; 4(1): 33-40.
8. Carver CS, Scheier MF. Dispositional optimism. Trends in Cognitive Sciences. 2014; 18(1): 293-99.
9. Schou-Bredala I, Heira T, Skogstad L. Population-based norms of the Life Orientation Test-Revised (LOT-R). Intl J Clini Health Psychol 2017; 17(3): 216-224.
10. Armbruster D, Pieper L, Klotsche J, Hoyer J. Predictions get tougher in older individuals: A longitudinal study of optimism, pessimism and depression. Soc Psychiatry Psychiatr Epidemiol 2015; 50(1): 153-63.
11. Chiesi F, Galli S, Primi C, Innocenti Borgi P, Bonacchi A. The accuracy of the Life Orientation Test Revised (LOT-R) in measuring dispositional optimism: evidence from item response theory analyses. J Pers Assess 2013; 95(5): 523-29.
12. Cano-García FJ, Sanduvete-Chaves S, Chacón-Moscoso S, Rodríguez-Franco L, García-Martínez J, Antuna-Bellerín MA, et al. Factor structure of the Spanish version of the Life Orientation Test-Revised (LOT-R). Testing several models. Intl J Clini Health Psychol 2015; 15(1): 139-48.
13. Ramsay JE, Yang F, Pang JS. Divergent pathways to influence: Cognition and behavior differentially mediate the effects of optimism on physical and mental quality of life in Chinese university students. J Health Psychol 2015; 20(7): 963-73.
14. Creed PA, Patton W, Bartrum D. Multidimensional properties of LOT-R: Effects of optimism & pessimism on career and well-being related variables in adolescents. J Career Assess 2002; 10(1): 42-61.
15. Janet S, Carl A, Basen-engquist K, Kudelka A, Bevers MW, Cohen L. Optimism, distress, health-related quality of life, and change in cancer antigen 125 among patients with ovarian cancer undergoing chemotherapy. Psychosomatic Med 2006; 68(4): 555-562.
16. Fernández-Abascal EG, Martín-Díaz MD, Molina VBB. Different conceptualizations of optimism/ pessimism and their relationship with physical and mental health and health-related behaviors. J Depress Scholarly Pag Anxiety Disord 2018; 1(1):41-54.
17. El-Anzi FO. Academic achievement and its relationship with anxiety, self-esteem, optimism, and pessimism in Kuwaiti students. Social Behav Personal 2005; 33(1): 95-104.
18. Rezaei SG, Mousavi SSS, Safari F, Bahrami H, Menshadi SMD. Study of relationship between optimism, pessimism and coping strategies with mental health among university students of lorestan. Open J Social Sci 2015; 3(1): 190-95.
19. Hammond C. Impacts of lifelong learning upon emotional resilience, psychological and mental health: fieldwork evidence. Oxford Rev Edu 2004; 30(4): 551-68.
20. Hingle MD, Wertheim BC, Tindle HA. Optimism and diet quality in the women's health initiative. J Academy Nutri Dietetic 2014; 114(7): 1036-45.
21. Boehm JK, Williams DR, Rimm EB. Association between optimism and serum antioxidants in the midlife in the United States study. Psychosomatic Med 2013; 75(1): 2-10.
22. Anthony EG, Kritz-Silverstein D, Barrett-Connor E. Optimism and mortality in older men and women: The Rancho Bernardo Study. J Aging Res 2016; 2016: 5185104.