



ORIGINAL RESEARCH PAPER

Pharma

A PROBE INTO THE EFFECT OF PERSONALITY FACTORS ON MAINTAINING GENERAL MENTAL HEALTH OF THE UNIVERSITY STUDENTS

KEY WORDS: General Mental Health, Big Five Factors of Personality, Multiple Regression Analysis.

Dibakar Ghosh*

Research Scholar, Department of Education, Sidho-Kanho-Birsha University, Purulia, West Bengal, India *Corresponding Author

Samirranjan Adhikari

Professor, Department of Education, Sidho-Kanho-Birsha University, Purulia, West Bengal, India

ABSTRACT

Objective: According to **Josefsson et al. (2011)**, **Cloninger and Zohar (2011)** personality traits and characters of an individual affect his/her mental health. But the question is that how these personality traits and characters affect individuals in a way that promote mental health and wholesome behaviours.

Method: This one was study carried out through descriptive survey method within ex-post-facto research design. To collect the data the "Big Five Inventory (BFI)" (**John & Srivastava, 1999**) and the "General Health Questionnaire-28 (GHQ-28)" (**Goldberg & Hillier, 1979**) were administered on a random sample of 61 male and 39 female university students.

Results: A "Multiple Regression Analysis" was carried out by considering "General Mental Health" as dependent variable and "Personality Factors" as independent variables. From the result it was found that –

General Mental Health (GHQ) = 73.272 - 0.499 × Extraversion - 0.600 × Agreeableness - 0.158 × Conscientiousness + 0.942 × Neuroticism + 0.069 × Openness

Conclusions: From the regression equation, it is observed that neuroticism and openness contributed positively to the score on GHQ-28 and whereas all other three factors of personality (extraversion, agreeableness and conscientiousness) put their negative influence here. It is known that higher the score in GHQ-28 implies the poorer mental health. Emotional imbalance, anxiety proneness, and high aspiration as well as achieve anxiety, fantastic day dreaming may be detrimental to the good mental health.

1. Theoretical Perspective of the Study

The term 'mental health literacy' was first coined by **Jorm et al. (1997)**. This term means the knowledge and beliefs about mental disorders which aid their recognition, management or prevention. The World Health Organization famously defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. So, mental health is an integral part of health; it is more than the absence of mental illness, and mental health is intimately connected with physical health and behaviour. Again the World Health Organization has recently proposed that mental health is a state of well-being in which an individual realizes her or his own abilities; s/he can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.

Realizing abilities, coping with stresses, and working productivity are some behaviours and according to definition of personality, these style of behaving are determined by personality. The relationship between personality and mental health is more vivid. Subjective well-being has been defined as an individual's evaluation of her/his life as a whole (**Diener, 1984**). This individualistic evaluation can be affected by the way of thinking or feeling in which personality account for this. Well-being is the other term in the realm of health and mental health. Well-being is a multidimensional concept that includes various aspects of mental and physical health, supporting social relationships, and ability to cope with stressful situations (**McDowell, 2010**). Therefore, personality which directs the ways of thinking, feeling and behaving is an undeniable construct in determining healthy states.

1.1 Personality and Mental Illness

Mental illness or, in other word, "psychopathology" is a term that can facilitate the conceptualization of mental health. By measuring psychopathology symptoms in mental health studies, it can be set the findings in a broader perspective of well-being and ill-health (**Josefsson et al., 2011**). The concept of mental health requires an understanding of abnormal behaviour leading to mental illness. Normality and abnormality cannot be differentiated objectively – these two reside on a continuum and slowly fade into the other (**Millon et al. 2004**).

Mental health and mental illness are the same – these cannot be considered separately. An individual with mental illness does not experience the state of good mental health. By recognizing and

examining the personality factors related to psychopathology, the relationship between personality and mental health would be clear in turn. Mental illness (MI) and mental health (MH) have been considered to be bipolar extremes of the same underlying dimensions; but this viewpoint has begun to be questioned. There are now some indications that positive and negative aspects of psychological experience are mediated by different psychological systems (**Keyes, 2007, 2009; MacLeod & Moore, 2000; Pressman & Cohen, 2005**). Thus, low levels of a mental illness characteristic such as depression does not guarantee high levels of mental health characteristic such as optimism. Various combinations of both MI and MH are possible (Keyes, 2007).

1.1.1 Relationship between Personality and Mental Health

Many studies have shown the effect of personality, personality traits, and personality dimensions in mental health (**Josefsson et al., 2011; Cloninger & Zohar, 2011; Cloninger, 1999; Cloninger, 2004; Cloninger, 2006; Diener & Biswas-Diener, 2008; Aboaja, Duggan, & Park, 2011; Chan & Joseph, 2000; Herero & Extremera, 2010; Wood & Tarrier, 2010; Joseph & Wood, 2010**). A cumulating body of research suggests that there are variables such as personality traits that predispose individuals to experience specific life events (**Luhmann et al., 2012**). However, as it is well known, personality is conceptualised as an unchanging aspect of the person (**Chan & Joseph, 2000**) at least according to dispositional approach (**Miscehl & Shoda, 2008**). Persons who are very anxious, depressed, angry, or distraught will often fail to provide an accurate description of their general personality traits (i.e., their usual way of thinking, feeling, behaving, and relating to others). Presence of a mental disorder negatively affect individuals in realizing their abilities and coping with stress as well as making them dysfunctional in important areas of life and this is in opposition with mental health. Thus presence and absence of mental health can alter the appearance and expression of personality traits.

1.2 Significance of the Study

In course of investigation to find out the personality factors correlated with general mental health it is hoped that mental health could be managed more effectively. Through the investigation of the role of personality factors in managing general mental health in university level students a counselling programme may be framed.

1.3 Broad Objective of the Study

The objective of the present study was to discern the relationships between the mental health and personality factors in adult population.

1.3.1 Specific Objective of the Study

The specific objective of the present study was to formulate a multiple regression equation to predict the general mental health by taking personality factors as independent variables.

2. Method

The present study was carried out through descriptive survey method within ex-post-facto research design. The details regarding the sample, research instruments, procedure of data collection and statistical technique are reported herewith.

2.1 Participants

A random sample comprising of 61 male and 39 female university students participated to the study.

2.2 Research Tool

The following research tools were used in the present study for data collection. The tools were selected by applying yardsticks of relevance, appropriateness, reliability, validity and suitability. Brief descriptions of the tools are given herewith.

2.2.1 Big Five Inventory (BFI), (John & Srivastava, 1999)

A 44-item inventory that measures an individual on the Big Five Factors (dimensions) of personality (John & Srivastava, 1999). The Big Five Factors (dimensions) of personality are – (a) Openness, (b) Conscientiousness, (c) Extraversion (d) Agreeableness and (e) Neuroticism.

This is a personality test, it helps one understand why s/he acts the way that s/he does and how her/his personality is structured. There are 44 statements and with each statement a 5 point Likart type scale is attached. An individual has to mark how much s/he agrees with the statement on the 1-5, where 1=disagree, 2=slightly disagree, 3=neutral, 4=slightly agree and 5=agree.

2.2.2 General Health Questionnaire-28 (GHQ-28) (Goldberg & Hillier, 1979)

In the GHQ-28 the respondent is asked to compare his recent psychological state with his usual state. For each item four answer possibilities are available (1-not at all, 2-no more than usual, 3-rather more than usual, 4-much more than usual). Likert scoring procedure (1, 2, 3 and 4) is applied here.

Through factor analysis, the GHQ-28 has been divided into four subscales. These are – (a) somatic symptoms (items 1–7); (b) anxiety/insomnia (items 8–14); (c) social dysfunction (items 15–21), and (d) severe depression (items 22–28) (Goldberg & Hillier, 1979). But the strong correlations among the subscales indicate the inter-relatedness of the subscales (Goldberg & Williams, 1988). The high correlations among the subscales and the GHQ-28 total scale indicate the uni-dimensionality of the instrument (Goldberg & Hillier, 1979). All of the 28 items are scored and summed up. Hence, the total scale score ranges from 28 to 112. The higher the score the poorer is the psychological well-being of the individual.

2.3 Procedure

The relevant data on different constructs were collected by administering the above-mentioned tools on the subjects under study in accordance with the directions provided in the respective manuals of the tools.

2.4 Statistical Analysis

A multiple regression analysis by considering "General Mental Health" as dependent variable and the "Big Five Factors" of personality as independent variables was done with the help of SPSS-19 software.

3. Results

The results are presented in tabular form.

Table-1: Variables Entered in Multiple Regression Analysis with General Mental Health of University Level Students as Dependent Variable

Dependent Variable	Variables Entered	Method
General Mental Health	Openness, Neuroticism, Agreeableness, Extraversion, Conscientiousness	Enter

Table-1 shows variables entered in multiple regression analysis.

Dependent variable is general mental health of both male as well as female students as a whole.

Independent variables are personality factors such as Openness, Neuroticism, Agreeableness, Extraversion, and Conscientiousness.

Method of analysis – here enter method of analysis has been considered.

Table-2: Model Summary in Multiple Regression Analysis with General Mental Health of University Level Students as Dependent Variable

R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics				
				R ² Change	F Change	df ₁	df ₂	Sig. F Change
0.588	0.346	0.311	9.907	0.346	9.956	5	94	0.000

Table-2 shows the model summary in multiple regression analysis. From this table it is clear that the F change is highly significant.

Table-3: ANOVA in Multiple Regression Analysis with General Mental Health of University Level Students as Dependent Variable

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4885.955	5	977.191	9.956	0.000
Residual	9226.485	94	98.154		
Total	14112.440	99			

Table-3 shows ANOVA in multiple regression analysis, from where we can see that the F is highly significant.

Table-4: Coefficients in Multiple Regression Analysis with General Mental Health of University Level Students as Dependent Variable

Predictors	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	β		
(Constant)	73.272	13.560		5.403	0.000
Extraversion	-0.499	0.226	-0.196	-2.206	0.030
Agreeableness	-0.600	0.233	-0.227	-2.578	0.012
Conscientiousness	-0.158	0.239	-0.067	-0.661	0.510
Neuroticism	0.942	0.216	0.438	4.366	0.000
Openness	0.069	0.196	0.032	0.350	0.727

Table-4 shows coefficient of multiple regression analysis. The linear multiple regression equation was as follows:

$$\text{General Mental Health (GHQ)} = 73.272 - 0.499 \times \text{Extraversion} - 0.600 \times \text{Agreeableness} - 0.158 \times \text{Conscientiousness} + 0.942 \times \text{Neuroticism} + 0.069 \times \text{Openness}$$

4. Discussion

From the table-4 and the regression equation, it was observed that neuroticism and openness contributed positively to the score on GHQ-28 and whereas all other three factors of personality (extraversion, agreeableness and conscientiousness) put their negative influence here. It is known that higher score in GHQ-28 implies the

poorer mental health. Emotional imbalance, anxiety proneness, and high aspiration as well as achieve anxiety, fantastic day dreaming may be detrimental to good mental health.

5. Conclusion

Neuroticism and openness (emotional imbalance, anxiety proneness, high aspiration and achievement anxiety, and fantastic day dreaming) were detrimental to the preservation of general mental health and whereas extraversion, agreeableness and consciousness beneficial to good mental health. In framing a counselling programme to uphold mental health neuroticism and openness should be controlled; whereas extraversion, agreeableness and consciousness should be encouraged.

Reference

1. Aboaja, A., Duggan, C., & Park., B. (2011). An exploratory analysis of the NEO-FFI and DSM personality disorders using multivariate canonical correlation. *Personality and Mental Health*, 5:1-11.
2. Chan, R. & Joseph, S. (2000). Dimensions of personality, domains of aspiration, and subjective well-being. *Personality and Individual Differences*, 28:347-354.
3. Cloninger, C. R., & Zohar, A. H. (2011). Personality and the perception of health and happiness. *Journal of Affective Disorders*, 128:24-32.
4. Cloninger, C.R. (1999). *Personality and Psychopathology* (American Psychopathological Association Series). American Psychiatric Press, Washington, D.C.
5. Cloninger, C.R. (2004). *Feeling Good: the Science of Well-Being*. Oxford University Press, New York.
6. Cloninger, C.R. (2006). The science of well-being: an integrated approach to mental health and its disorders. *World Psychiatry*, 5:71-76.
7. Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3):542-575.
8. Diener, E., Biswas-Diener, R. (2008). *Happiness: Unlocking the Secrets of Psychological Wealth*. Blackwell Publishing, Malden, MA.
9. Goldberg, D.P. and Hillier, V.F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9:139-45.
10. Goldberg, D. and Williams, P. (1988). *A user's guide to the General Health Questionnaire*. NFER NELSON Publishing company Ltd. Windsor, 1988.
11. Herero, V. G., & Extremera, N. (2010). Daily life activities as mediators of the relationship between personality variables and subjective well-being among older adults. *Personality and Individual Differences*, 49:124-129.
12. John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2:102-138). New York: Guilford Press.
13. Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Politt, P. (1997). 'Mental health literacy': a survey of the public's ability to recognize mental disorder and their beliefs about the effectiveness of treatment. *The Medical Journal of Australia*, 166:182-186.
14. Josefsson, K., Cloninger, C. R., Hintsanen, M., Jokela, M., Pulkki-Råback, L., & Keltikangas-Järvinen, L. (2011). Associations of personality profiles with various aspects of well-being: A population-based study. *Journal of Affective Disorders*, doi: 10.1016/j.jad.2011.03.023.
15. Joseph, S., & Wood, A. (2010). Assessment of positive functioning in clinical psychology: Theoretical and practical issues. *Clinical Psychology Review*, 30:830-838.
16. Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62(2):95-108.
17. Keyes, C. L. M. (2009). The black-white paradox in health: Flourishing the face of social inequality and discrimination. *Journal of Personality*, 77:1678-1705.
18. Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A meta-analysis. *Journal of Personality and Social Psychology*, 102:592-615.
19. MacLeod, A. K., & Moore, R. (2000). Positive thinking revisited: Positive cognitions, well-being and mental health. *Clinical Psychology and Psychotherapy*, 7:1-10.
20. McDowell, I., (2010). Measures of self-perceived well-being. *Journal of Psychosomatic Research*, 69:69-79.
21. Millon, T., Grossman, S., Millon, C., Meagher, S., & Ramnath, R. (2004). *Personality Disorders in Modern Life*. (2nd ed.). John Wiley & Sons, New York.
22. Mischel, W., & Shoda, Y. (2008). Toward a unified theory of personality. In O. P. John, & R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality* (208-241). New York: Guilford.
23. Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health? *Psychological Bulletin*, 131(6):925-971.
24. Wood, A. M., Tarrrier, N. (2010). Positive Clinical Psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review*, 30:819-829.