

## Personality Factors, Self-Efficacy, and Mental Health among University Students: A Correlational Study

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**Abstract:** The aim of the present study is to investigate the personality factors and self-efficacy in relation to mental health among university students. The sample comprised of 80 post graduate students (40 boys and 40 girls), who was randomly selected, from Aligarh Muslim University, Aligarh, India. The NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992), General Self-Efficacy Scale-Hindi (GSS-H; Sud, 2002), and Mental Health Check-List (MHC; Kumar, 1992) were used to measure the personality factors, self-efficacy, and mental health respectively. Results of correlation analysis revealed that only conscientiousness dimension of NEO-FFI was significant positive relation with better mental health among students. Furthermore, self-efficacy was significantly positive correlated with extroversion and conscientiousness while negative correlated with neuroticism. Moreover, it was also found that self-efficacy was positively correlated with mental health.

**Keywords:** Neo-Five Factor, Self-Efficacy, Mental Health, Post Graduate students

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### I. Introduction

Mental health is one important aspect of positive psychology, World Health Organization (WHO) added mental health as one important contained in defining health as “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,” while, WHO defined mental health as “concepts of mental health include subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence and recognition of the ability to realize one’s intellectual and emotional potential. It has also been defined as a state of well-being, whereby individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities. Mental health is about enhancing competencies of individuals and communities and enabling them to achieve their self-determined goals” [1]. As Saxena [2] mental health refers to a state of mind which is characterised by emotional well-being, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationship and cope with the ordinary demands and stresses of life. Student’s life has more psychological or mental problems in present era because greater competitiveness, to become more perfectionism, urges to fulfil parental expectation, and changing environment, etc. As previous research survey found college students reports at any given time there will be 10 to 20 % of student population suffering from psychological problems like stress, anxiety, and depression [3].

### Neo-Five Factor Personality and Mental Health

Personality as many enduring traits, and for measuring this traits psychologists frequently developed different scales, for example Cattell’s Sixteen Personality Factors, Eysenck’s Big Three dimensions, and

Costa and McCrae's NEO Five-Factor Inventory. The Big Five personality factors or traits are consisting of five major domains or dimensions of personality, namely neuroticism, extraversion, agreeableness, openness to experience, and conscientiousness [4]. **Extraversion** associated with activity and energy, dominance, sociability, expressiveness, and positive emotions; **agreeableness** included prosocial orientation toward others with an antagonistic orientation, such as altruism, tender-mindedness, trust, and modesty; **conscientiousness** refers as socially prescribed impulse control that facilitates task and goal-directed behavior; **neuroticism** refers tendency to experience negative emotions such as negative affect, anxiety, sadness, irritability, and nervous tension; **openness to experience** reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety a person has.

Many studies affirmed that five-factor personality traits related to mental health such as Goodwin and Friedman investigated on health status and five-factor personality traits among adults, in the United States, their results showed that higher level of conscientiousness was associated with reduce level of mental and physical disorders while, a higher level of neuroticism was significantly contributed to increase in mental disorders [5]. Recently another study conducted by Zarei, Zeinalipour, Sough, Adli, and Sough on personality traits and general health among students, and found positive and significant relationship between personality traits of extraversion, openness (flexibility), agreeableness, conscientiousness and general health, while a negative relationship between neuroticism and general health. Further, they also found neuroticism predicts 0.45 % of variance of general health among students [6].

### **Self-Efficacy and Mental Health**

Another psychological variable of present study is self-efficacy which play important role in enhancing mental health. As Bandura's [7, 8] social cognitive theory, individual possess a self-system which enables them to exercise a measure of control over their thoughts, feelings, motivation and actions. So every individual estimates his ability to get things done, it may be an important element of a person's self-concept, which is a constellation of beliefs and experiences about his/her ability to deal effectively with the tasks and accomplish what needs to be done. Bandura defined self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercises influence over events that affect their lives" [9]. Ogunyemi and Mabekoje was found that self-efficacy and mental health was positively correlated with one another and also with personal growth initiative among university undergraduates [10].

Chamanabad, Mirdoraghi, and Pakmehr found significant correlation of self-efficacy and meta-cognition with student's mental health [11]. Similarly Parto, and Parto and Besharat were revealed that self-efficacy and problem solving were the direct and indirect predictors of mental health in adolescents [12, 13]. Mostafai, Mohiadin, and Mostafai showed that self-efficacy was positively correlated with general health and social functions and negative correlated with somatic symptoms, anxiety, depression and sleep disorder among students [14]. Recently in a study on the relationship between self-efficacy and hardiness with mental health of students, Shriatnia, Mirdoraghi, Pakmehr, and Iravani found that self-efficacy and hardiness were better predictors of mental health of students [15].

### **Objectives:**

1. To examine the relationship of NEO-FFI dimensions (i.e., neuroticism, openness, extroversion, conscientiousness, and agreeableness), self-efficacy and mental health among students.

### **Hypothesis:**

**H-1:** There will be significant relationship between NEO-FFI dimensions (i.e., neuroticism, openness, extroversion, conscientiousness, and agreeableness) and mental health among students.

**H-2:** There will be positive relationship between self-efficacy and mental health among students.

## II. Methods

**Study Sample:** The sample for the present study consisted of 80 post graduate students (40 boys and 40 girls) which were randomly selected from Aligarh Muslim University, Aligarh, India. The average age of the students was 21.39 years, and all the students came from middle socio-economic background.

**Measures:** The following psychological tests were used for present study.

**NEO Five-Factor Inventory (NEO-FFI):** NEO-FFI [4] was employed for present study which consists of 60-items. There are five broad domains of NEO-FFI i.e. extraversion, agreeableness, conscientiousness, neuroticism, and openness. Each of these five domains is represented by 12 items that must be scored on 5-point Likert scales. Consequently, scores range from 12 to 60. The NEO-FFI scales show correlations of .75 to .89 and internal consistency values range from .74 to .89, (as five domains internal consistency was N= .79, E= .79, O= .80, A= .75, C= .83) found.

**General Self-Efficacy Scale-Hindi Version (GSS-H):** General Self-Efficacy (GSS) scale was developed by Jerusalem & Schwarzer [16] in English version which consists of 10-items rated on four point rating scale and further it was translated in Hindi version by Sud [17]. This scale ranged from 10 to 40, and high scores showing as high self-efficacy of the person and vice-versa. The reliability coefficient of this scale was found to be ranging between 0.76 to 0.90 and validity of this scale is well established.

**Mental Health Check-List (MHC):** MHC was developed by Kumar [18] which consist of 11 items and it was distributed in two areas i.e. mental (six items) and somatic (five items) in 4 points rating format, scores range from 11 to 44. The lowest scores on mental health check-list indicates high mental health status and vice versa. The reliability of MHC was estimated through test retest and split half reliability Index which was found 0.81 and 0.83 respectively.

**Procedure:** For collecting the data questionnaire such as demographic sheet, NEO-FFI, GSS-H, and MHC were administered in the classroom situation. Before administering the tests rapport was established, then subject were requested to read the instruction carefully and then respond the questionnaire in true spirit. When the questionnaire was completed, the researcher collected the questionnaire from the subjects, and thanked for their participation and cooperation.

### **Statistical Analysis**

The obtained data were computed by using SPSS-16 version, Mean, SD of the total sample and Pearson's correlation coefficient was used to find out the significance relationship of personality factors and self-efficacy with mental health.

## III. Results and Discussion

*Table 1: Showing the Mean and SD of NEO-FFI, Self-Efficacy, and Mental Health Check-List of the Total Sample.*

Variable	N	Mean	SD
Neuroticism	80	25.40	5.32
Extroversion	80	25.40	4.66
Openness	80	23.93	3.60
Agreeableness	80	24.53	4.39
Conscientiousness	80	29.19	4.70
Self-Efficacy	80	29.56	5.69
<b>Total Mental Health</b>	80	21.58	4.94
I. Mental Health	80	11.86	2.96
II. Somatic Health	80	9.71	2.71

Table 1 shows that the Mean scores of neuroticism, extroversion, openness, agreeableness and conscientiousness are 25.40, 25.40, 23.93, 24.53, and 29.19, and SD are 5.32, 4.66, 3.60, 4.39, and 4.70, respectively. Similarly the Mean scores of self-efficacy is 29.56 and SD is 5.69, and total mental health Mean is 21.58 and SD is 4.94 while their sub-scale i.e. mental health and somatic health the Mean are 11.86, 9.71 and SD are 2.96, 2.71, respectively.

Table 2: Pearson's Correlation between Self-Efficacy, NEO-FFI and Mental Health Check-List among Students (N=80).

Variable	1	2	3	4	5	6	7	I	II
1. Neuroticism	1	-.288*	-.156	.210	-.177	-.312*	.120	.143	-.063
2. Extroversion		1	.060	-.146	.223*	*	-.105	-.112	-.068
3. Openness			1	-.117	.057	.451*	-.015	-.075	.055
4. Agreeableness				1	.147	.147	-.136	-.064	-.176
5. Conscientiousness					1	.508*	-.184	-.270*	-.039
6. Self-efficacy						1	-.049	-.244*	-.166
7. Total Mental Health							1	.882*	.857*

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I.	Mental Health	1	.514*
			*
II.	Somatic Health		
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\*\* $p < .01$ ; \* $p < .05$

Table 2 shows the relationship of five NEO dimensions of personality (i.e., neuroticism, extraversion, openness, agreeableness, and conscientiousness) with total mental health and it reveals that negative relationship was exist only one dimensions of NEO-FFI i.e. conscientiousness with mental health scores ( $r = -.270$ ,  $p < .05$ ) while relationship between NEO-FFI five dimensions with self-efficacy was found that three dimensions of NEO-FFI (i.e. neuroticism, extroversion and conscientiousness) was significantly correlated. The negative correlation between self-efficacy and neuroticism ( $r = -.312$ ,  $p < .01$ ), while positive correlation of self-efficacy with extroversion ( $r = .451$ ,  $p < .01$ ) and conscientiousness ( $r = .508$ ,  $p < .01$ ) was found among students score. Self-efficacy with total MHC scores ( $r = -.238$ ,  $p < .05$ ) was found negative relationship, while self-efficacy with MHC subscale i.e. mental ( $r = -.244$ ,  $p < .05$ ) was found significant negative relationship. As high scores of MHC scores which indicated low mental health while high scores of self-efficacy or conscientiousness indicated high self-efficacy or conscientiousness. Because significant negative relationship was found between conscientiousness and mental health subscale scores and self-efficacy with total MHC and its subscale (i.e. mental health) scores thus high conscientiousness and self-efficacy is associated with better mental health and low conscientiousness and self-efficacy was deleterious effect on mental health among students.

The result of present study showed that the first hypothesis was partially confirm as conscientiousness was positively correlated with mental health, it was supported by previous studies conducted by Booth-Kewley and Vickers [19], Goodwin and Friedman [5], and Zarei, et al. [6], who concluded that certain personality traits like conscientiousness was positively correlated and predicted with physical and mental health.

Present study also confirmed as true of second hypothesis that self-efficacy as positively correlated with mental health which showed consistent results of numerous previous studies [11, 14, 15, 20] findings that self-efficacy was positively correlated with general and mental health and social functions and negative correlated with somatic symptoms, anxiety, depression and sleep disorder. Similar studies [12, 13] also revealed that self-efficacy and problem solving were the direct and indirect predictors of problem solving, assertiveness, coping and mental health in adolescents.

#### IV. Conclusion

Present study was revealed the conscientiousness and self efficacy was positive correlation with better mental health among students. So conscientiousness and high self-efficacy contribute reducing certain risk factors such as anxiety, depression or other form of mental health problems among students. The implication of this study will benefits in family, school-environment, and society which will effective of enhance mental health of students by increasing self-efficacy and develop certain positive personality trait like conscientiousness for reducing obstacles in their overall personality development and mental health.

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