

Big-Five Personality Traits, Self-Compassion and Mental Health among University Students

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Abstract

The occurrence and severity of mental health issues among university students is increasing globally. India is also on the same platform when it comes to alarming mental health issues among students. However, most studies so far have been limited to assessing the prevalence and outcomes of psychological issues, and a paucity of studies investigating the protective factors for students' mental health was observed. With the advent of the salutogenic approach, the research interest in health-protective factors, as opposed to risk factors, has heightened drastically. Given this, the present work investigated the role of personality traits and self-compassion in university students' mental health. A correlational research design was employed. Participants included university students assessed on Costa & McCrae's (1992) NEO-Five Factor Inventory, Self-Compassion Scale (Neff, 2003), and Mental Health Inventory (Jagadish & Srivastava, 1983). Data analysis employed Pearson's correlation and multiple linear regression analysis. Extraversion, agreeableness, and self-compassion were positively associated with mental health, whereas neuroticism was negatively associated. The OCEAN personality traits and self-compassion explained significant variance in mental health, and only extraversion positively and significantly predicted mental health. OCEAN Personality Trait Extraversion is a protective factor for university students' mental health.

Keywords: Personality, Self-compassion, Mental Health, University Students

Introduction

Within the past few decades, higher education has become increasingly competitive. Academic stressors such as institutional and familial expectations, maintaining study hours, meeting tuition costs, adjusting to new surroundings, etc. contribute to mental health issues such as stress, anxiety, depression, etc. among university students (Fawzy & Hamed, 2017; Ratanasiripong et al., 2018), and around 57% of them become liable to psychological problems (Üner et al., 2008). Psychological disorders have a significant percentage of the global burden of diseases and a

substantial burden on the global economy. In most cases, they translate into self-harming behaviours, including suicide, which is a major public health issue everywhere (CDC, 2010), including India (Seby et al., 2011).

Personality is a psychological variant that affects individuals' personal and societal behaviour (Mahmod Aliloo et al., 2010) and significantly affects mental health. However, prior studies (Baghiani-Moghaddam et al., 2012; Löckenhoff et al., 2008) examining the association have yielded mixed findings. With the

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advent of Antonovsky's (1987) salutogenic approach, the research focus shifted from pathogenesis to health protection, promotion, and well-being. Entering into higher education is a turning point in the lives of students. They are transiting from adolescence to young adulthood and are undergoing numerous neurological and psychosocial developmental changes (Arnett, 2000; Blonigen et al., 2008), all of which impact their personality and mental health. Drawing from Buddhist ideology, Neff (2003) pioneered the construct of self-compassion and highlighted its significant bearing on positive mental health. Self-compassion is an emotionally positive self-attitude that protects against the damaging psychological consequences of isolation, rumination, and self-judgment. As individuals' mental health is influenced by their relatively stable personality traits and their thoughts, emotions, and attitudes, the present work attempted to examine the association and predictive relevance of personality traits and self-compassion attitude for university students' mental health functioning.

Mental Health

As per the World Health Organization (2018), mental health (MH) is a state of well-being where the individual has (1) realisation of their abilities, (2) can effectively cope with the stressors of everyday life, (3) functions productively, and (4) is able to make significant societal contributions. MH entails constructs like autonomy, realisation of intellectual and emotional potential, perceived self-efficacy, subjective well-being, etc., and good MH is reflected in one's ability to enjoy life and create a balance between life activities and efforts to achieve psychological resilience (Srivastava, 2011).

Personality and Mental Health

The personality model utilised in the study was McCrae & Costa's (2003) Five-Factor Model (FFM), also referred to as the "Big Five" Model. FFM postulates the existence of five higher-order personality dimensions or facets, namely neuroticism (N), extraversion (E), openness to experience (O), agreeableness (A), and conscientiousness (C).

N is associated with pessimism and negative emotions. Individuals scoring high on N are likely to experience more negative emotions, get easily overwhelmed by any stressful experience, and find it

difficult to control their impulses. E is associated with positive affect and optimism, and those high in E are likely to experience positive emotions, be active, and be sociable. C is related to a sense of competence and an achievement orientation, and individuals high on C implement self-control and behave in a deliberate manner. Those high on O are characterised as risk-takers, curious, and entertainers of novelty. A is characterised by altruistic behavior, cooperativeness, helping, and pro-social behaviour. Previous research (e.g., Lamers et al., 2012) has confirmed the differential association of personality with mental illness and health. For instance, extraversion and agreeable personality traits are associated with positive MH, conscientiousness with emotional well-being, while reversed neuroticism is strongly associated with psychopathology.

Self-compassion and mental health

Neff (2003) proposed the construct of self-compassion as an important human strength that has recently gained widespread acceptance as a psychologically adaptive mindset. It represents a "warm and accepting stance towards those aspects of oneself and one's life that are disliked." When encountered with difficulties or adversities, self-compassion invokes feelings of interconnectedness, equanimity, and kindness within the individual. Self-compassion entails "being kind and understanding to oneself in instances of suffering or perceived inadequacy, a sense of common humanity, recognising that pain and failure are unavoidable aspects of the shared human experience, and balanced emotional awareness, including the ability to handle and accept even painful thoughts and feelings without any drama, self-pity, and exaggeration" (Neff, 2003b).

Self-compassion is differentiated from self-esteem (Leary et al., 2007; Neff, 2008). It has a positive association with life satisfaction and social connectedness (Wong & Mak, 2013) and a negative association with thought suppression, self-criticism, rumination, anxiety, depression, and neurotic perfectionism. It also buffers against depression among autonomous and self-critical individuals. Researchers found that enhanced self-compassion over time led to lowered stress and improved psychological health and well-being (Gilbert & Procter, 2006; Neff et al., 2007; Shapiro et al., 2005). In the academic sphere, studies with college students found that self-compassion links positively with intrinsic motivation and adaptive coping

strategies after exam failure and buffers the negative impact of academic failure (Neff et al., 2005). Studies with university students have shown that self-compassion moderates the academic burnout-psychological well-being relationship (Kyeong, 2013).

The Present Study

The present study attempted to examine the association between Big-Five personality traits, namely neuroticism, extraversion, openness, agreeableness, and conscientiousness, the positive psychological resource self-compassion, and the mental health of university students. Also, the predictive relevance of neuroticism, extraversion, openness, agreeableness, conscientiousness, and self-compassion for university students' mental health functioning was assessed.

Method

Study Design

The study utilised a correlational design, where the direct predictive power of the predictor variables (Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness, and Self-compassion) on the criterion variable (Mental Health) was ascertained.

Participants

The sample comprised students ($n = 100$), male = 45, female = 55, age range 18–25 years, enrolled in varied graduate and post-graduate social science courses at the Banaras Hindu University, Varanasi, India.

Measures

Before administering the questionnaires, written informed consent was taken from the participants. The consent form clearly stated the purpose of the research and the researcher's details. The confidentiality and anonymity of participants were ensured. The demographic characteristics and education-related data were collected using demographic datasheets.

NEO-Five Factor Inventory (McCrae & Costa, 1985)- It is a 60-item scale responded to on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) assessing the Big Five personality traits: "*Neuroticism, Extraversion, Openness to*

Experience, Agreeableness, and Conscientiousness". The reliability (Cronbach's alpha) of domains ranged between 0.79 and 0.83.

Self-Compassion Scale (Neff, 2003b)- The 26-item scales assess self-compassion on the six dimensions of self-compassion: "*self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification*". The Cronbach's scale demonstrates good internal consistency (Cronbach's = 0.92) and test-retest reliability (Cronbach's = 0.93).

The Mental Health Inventory (Jagadish & Srivastava, 1983)- The measure is a 56-item scale to be responded to on a 4-point Likert-type scale (always, often, rarely, and never). The scale assesses mental health on six mental health dimensions: "*positive self-evaluation, realistic perception, integration of personality, autonomy, group-oriented attitude, and environmental mastery*". The scale has satisfactory reliability and validity, i.e., 0.73 and 0.54 respectively.

Analysis

The initial step was to review the data set for values that were missing, erroneously coded, or outliers. For carrying out statistical data analysis, IBM SPSS 19 was used. For demographic and scale scores, mean and standard deviation were used. For correlational analysis, Pearson's product-moment correlation coefficient was used. For regression analysis, Multiple Linear Regression Analysis (MLRA) with the enter method was used.

Procedure

More than 250 students enrolled in varying graduate and post-graduate courses at Banaras Hindu University, Varanasi, were contacted for the study. Out of them, 170 agreed to participate and provided consent. After excluding missing responses and outliers, a sample of 100 was retained. Detailed instructions in accordance with the respective manuals were given. After the test, the subjects were then asked to write an introspective report and were given a vote of thanks. Scoring was done in accordance with the respective manuals. For data analysis, IBM SPSS V.19 was employed. A thorough analysis was done using appropriate statistical measures (descriptive, correlational, and inferential).

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Results
Table 1

Correlation between Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness, Self-compassion, and Mental Health

	1	2	3	4	5	6	7
Neuroticism	1.00						
Extraversion	-.50**	1.00					
Openness	0.23	-0.08	1.00				
Agreeableness	-0.28	.55**	-0.15	1.00			
Conscientiousness	-.30*	.40**	-.31*	.61**	1.00		
Self-compassion	-.46**	.53**	-.37**	.61**	.69**	1.00	
Mental Health	-.35*	.50**	0.03	.36*	0.18	.34*	1.00

* $p < .05$, ** $p < .01$

Table 1 represents the correlation between Openness, Conscientiousness, Extraversion, Agreeableness, Agreeableness, Self-compassion, and Mental Health. Neuroticism is significantly and negatively ($r = -.35, p < .05$) while extraversion ($r = .50, p < .01$), agreeableness ($r = .36, p < .05$), and self-

compassion ($r = .34, p < .05$) are significantly and positively associated with mental health. While openness ($r = .03$) and conscientiousness ($r = .18$) are positively associated with mental health, the relationship is not significant.

Table 2

Multiple Linear Regression Analysis with Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness, and Self-compassion as predictors and Mental Health as criterion

Predictors	Standardized Beta	R ²	F
Neuroticism	-.14		
Extraversion	.33*		
Openness	.13		
Agreeableness	.15		
Conscientiousness	-.17	.303	3.122*
Self-Compassion	.17		

* $p < .05$

Result from Multiple Regression Analysis shows that only extraversion significantly predicted mental health ($\beta = .36, p < .05$), while all factors together explained a significant variance of 30.3% in it.

Discussion

This study attempted to explore the association between personality traits, the positive psychology

resource self-compassion, and MH functioning in university students. Further, the predictive relevance of these factors for mental health was assessed. Study findings indicate that neuroticism is negatively associated with MH while extraversion, agreeableness, and self-compassion are positively associated with MH.

Previous studies show that neuroticism is associated with adverse MH consequences like psychological distress, substance use, anxiety disorders, depression, etc. (Gleeson et al., 2005). Students with neurotic traits are disposed to experience negative affect, including irritability, anger, self-consciousness, anxiety, emotional instability, and depression (Leary & Hoyle, 2009; Widiger & Oltmanns, 2017). Thus, the negative association between neuroticism and mental health functioning is likely. Extraversion and agreeableness are also linked to good mental health outcomes (Shirazi et al., 2012; Trull & Sher, 1994). Findings suggest that more sociable, warm, friendly, and tactful students are likely to have better mental health functioning than less sociable and friendly ones. Numerous studies and meta-analyses have shown that self-compassion is related to the usage of more adaptive coping strategies when confronted with academic failure, life satisfaction, social connectedness, and positive MH, such as lowered anxiety levels. Self-compassion is also inversely related to negative indicators of mental functioning such as self-criticism, anger, self-rumination, social comparison, stress, depression, anxiety, rumination, thought suppression, public self-consciousness, unstable self-worth, and neurotic perfectionism in a wide range of populations (MacBeth & Gumley, 2012; Neff et al., 2005, 2007; Zessin et al., 2015). Thus, study findings of negative self-compassion and MH linkage are plausible. All together, the results show that students who are less neurotic, more extraverted and agreeable, and more self-compassion will have better mental health.

Together, the five personality traits and self-compassion explained a significant variation in mental health. Only extraversion emerged as a significant predictor. Higher education students who have a more assertive, friendly, and emotional personality are likely to have better MH.

Conclusion

This study examined the association between Big Five personality traits, positive psychological resources (self-compassion), and the mental health functioning of university students. Findings reveal that neuroticism is negatively associated with mental health, while extraversion, agreeableness, and self-compassion are positively associated with mental health. Besides, while all factors explain significant variance in mental health, only personality trait extraversion significantly predicts mental health functioning. The findings hold relevance for both educational and health psychologists and academic policy-makers. The study is geographically limited, no gender-based or academic level-based comparisons were made, and only self-reported measures were used. To make the findings more general, future studies should use more data sources, a wide range of people, different demographics, and different educational levels.

Declaration of Conflict

The authors declare no conflict of interest.

Data availability statement

Data could be made available upon request to the corresponding author.

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