The Role Of Big Five Personality Factors On Perceived Stress Of University Professors

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Abstract:

Professors play an important role in shaping a student's future. Hence it is important to take care of their mental health. The present research aims to study how different personality traits affect the perceived stress of university professors. For this purpose, data was collected from 53 university professors of West Bengal. The result indicates that the trait of neuroticism, extraversion and conscientiousness is significantly correlated with the perceived stress of professors. However no significant correlation was found between the traits of openness, agreeableness and perceived stress.

Key words: University Professors, Perceived Stress, Big Five Personality Traits

Introduction:

In a student's life a professors or teacher plays an important role. After parents a teacher is one who guides the students and shows them the right path. They enlighten a student's mind with knowledge. In Hindu Shastra a teacher is thus compared to God. A teacher serves as a role model to the students.

However, compared to other profession teachers report high level of stress and psychosomatic illness (Alexander Wettstein et.al 2021) [30]. High level of stress among professors effects their personal, occupational, social and economic life. This also affects the entire education system. As teachers are the main pillar of education system and they play an important role in shaping the future of the society taking care of

their mental health is very important. Thus, the effect of stress on teachers indicates the need for early detection of teacher's health status (Salvagioni et.al 2017) [25].

In a review article Chris Kyriacou (2001) [5] indicates that it is important to identify why teachers differ in their experience of stress i.e., why some teachers can successfully deal with stress and make a positive commitment to work while others cannot. In order to explore the cause of this difference the present study takes personality factors of the teachers in consideration. As personality dimensions appear to be more contributing in the study of stress than age and gender (D Fontana et.al 1993) [14].

Personality is an integrated part of a person's life. According to Allport, Personality is the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought" (Allport, 1961, p. 28) [2]. A person's personality is a unique combination of certain traits which in turn affect the person's thought behaviour and emotional pattern. That can affect a person's way of responding to stress.

Costa and Mc Crae (1987) identified five major traits of personality together known as Big Five Factor of Personality. The traits are Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. Costa and Mc Crae developed Big Five Factor Model of Personality in order to represent differences in individual's personality. Many psychologists also agree that these five factors are very effective in capturing basic differences among individual's personality (Christopher J. Soto, Joshua J. Jackson, 2018) [26].

The trait of neuroticism is characterized by moodiness, emotional instability, sadness etc. This trait is also related to dissatisfaction and distress.

The trait of extraversion is characterized by emotional expressiveness, sociability, talkativeness, assertiveness, excitability etc.

The trait of openness is characterized by imagination, creativity, adventurousness and openness to experience.

The trait of agreeableness is characterized by kindness, trust, altruism and other prosocial behaviour.

The trait of conscientiousness is characterized by thoughtfulness, goal directed behaviour and good impulse control.

Several studies indicate that there is a significant positive correlation between the trait of neuroticism and stress and a significant negative correlation between the trait of extraversion, conscientiousness, agreeableness and stress (K. J. Divinakumar et.al 2019) [19].

The present study aims to see how these different traits contribute to the perception of stress by the university professors.

Literature Review:

Review of literature plays an important role in identifying the gap of previous research studies. It also helps in the identification of research areas that need exploration.

Indian Studies:

K. J. Divinakumar et.al (2019) in a study also concludes that the trait of neuroticism increases the vulnerability to perceived stress whereas the trait of extraversion, agreeableness and conscientiousness act as a protective factor against it. [19]

In a study conducted by Manpreet Kaur and Rajesh Kumar on urban Indian school teachers it was found that among 398 teachers 111 teachers are reported to have high stress. [20]

A study was conducted by Thumuchuichan Raman and K.C. Kapoor on 120 undergraduate students of India. The results indicate that trait of neuroticism is positively correlated to perceived stress whereas the trait of

openness, agreeableness and conscientiousness is negatively correlated to it. However no significant correlation was found between extraversion and perceived stress. [28]

Studies in the foreign countries:

In a study conducted by Cameron Montgomery & André A. Rupp (2005) it was found that teacher's respond to external stressor is related to their support, personality and burnout. [4]

A study conducted by Dalia Saleh et.al (2017) on French University students shows that the personality trait of neuroticism, extroversion and conscientiousness are related to perceived stress. [12]

In a study Jeanette Frost Ebstrup et.al (2011) negative association was found between perceived stress and the trait of extroversion, openness and agreeableness. [16]

The finding was also similar another study conducted by Joanna Pierkarska (2020) where it was found that the main predictor of perceived stress among adolescents is high neuroticism. [17]

In a study Kurosh Mohamadi Hasel et.al (2013) shows that among the big five factors neuroticism is more effective in predicting perceived stress. [23]

Dr. Samuel O. Salami (2011) conducted a study and found that social support and personality were effective in reducing adverse effect of job stress. In addition, in this study lecturers who scored high in extroversion and conscientiousness is found to have reduced stress. [13]

In a study conducted by Seyed Kazem Mousavi, Mohsen Kamali (2022) it was found that neuroticism is positively correlated with perceived stress among nursing students. [24]

In a study conducted by Sharon Grant et al. (2007) it was found that personality traits specifically neuroticism, extroversion and conscientiousness is directly related to perceived stress and strain. [15]

In another study conducted by Yiwei Chen et.al (2017) neuroticism is found to have a positive relationship with perceived stress and depression whereas conscientiousness is found to have a negative relation with these two. [31]

As most of the data in literature review indicates that there is a significant relationship between different personality traits and perceived stress and as not much work was done on the personality traits and perceived stress of professors, hence we found this study relevant.

Aim:

To study how different personality factors affect perceived stress of university professors in order to promote mental well-being among professors and to restore their work life balance.

Objectives:

1. To investigate the relationship between the trait of neuroticism and perceived stress among the university professors.
2. To investigate the relationship between the trait of extraversion and perceived stress among the university professors.
3. To investigate the relationship between the trait of openness and perceived stress among the university professors.
4. To investigate the relationship between the trait of agreeableness and perceived stress among the university professors.
5. To investigate the relationship between the trait of conscientiousness and perceived stress among the university professors.

Hypotheses:

1. There is no significant relationship between neuroticism and perceived stress of university professors.
2. There is no significant relationship between extraversion and perceived stress of university professors.
3. There is no significant relationship between openness and perceived stress of university professors.
4. There is no significant relationship between agreeableness and perceived stress of university professors.
5. There is no significant relationship between conscientiousness and perceived stress of university professors.

Methods:

- **Plan of Work:**
    - **Variables:**
        1. Personality Factors namely:
            - Neuroticism: This trait identifies individuals who are prone to psychological distress. This trait describes characteristics like experience of negative affect such as stress, anxiety, anger, vulnerability, sadness etc.
            - Extraversion: This trait identifies the quantity and intensity of energy directed outwards into the social world. This trait describes characteristics like warmth, gregariousness, positive emotions, excitement, assertiveness etc.
            - Openness: This trait indicates an individual's information seeking and appreciation of experiences. This trait describes characteristics like fantasy, aesthetics, ideas, values, actions, feelings etc.
            - Agreeableness: This trait indicates the kinds of interactions an individual prefers from compassion to tough mindedness. This trait describes characteristics like altruism, compliance, trust, straightforwardness, modesty etc.
            - Conscientiousness: This trait refers to an individual's degree of persistence, impulse control and motivation to goal directed behaviour. This trait describes characteristics like dutifulness, competence, self-discipline, need of achievement etc. [8,9,10,11,21,22]

        2. Perceived Stress: Perceived stress refers to the degree to which events in a person's life are assessed as stressful, unpredictable and uncontrollable (Cohen, Kamarck, & Mermelstein, 1983; Phillips, 2012) [6,7,29]
    - **Sample Size:** Data was collected from 53 University Professors of West Bengal.
    - **Sampling Techniques:** Purposive Sampling technique is used to select the sample.
    - **Age Range:** 25-55 years
    - **Methods:** Questionnaire method is used to collect the data
    - **Approach:** The present study is a Correlational Study

- **Inclusion Criteria:**
    - Both male and female professors are included.
    - Professors with minimum 3years of Teaching experience are included.
    - Professors actively involved in the academic field are included.

- **Exclusion Criteria:**
    - Individuals with any Psychiatric illness are not included.
    - School teachers are not included.

- **Tools:**
    1. Neo Five Factor Inventory (NEO-FFI-S): NEO-5 is a Personality Inventory or an assessment device for measuring personality. This measures five major personality traits namely Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. In this present study NEO-FFI Form- S developed by Costa and McCrae 1992 is used. It contains 60 items, 12 for each trait. Its internal consistency reliability ranges from 0.68 to 0.86. It is a very effective and reliable tool for measuring personality. [8,9,10,11,21,22]
    2. Perceived Stress Scale (PSS-10): PSS-10 was developed by Cohen and Williamson in 1988. It is a 10 items self-report measure of global perceived stress with an internal consistency reliability of 0.81. [6,7]

- **Procedure:**

Data has been collected from 53 professors from different Colleges of West Bengal. Online Google form was also created and circulated among the professors. After data collection the data was statistically measured by the SPSS v.16.0 [27]

- **Statistical Analysis:**
    With the help of SPSS 16 (Statistical Package for Social Science, version 16) (Levesque 2006), the data is then statistically evaluated.
    Pearson Correlation coefficient was used to determine if there is any relationship present between perceived stress and personality factors of professors.

Results:

Table -1: Correlation between Perceived Stress and Personality Factors of University Professors.

Domain	Pearson Correlation	Level of Significance	Remark
Neuroticism	+0.764	0.000	Significant relationship present, Null hypothesis rejected at 0.001 level.
Extraversion	-0.458	0.001	Significant relationship present, Null hypothesis rejected at 0.001 level.
Openness	-0.148	0.289	No significant relationship present, Null hypothesis is accepted.
Agreeableness	-0.252	0.069	No significant relationship present, Null hypothesis is accepted.
Conscientiousness	-0.526	0.000	Significant relationship present, Null hypothesis rejected at 0.001 level.

Discussion:

From Table: 1 it is observed that for the present sample perceived stress is significantly correlated with the personality traits of neuroticism, extraversion and conscientiousness with a Pearson Correlation coefficient of +0.764, -0.458 and -0.526 respectively ($p<0.001$). However no significant difference is found between the traits of openness, agreeableness and perceived stress.

A positive correlation between the trait of neuroticism and perceived stress indicates that professors with a higher level of neuroticism tend to experience more stress than those who scored low in this trait. This finding can be attributed to the fact that, as the trait of neuroticism is related to emotional instability, moodiness and sadness, it also effects the perception of stress accordingly. The finding is also in line with the previous body of literature where a positive correlation was found between neuroticism and perceived stress. Thus, the 1st null hypothesis is rejected.

The trait of extraversion and conscientiousness is negatively correlated with the perceived stress, which indicates an increase in these traits will result in a decrease in perceived stress and vice versa. Thus the 2nd and 5th null hypothesis are also rejected.

The trait of extraversion is related to emotional expressiveness, assertiveness and sociability. Thus, it can be said that individuals with high extraversion possesses good interpersonal relationships which help them in management of stress, which in turn effects their perception of stress. The present finding can be also explained in the lights of a study conducted by Mousavi S K et.al 2022 [24] on nursing students where they found that as individuals with high extraversion and agreeableness also have strong social connection, they perceive lower level of stress.

The trait of conscientiousness is related to goal directed behavior and good impulse control. Thus, it can be attributed to the fact that as individuals with high conscientiousness usually have good impulse control, they are more likely to experience lower level of stress. Conscientiousness is also found to have a negative correlation with perceived stress in a study conducted by Yiwei Chen et.al (2017) [31] on U.S. Chinese older adults.

The traits of openness and agreeableness are not found to have any significant relationship with perceived stress of university teachers. Thus the 3rd and 4th null hypothesis is accepted.

Thus, from the present findings it can be said that, the level of openness and agreeableness of the professors' dose not found to have any impact on their perceived stress.

Conclusion:

Thus, it can be concluded from the present study that personality traits like neuroticism, extraversion and conscientiousness are found to have a significant relationship with the perceived stress of University Professors of West Bengal. However, the traits of openness and agreeableness are found to have no significant relationship with perceived stress.

Implications:

The present study made an attempt to understand perceived stress of the university professors in the light of Big Five Personality traits. If the Stress level increases it is likely to affect the social, personal and occupational life of the professors.

On the basis of the current findings stress management programs can be arranged for the professors by understanding their unique personality traits, in order to promote mental well-being of the professors.

Delimitations:

- A large number of samples could have been taken to increase the generalization of the finding.
- Inability to include other psychological dimensions.

Future Scope:

- School teachers can be included in the study and a comparative study between the perceived stress of both School and university teachers can be done.
- A comparative study on the perceived stress of male and female professors can be done.
- Other psychological dimensions can be taken in consideration for future research.

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