

Personality Traits As A Psychological Determinants Of Emotional Intelligence And Perceived Stress Among Substance Abusers Of Peshawar Pakistan

Syeda Nadia Shah¹ , Summiya Ahmad²

¹Department of Psychology Islamia College Peshawar Pakistan Email: nadiashah@icp.edu.pk

²Associate Professor Department of Psychology University of Peshawar Pakistan. Email: summiya-ahmad@uop.edu.pk

Abstract

The purpose of the present study was to explore and examine the impact of big five personality traits on perceived stress and emotional intelligence among abusers and non-abusers. The sample consisted of four hundred subjects (N=400), two hundred of them were substance abusers (n₁=200) and two hundred were non-abusers (n₂=200). **Results** indicated that three personality factors are strong predictor of emotional intelligence and that includes extroversion, openness to experience, agreeableness and that of conscientiousness (F= (4,199)17.813*** adjusted R² =.253.) among non-substance abusers. From results found that big five personality traits are the predictor of perceived stress among substance abusers (F=5,198) 4.603*** adjusted R² = .083).

Conclusion: This study endows with an evidence of marked impact of personality factors on adolescent's emotional intelligence and their level of perceived stress.

Key Words: Personality traits, Emotional Intelligence and Perceived Stress.

Introduction.

Personality traits and Emotional Intelligence

The term personality is defined as the combination of different thoughts, feelings and behaviour that makes an individual unique. Keeping in view the importance of proper taxonomy for different personality factors, the results from factor analysis have incorporated the five categories of personality in two distinctive models. One of the model was developed by Costa and McCrea model and the other by Goldberg and Saucier (Costa Jr & McCrae, 1989; Saucier & Goldberg, 1996). D. W. Fiske (1949) developed the five basic personality traits theory, which was later expanded upon by other researchers such as Norman (1967), Smith (1967), Goldberg (1981), and McCrae & Costa (1987). Extraversion or extroversion, agreeableness, openness, conscientiousness, and neuroticism

are the five broad personality traits described by the theory. While Emotional intelligence (EQ) is the ability to identify, use, and organise or control one's own emotions in a positive way in order to reduce stress, communicate properly, feel empathy with those around, overcome challenges, and resolve conflicts. The influences of different personality traits on the behaviour of an individual in different ages hence can be examined through observations and so as the individual differences in this regard can also be observed. Emotions and a wise and skilful supervision and control of emotions it is therefore necessary to examine individual differences. The differences in behaviours and emotions including the tactful management of emotions hence can be expressed as personality (Lopes et al., 2003; Maccoby, 2008). Similarly different research studies conducted by research experts has revealed that personality traits are the predictor

of emotional intelligence among the university teachers who were working as advisors for students. The total sample of 100 advisors including both male and female have been taken. Big five personality inventory and emotional intelligence scale was administered to measure EI and personality traits. After statistical analysis of the obtained data, it has been revealed that extraversion, agreeableness and openness to experience are strong predictors of emotional intelligence while neuroticism and conscientiousness have found to have a less or no impact on emotional intelligence (Alghamdi et al., 2017) (Andi, 2012; Avsec et al., 2009). Likewise, the findings obtained by Van Rooy and Viswesvaran (2000) also depicted a strong correlation between personality and emotional intelligence. Certainly, three out five of the Big Five factors of personality had a strong correlations with emotional intelligence which is more than .31 while the weakest association of .23 was found with openness to experience and agreeableness (Lopes et al., 2003; Van Rooy & Viswesvaran, 2004).

In another cross sectional study conducted by Nawi Hudani (2012) has examined the relationship between EI and big five among the school teachers. The results of their study revealed that agreeableness, openness to experience, extraversion and conscientiousness have been found correlated with emotional intelligence. They also identified conscientiousness as to have a stronger relation with that of emotional intelligence (Nawi & Sciences, 2012). By keeping in view the big five model of personality, trait emotional intelligence is found to have a strong and significant association with neuroticism and extraversion and less significant relation with agreeableness, openness to experience, and conscientiousness (Dawda et al., 2000; Pop-Jordanova & Stoimenova-Canevska, 2014). Moreover, effects of some research developments also indicated that there emotional intelligence is a significant and strong predictor of four out of

five traits of personality including, extraversion, neuroticism, agreeableness and openness to experience. While with conscientiousness the relation was not that significant (Athota et al., 2009).

Personality traits & Perceived Stress

Personality is considered as one of the most important factor that is related to stress. Stress refers to the process as how a person evaluate a given situation i.e threatening , harmful or challenging (Suls & Martin, 2005). According to a study carried out by O'Brien and DeLongis a person who have high level of extraversion implement coping strategies in different situations which are mostly based on the idea of refusal of responsibility for the occurrence of stress related circumstances (O'Brien & DeLongis, 1996). Keeping in view different dimensions of big five personality model, the factor of Neuroticism is found to have a strong relationship with stress. As neuroticism is related to the fear, anger, guilt and other negative emotions that linger for a long period of time. Therefore people with neurotic tendencies evaluate the situation mostly as threatening. Hence these individual with high neuroticism do no utilise or appreciate their coping strategies in any given stressful situation. (Gunthert et al., 1999; Schneider, 2004; M. J. S. J. o. P. Vollrath, 2001). On the other hand results obtained from a study carried out on a people with agreeableness found to have a positive attitude that they manifest in a situation of social conflicts (Asendorpf & Van Aken, 2003).

The different facets and elements of conscientiousness such as dutifulness, competence and prudence, conscientiousness hence can be a protective shield against stress in various situations (Carver & Connor-Smith, 2010). But in a study conducted in 2013 it has been examined that because of the high level of perfectionism among conscientious people they often take a lot of pressure in order to achieve the best results, therefore they assess the

situation mostly as stressful (Włodarczyk & Obacz, 2013). But instead to avoiding it a conscientious person is found to take a remedial actions to cope with the stress (Penley et al., 2002). On a contrary the researches done so far does not offer reliable outcomes of relations between openness to experience and that of stress. Therefore more research needed to be done so that a clear perspective of this dimension of personality with respect to a stressful situation can be obtained (Leger et al., 2016).

Similarly number of research studies have described the influence of personality especially of that of neurotic personality under stressful situations (Penley et al., 2002) In both the psychology of personality as well as in psychopathology, neuroticism (N) is an important fundamental dimension. Neuroticism has been reported to have a role in everyday stress and coping (Gunthert et al., 1999). Likewise, Neuroticism is believed to modulates the relationship between exposure to culturally relevant stress and risk for some mood and anxiety disorders reported from the findings of a study, thus scores on N predicted cultural stress in Mexican American college students (Mangold et al., 2007). Neupert, Mroczek, and Spiro stated that people were more likely to report memory failures on days when people rated high on N experienced stressors, especially interpersonal stressors, than those rated lower on neuroticism (Neupert et al., 2008).

Objectives

Following are the objectives of the study

1. To determine the role of big five personality traits in emotional intelligence and perceived stress among abusers and non-abusers.
2. To compare substance abusers and non-abusers on the basis of emotional intelligence and perceived stress.

Hypotheses

Following are the hypotheses of the study.

- 1: Openness to experience, agreeableness, conscientiousness and extroversion will be the predictor of emotional intelligence.
- 2: Individuals who score high on neuroticism trait of personality will score low on emotional Intelligence.
- 3: Neuroticism, Openness to experience, agreeableness, conscientiousness and extroversion will be the predictor of perceived stress among abusers.

Sample

A total sample of 400 male adolescent subjects were taken from different universities and colleges of Peshawar city. Among 400 subjects (N=400) 200 male participants were substance abusers (n1=200) and the remaining 200 male participants were non-abusers (n2=200). Informed consent was taken from the subjects before administration of questionnaire. Snow ball sampling technique and convenient sampling technique was used for the collection of data from the sample of a given population.

Instruments

After the administration of demographic information sheet Self Report Measure of Emotional Intelligence (SRMEI) a self report 5 point likert scale with 60 items developed by Rizwan Alam khan (2010) along with Big Five Inventory which is a self-report inventory with 44 items to measure five big dimensions of personality were administered. BFI was developed in 1991 by John and Donahue. Hence it is divided into personality aspects i.e Extraversion vs. introversion, Conscientiousness vs. lack of direction, Openness vs. closeness to experience, Agreeableness vs. antagonism and Neuroticism vs. emotional stability. After that the third scale Perceived Stress Scale. (PSS) was

administered. The original 14 items (PSS) scale has been developed by Cohen and colleagues in 1983. This self-report measure determine an individual's perception about a given daily life situation as stressful. (Cohen, Kamarack &

Mermelstein, 1983). For the present study 10 items version was used (Cohen & Williamson, 1988).

Results

Table 1: Pearson Correlation among main scales of the study. BFI, Emotional Intelligence scale (SRMEI) and PSS (N=400).

S. No	Variables	Mean	SD	1	2	3
1	BFI	142.8	14.96	1.00	-	-
2	SREMI	198.0	25.94	.288**	1.00	-
3	PSS	21.02	6.75	-.036**	-.499**	1.00

Note: BFI: Big five inventory, SRMEI: Self report measure of emotional intelligence, PSS: Perceived Stress Scale

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2: Multiple Regression Analysis of Openness to experience, Agreeableness, Conscientiousness and Extroversion Predicting Emotional Intelligence among non-substance abusers (n=200)

Variables	B	SE	B
Constant	118.1	11.54	
Ex	.781	.404**	.135
Con	1.25	.314***	.290
O.E	.371	.301	.089
Agg	.665	.288**	.166
R ²	.268		
F	17.81***		

Note: *p<.05, **p<.01 & ***p<.001

Table 2 shows Openness to experience, Agreeableness, Conscientiousness and Extroversion are the Predictors of Emotional Intelligence among non-substance abusers. The result reveals significant regression equation

between agreeableness, conscientiousness and emotional intelligence responded by non-substance abusers F (4,199)17.81; the table is statistically significant at p< .001 with variance R² of .268 and adjusted R² is .253.

Table 3: Pearson Correlation among Emotional Intelligence scale (SRMEI), extraversion, conscientiousness, openness and agreeableness among non-abusers (N=200).

Table 3 shows that there will be strong positive correlation between SREMI and extraversion, conscientiousness, openness. The result will be highly significant at 0.01 levels. Also indicate that there will be positive correlation between SREMI and agreeableness as well as their will be strong positive

Variables	Mean	SD	1	2	3	4	5
1. SRMEI	209.7	24.07	1.00	-	-	-	-
2. Extraversion	26.17	4.16	.335**	1.00	-	-	-
3. Conscientiousness	30.31	5.56	.451**	.373**	1.00	-	-
4. Openness	33.25	5.80	.330**	.413**	.408**	1.00	-
5. Agreeableness	31.32	5.99	.376**	.329**	.446**	.405**	1.00

correlation among the sub-scale of SREMI.

Table 4: Pearson Correlation between SRMEI and Neuroticism (N=400).

Variables	Mean	SD	1	2
1. SRMEI	198.0	25.9	1.00	-
2. Neuroticism	24.0	5.11	-.440**	1.00

table: shows that there is strong negative correlation in neuroticism and SRMEI total (-.440**).

Table 5: Multiple Regression Analysis of Neuroticism, Openness to experience, Agreeableness, Conscientiousness and Extroversion Predicting Perceived Stress among substance abusers (n=200).

Variables	B	SE	β
Constant	17.294	4.583	
Ex	-.333	.118**	-.204

Con	.104	.113	.067
O.E	.046	.104	.032
Agg	.020	.102	.015
Neuro	.388	.109**	.251
R ²	.107		
F	4.603***		

Note: Ex=extroversion, Con=Conscientiousness, O.E=openness to experience, Agg=agreeableness, Neuro=neuroticism, *p<.05, **p<.01 &***p<.001

Table 5 shows Neuroticism and Extroversion are the Predictors of perceived stress among abusers. The result reveals significant regression equation between neuroticism, extroversion and perceived stress responded by substance abusers F (5,198) 4.603*** with variance R² of .107 and adjusted R² is .083. However no significant results has been obtained for Conscientiousness, agreeableness and openness to experience.

Discussion

This study has been conducted in order to find out how various personality dimensions can have its influences on adolescents with respect to substance abuse, emotional intelligence, and perceived stress. For this purpose different scales have been used for the collection of data that include Big five personality inventory (BFI), Emotional intelligence scale (SRMEI), and Perceive stress scale (PSS). All scales were found to have a good alpha reliability to be used for the study.

Relationship between different personality factors and that of emotional intelligence is evident not only form this study but from previous studies as well. The research found that there is a strong relationship between emotional intelligence, the dimensions of extraversion, managing experiences, harmony, and conscientiousness, and a weak relationship between emotional intelligence and emotional. Similarly according to the findings of Petrides

(2010) there is a stronger association between big five aspects of personality and that of emotional intelligence. The findings of Ghiabi and Besharat's study (2011) Pearson correlation coefficient has shown that students' score on (EI) and on personality dimensions have a strong correlation with each other.

People with high levels of neuroticism and extraversion are more likely to act impulsively, which has a detrimental impact on their academic performance. Similarly, people with low levels of neuroticism are more likely to consider before they act, which has a beneficial impact on their self-efficacy. Extroverts, on the other hand, are better able to deal with their emotions since they seek out the company of others (Afshar et al., 2015; Clark & Ro, 2014). In another study the three personality factors emerged as important predictors of EI: extraversion, agreeableness, and openness to experience (Alghamdi et al., 2017).

In a new study, researchers are trying to figure out how personality traits and decision-making styles affect medical students in Lebanon. Emotional intelligence and extroversion, conscientiousness and agreeableness all have a strong link to each other (El Othman et al., 2020).(as shown in table 2 and 3)

People who are more extroverted are more likely to have high Emotional Intelligence, and those who are more neurotic are less likely to

have high Emotional Intelligence. This is based on a statistical analysis. The goal of the study was to learn more about emotional intelligence and how it relates to the two personality traits extroversion and neuroticism. This way, it will be easier to come up with different ways to help students who have trouble controlling their emotions (Nayak, 2020). A person with strong emotional intelligence is able to control their tension, anxiety, and mood. A prior study by Sato found the same thing (2005). A high level of neuroticism is associated with an unstable autonomic nervous system, according to him. Those who are less neurotic tend to have a more stable nervous system since their autonomic nervous system is less prone to overreacting (Sato, 2005; Yusoff et al., 2014) thus all these previously mentioned studies are found to be in accordance with the findings of this study (as shown in table 4).

Similarly the stress an individual feels is based on how they see the world around them. Consequently, tension and stress is sensed and perceived when a potentially dangerous environment is inferred (Asadimajareh et al., 2017). Different other studies have revealed that people with neuroticism (N) had more stressful events. Extroverts, on the other hand, have both more stressful and more pleasant things happen to them. It is likely that people who are stressed out will have a variety of personality types and varied approaches to dealing with their stress (Pourafzal et al., 2013; Safaei & Shokri, 2014). Several relevant research found that neuroticism had a positive and statistically significant link with perceived stress, and that persons who possessed this attribute reported experiencing more stressful occurrences. Neuroticism was found to have a positive and substantial link with occupational stress in researches conducted on of personality traits and their association with stress (M. Vollrath, 2001).

Personality factors have been linked to people's life experiences. It has been demonstrated that

individuals with high neuroticism suffer more unpleasant emotions such as anxiety. Positive emotions have also been linked to happiness and hope. According to the research, persons with higher neuroticism, in addition to experiencing negative emotions, create stressful situations and have cognitive vulnerabilities, resulting in higher levels of perceived stress. (Hankin, 2010). In another research extroversion, conscientiousness, agreeableness, and openness were found to have negative relationships with perceived stress, but neuroticism showed a significant positive association. Neuroticism was found to have the strongest stress-association (Ebstrup et al., 2011) (as shown in table 5)

Conclusion

The present study was carried out to study the personality traits as a psychological determinants of emotional intelligence and perceived stress among substance abusers. It has been evaluated from analysis of the obtained data that certain personality traits can predict the level of emotional intelligence and that of perceived stress among substance abusers as well as non-abusers. Similarly, among big five personality factors neuroticism was found to be a strongly and positively related to perceived stress and negatively related to that of emotional intelligence. Thus adolescent who scored high on neuroticism trait of personality were found to deal with life stressors with poor coping strategies and hence are more vulnerable to escape from life challenges by getting stressed easily and hence take a refuge in by starting abusing substance. Such individuals may face more emotional issues like they are more prone to develop poor interpersonal skills, emotional instability and lack of emotional awareness. Apart from neuroticism, extroversion was also found to be negatively and strongly related to that of perceived stress specifically in substance abusers. However, other personality traits like that of openness to experience, conscientiousness and agreeableness were

found as a weak predictor of perceive stress among substance abusers.

References

1. Afshar, H., Roohafza, H. R., Keshteli, A. H., Mazaheri, M., Feizi, A., & Adibi, P. (2015). The association of personality traits and coping styles according to stress level. *Journal of research in medical sciences : the official journal of Isfahan University of Medical Sciences*, 20(4), 353-358.
<https://pubmed.ncbi.nlm.nih.gov/26109990>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4468450/>
3. Alghamdi, N. G., Aslam, M., & Khan, K. (2017, 2017/05/14). Personality Traits as Predictor of Emotional Intelligence among the University Teachers as Advisors. *Education Research International*, 2017, 9282565.
<https://doi.org/10.1155/2017/9282565>
4. Andi, H. K. J. M. J. o. Y. S. (2012). Relationships between emotional intelligence and 'The Big Five In Youths'. 7, 125-135.
5. Asadimajareh, S., Bakhshiporodsari, A., & Poursharifi, H. (2017). The relationship of type D personality and its components with perceived stress in students in Tabriz University. *Knowledge & Research in Applied Psychology*, 14(54), 91-98.
6. Asendorpf, J. B., & Van Aken, M. A. J. J. o. p. (2003). Personality–relationship transaction in adolescence: Core versus surface personality characteristics. 71(4), 629-666.
7. Athota, V. S., O'connor, P. J., & Jackson, C. (2009). The role of emotional intelligence and personality in moral reasoning.
8. Avsec, A., Takšić, V., & Mohorić, T. J. P. o. (2009). The relationship of trait emotional intelligence with the big five in croatian and slovene university student samples. 18(3), 99-110.
9. Carver, C. S., & Connor-Smith, J. J. A. r. o. p. (2010). Personality and coping. 61, 679-704.
10. Clark, L. A., & Ro, E. (2014). Three-pronged assessment and diagnosis of personality disorder and its consequences: personality functioning, pathological traits, and psychosocial disability. *Personality disorders*, 5(1), 55-69.
<https://doi.org/10.1037/per0000063>
11. Dawda, D., Hart, S. D. J. P., & differences, i. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. 28(4), 797-812.
12. Ebstrup, J. F., Eplov, L. F., Pisinger, C., & Jørgensen, T. (2011, Jul). Association between the Five Factor personality traits and perceived stress: is the effect mediated by general self-efficacy? *Anxiety Stress Coping*, 24(4), 407-419.
<https://doi.org/10.1080/10615806.2010.540012>
13. El Othman, R., El Othman, R., Hallit, R., Obeid, S., & Hallit, S. (2020, 2020/05/05). Personality traits,

- emotional intelligence and decision-making styles in Lebanese universities medical students. *BMC Psychology*, 8(1), 46.
<https://doi.org/10.1186/s40359-020-00406-4>
14. Gunthert, K. C., Cohen, L. H., Armeli, S. J. J. o. p., & psychology, s. (1999). The role of neuroticism in daily stress and coping. *77*(5), 1087.
15. Hankin, B. L. (2010). Personality and depressive symptoms: Stress generation and cognitive vulnerabilities to depression in a prospective daily diary study. *Journal of Social and Clinical Psychology*, 29(4), 369-401.
16. Leger, K. A., Charles, S. T., Turiano, N. A., Almeida, D. M. J. J. o. P., & Psychology, S. (2016). Personality and stressor-related affect. *111*(6), 917.
17. Lopes, P. N., Salovey, P., Straus, R. J. P., & Differences, i. (2003). Emotional intelligence, personality, and the perceived quality of social relationships. *35*(3), 641-658.
18. Maccoby, M. J. I. B. J. O. (2008). To win the respect of followers, leaders need personality intelligence. *72*(3), 1.
19. Mangold, D. L., Veraza, R., Kinkler, L., & Kinney, N. A. J. H. J. o. B. S. (2007). Neuroticism predicts acculturative stress in Mexican American college students. *29*(3), 366-383.
20. Nawi, N. H. M. J. I. J. o. A. R. i. B., & Sciences, S. (2012). Inter relationship between emotional intelligence and personality trait of educator leaders. *2*(5), 223.
21. Nayak, R. (2020). A research exploration of the relationship between personality dimensions and emotional intelligence of international medical students of Malaysia. <https://doi.org/10.25215/0803.038>
22. Neupert, S. D., Mroczek, D. K., Spiro III, A. J. P., & Aging. (2008). Neuroticism moderates the daily relation between stressors and memory failures. *23*(2), 287.
23. O'Brien, T. B., & DeLongis, A. J. J. o. p. (1996). The interactional context of problem-, emotion-, and relationship-focused coping: the role of the big five personality factors. *64*(4), 775-813.
24. Penley, J. A., Tomaka, J. J. P., & differences, i. (2002). Associations among the Big Five, emotional responses, and coping with acute stress. *32*(7), 1215-1228.
25. Pop-Jordanova, N., & Stoimenova-Canevska, E. J. P. (2014). Emotional Intelligence and Big-Five Personality Factors in Female Student Sample. *35*(2), 59-66.
26. Pourafzal, F., Seyedfatemi, N., Inanloo, M., & Haghani, H. (2013). Relationship between Perceived Stress with Resilience among Undergraduate Nursing Students. *Hayat*, 19(1).
27. Safaei, M., & Shokri, O. (2014). Assessing stress in cancer patients: Factorial validity of the perceived

- stress scale in Iran. IRANIAN JOURNAL OF PSYCHIATRIC NURSING (IJPN)
28. Sato, T. (2005). The Eysenck personality questionnaire brief version: Factor structure and reliability. *The Journal of psychology*, 139(6), 545-552.
29. Schneider, T. R. J. J. o. E. S. P. (2004). The role of neuroticism on psychological and physiological stress responses. 40(6), 795-804.
30. Suls, J., & Martin, R. J. J. o. p. (2005). The daily life of the garden-variety neurotic: Reactivity, stressor exposure, mood spillover, and maladaptive coping. 73(6), 1485-1510.
31. Van Rooy, D. L., & Viswesvaran, C. J. J. o. v. B. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. 65(1), 71-95.
32. Vollrath, M. (2001). Personality and stress. *Scandinavian Journal of Psychology*, 42(4), 335-347.
33. Vollrath, M. J. S. J. o. P. (2001). Personality and stress. 42(4), 335-347.
34. Włodarczyk, D., & Obacz, W. J. M. P. (2013). Perfectionism, selected demographic and job characteristics as predictors of burnout in operating suite nurses. 64(6), 761-773.
35. Yusooff, F., Desa, A., Ibrahim, N., Ba'yah Abd Kadir, N., & Ab Rahman, R. M. (2014). A study of the relationship between EQ and personality among lecturers at a research university. *Procedia-Social and Behavioral Sciences*, 114, 351-354.