

PERCEIVED STRESS AND EXTROVERSION: ROLE OF GENDER

Mawra Mateen^{*1}, Dr. Sara Mehmood Durrani², Dr. Saima Ambreen³

*1,2,3Department of psychology, University of Balochistan-Quetta

Corresponding Author: *

D1 , 15 E 1 2024	D 1 / M. 1 0004	A	Published: 09 April 2024
Received: 15 February, 2024	Revised: 14 March. 2024	Accepted: 26 March, 2024	Published: 09 April, 2024
			,,,

ABSTRACT

Recent research spotlights a unique aspect whose objective is to find out the relationship between perceived stress and extroversion. The sample were University students and both genders were considered (Male and Female) to intricate gender differences among them. Sample size was comprised of 100 participants. Present research was conducted in different universities of Quetta, Balochistan. The Perceived Stress Scale containing 10 items was utilized to assess Perceived stress. Extroversion was measured using Big Five Inventory's subscale of Extroversion containing 8 items. Correlation and independent sample t-test was used. This research concluded that perceived stress and extroversion in university students have a significant negative correlation ($r = -.367^{**}$, p < 0.01) and there is significant gender differences in Extroversion, males are more extroverted. These findings would be helpful in future for upcoming researchers for analyzing various psychological interrelations that are very crucial as this is need of the era to make environment as stress free regime for dwellers especially for students that are future of any nation.

Keywords: BFI, Perceived Stress, Extroversion, Students.

INTRODUCTION

Stress is the body's response to changes that need to be addressed or dealt with; it can lead to physical. emotional, or mental strain. Although stress is a normal experience, how you handle it has a big impact on your wellbeing (Scott, 2022). Perceived stress refers to an individual's personal evaluation of the degree of stress they are currently experiencing or have experienced over a certain period. It includes a person's emotional and cognitive reactions to factors such as their perceived lack of control and predictability over their lives, the frequency of unpleasant difficulties the magnitude of life transitions, and their level of confidence in their capacity to cope with obstacles. It doesn't focus on quantifying specific stressful events or their frequency but rather centers on how a person perceives the overall stressfulness of their life and their capacity to manage it. (Phillips, 2013)

A person's personality is made up of their unique ways of thinking, feeling, and acting, as well as their attitudes, beliefs, and emotions. It encompasses both inherited and acquired behavioral traits that set individuals apart and may be observed in the ways they engage with their environment and social circles. It is most visibly expressed when people engage with one another (Holzman, 1999). The Big Five Model, developed by McCrae and Costa in 2003. It is a popular framework for explaining many aspects of personality.

Lim (2020) lists neuroticism, extraversion, conscientiousness, agreeableness, and openness to new experiences as the core components of this paradigm. In social situations, extroverts are usually characterized as vibrant, gregarious, competitive, noticeable, and demonstrating a strong desire in forming relationships with others (Costa and McCrae 2003).

An increased need for social connection and a proactive interaction with the outside world are traits of the personality type known as extroversion (Cherry, 2019). A person's personality plays a moderating role in how person views and interprets stressful events, which coping strategies they choose and how they handle the emotional fallout (Vollrath, 2001). Several cognitive processes including perceived stress, are linked with personality traits. Research by Afshar et al. (2015) and Ebstrup et al. (2011) has shown a strong relation between perceived stress and certain traits of personality, such as extroversion, neuroticism and conscientiousness. More precisely, those Individuals with a high degree of neuroticism typically report feeling more stressed

out than those with higher conscientiousness and extroversion scores, according to research by Lecic-Tosevski et al. (2011). According to Pour (2011) research on college students, extroversion and stress are negatively correlated, meaning that extroverts are less stressed. Stress, on the other hand, was positively correlated with introversion. Furthermore, the study found that there are gender variations in personality traits, with men showing stronger intuition and women leaning more toward sensing. (Bashir,2019). The understanding of stress and personality dynamics in university students is greatly enhanced by these findings. Another study looks at the experiences nursing students had during their clinical education and explores the connection between perceived stress and characteristics of personality, there is a substantial positive association between neuroticism and perceived stress, and a significant negative correlation between extraversion and agreeableness. The results highlight how proactive approaches to identify and assist nursing students who are at-risk should be put in place by healthcare authorities in order to prepare them psychologically for the demands of clinical settings (Mousavi & Kamali, 2021). Perceived stress levels are often lower in extraverted people (Jackson & Schneider, 2014; Schneider et al., 2012).

According to Jungian personality types, Homayouni et al. (2009) analyze the connection between stress and personality traits in college students. Different patterns are found in the study: extroversion correlates negatively with stress, while introversion correlates positively. It has been noted that there are gender disparities in sensing and intuition, with men being more intuitive and women more sensing. Introverted people who tend to be quiet and independent may feel more stressed out because they find it difficult to adjust to outside influences. Furthermore, students who perceive tasks that exceed their capabilities may experience elevated levels of stress, underscoring the importance of perceived self-efficacy in the manifestation of stress.

METHODOLOGY

The focus of this study is to investigate the association between extroversion and perceived stress among university students.

Research design

In this research, correlational research design was used. Study is cross-sectional and quantitative in nature.

Participants and Sampling Technique

Target sample was university students from different universities of Quetta Balochistan. Sample size was comprised of 100 participants. The convenient sampling technique was used for data collection.

Measures

Demographic Form

Demographic form was used to take the information of the respondents such as, age, gender, family system etc.(Bashir, Khan, Danish, & Bashir, 2023)

Big Five Inventory (BFI)

John et al., 1991 developed The Big Five Inventory (BFI). BFI contains subscales named Conscientiousness, Neuroticism, Extraversion, Agreeableness, and Openness to new experience. It has 44 items, from which subscale of extroversion contains 8 items (1, 6, 11, 16, 21, 26, 31, 36) used for measuring extroversion. Item 6, 21 and 31 are reversely scored. Its responses range from strongly disagree (1) to strongly agree (5) on a 5-point Likert scale. Stronger personality traits are indicated by higher scale scores, and vice versa (Rammstedt & John, 2020). Reliability of this scale is .69, which falls in acceptable range. It is open access scale to use.

Perceived stress scale (PSS)

Cohen et al. introduced the Perceived Stress Scale (PSS) in 1983 as a tool to evaluate individuals' perceived stress levels. Permission was taken from authorities to use this scale. The PSS-10, a 10-item questionnaire is commonly employed to assess stress levels in individuals aged 12 and older. This survey examines the extent to which a person has experienced feelings in the past month related to life being unpredictable, uncontrollable, and overwhelming. It comprises 10 items, each rated on a five-point Likert scale ranging from "very often" (5) to "never" (1), from which 4 items are reversely scored (4,5,7,8). Reliability of this scale is .64, which falls in acceptable range.

Procedure

Permissions was taken from the authorities of universities for collecting data. Informed consent form and demographic information was taken from participants. Data was collected through questionnaires. We ensured to respecting participant's autonomy and privacy throughout the study, further provide briefings on the questionnaires to facilitate ease of completion for participants and avoid confusions. Participants were allowed to withdraw at any time without any penalty.

Statistical Analysis

Results were analyzed using Spss version 23. Correlation and independent sample t test were used.

RESULTS

Table I

Correlation between Perceived Stress and Extroversion among University Students (N=100)

Variables	PSS BFI
PSS	367**
BFI (EXT)	
<i>Note</i> : PSS= <i>Perceived Stress Scale</i> ; BFI = <i>Big Five</i>	Table 1 shows a significant negative correlation
Inventory, EXT = Extroversion	between perceived stress and Extroversion among
(Significance level; p <0.01).	university students.

Table II

Mean comparison of Male and Female in Perceived Stress and Extroversion

Variables	f	female (n=55) male (n=45)					95%CL					
	<i>M</i>	SD	М	SD t	(98)	p	Cohen's	d LL	UL			
PSS	23.20	5.93	24.09	5.18	.78	.433	0.15	-1.35	3.12			
BFI (EXT) 24.29	6.19	24.11	5.91	14	.883	0.02*	-2.60	2.24			
N7 T 1	1	. 1		1	. 1 .	-		•		11.00	1 .	

Note: Independent sample t-test was conducted to associate the CL for male and female. SD = Standard Deviation; M = Mean; CI = Confidence Interval; UL = Upper limit; LL = Lower limit and t value. ; p Significance level i.e. <0.05.

DISCUSSION

The purpose of this research was to delve into the intricate relationship between perceived stress and extroversion among university students. In order to accomplish this goal, a comprehensive analysis was carried out using the BFI sub scale (Extroversion) and the PSS. The study's results, which were based on a sample of 100 individuals, showed a statistically significant negative correlation ($r = -.367^{**}$, p < 0.01) between extroversion and perceived stress levels. This finding suggests that as individuals' bfi (Extroversion) scores increases, their perceived stress levels decreases. The results of this study resonate with and expand upon previous literature particularly the work done by Ebstrup et al. (2011),

Table 2 show a significant mean difference between male and female in extroversion but not in Perceived stress among university students.

showing a negative relationship between perceived stress and important personality qualities such as extraversion. Beyond this, our investigation integrates findings from Lu's (1994) research, corroborating the idea that extroversion shows a negative correlation and neuroticism a positive correlation with stress associated to university life. This body of research highlights the complex relationship that exists between particular personality traits and perceived stress. It also limelight the significance of taking individual differences into account when analyzing psychological factors that affect stress perception. both generally and in the particular setting of university life. These combined findings contribute

to a more broad understanding of the complicated associations between personality traits and perceived stress, offering valuable implications for both theoretical frameworks and applied interventions in the field of psychology.

In this research there were statistically significant gender differences found on extroversion, this study aligns with several earlier studies conducted b y Vangara, Kumari, and Kumar (2022), Males had higher mean levels of neuroticism, extraversion, and lie score than females. Compared to men, women showed statistical significant higher mean stress levels. Another research was carried out during COVID 19, findings showed that males had stronger extraversion, whereas females displayed higher levels of anxiety and conscientiousness(Rodriguez-Besteiro et al., 2021). Similarly an additional study conducted by Costa et al. (2001) concluded that, Compare to individual difference among genders, a subsequent study of data from 26 cultures, found marginal gender disparities. Men scored better in assertiveness (extroversion) and openness to ideas, whereas women were scored higher in neuroticism, agreeableness, warmth, and openness to emotions. Though conventional sex roles were ignored, different cultures showed different gender variations in personality characteristics.

Gender differences are not statistically significant in this study when it comes to perceived stress, which is consistent with prior findings by Gupta and Nc (2021), they attempted to evaluate the association between perceived stress and empathy among Indian college students. According to the study, these variables did not significantly relate to one another. Additionally, the study discovered that there was not a significant gender disparity in perceived stress among undergraduates.

Conclusions

As we approach to the conclusion of our study, there is negative association between Perceived stress and extroversion. Significant gender difference in extroversion found, where males tend to be more extroverted than females. Current research is a step towards contributing in the field of psychology as these attributes highlighted in this research are crucial for different aspects. The findings could be source of enlightenment for future researches.

Limitations

In this study, there are some limitations such as sample size was small. The study's particular cultural environment and the less universities it covered may have limited the outcomes' applicability to larger populations or other cultural contexts. Another limitation was that Self-report methods used in the study such as questionnaires, may be likely to response biases or to maintain social desirability which might compromise the validity of the information gathered.

References

- 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.
- Awan, A., et al. (2021). Critical thinking and creative thinking: students' reading comprehension. Webology, 18 (6), 4186-4190.
- Bashir, S. The role of NGOs in community development in Balochistan. Pak. J. Appl. Soc. Sci. 2016, 4, 123–135.
- Bashir, S., Khan,J., Danish, M., & Bashir, W. (2023). Governance and development challenges in Balochistan: A comparative study with other provinces and way forward. International Journal of Contemporary Issues in Social Sciences, 2(4), 620-649
- Bashir, S., Ali, M., Riaz, S., & Barrech, S. (2019). Balancing work, life and family life: Working women's narrative from karachi. BALOCHISTAN REVIEW, 41(2).
- Bashir, S. (2019). Women Participation In Community Development Programs In Urban Area In Balochistan. Pakistan Journal of Gender Studies, 18, 193–210.
- Benazir, B., Bashir, S., Zarar, R., Ahmed, M.,& Farooq,
 K. (2021). A sociological Analysis of the Attitude of Working Females towards Joint Family System: A Case Study of Quetta City.Indian Journal of Economics and Business,20(2)
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.
- Costa, P. T., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81(2), 322– 331. https://doi.org/10.1037/0022-3514.81.2.322

- Cherry, K. (2019). What are the big 5 personality traits? Very well Mind. https://www.verywellmind.com/the-big-fivepersonality-dimensions2795422.
- Ebstrup, J. F., Eplov, L. F., Pisinger, C., & Jørgensen, T. (2011). 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
- Gupta, K., & Nc, K. B. (2021). Empathy and Perceived Stress among College Students. *International Journal of Indian Psychology*, 220–231. https://doi.org/10.25215/0902.027
- Holzman, P. S. (1999, July 26). Personality / Definition, Types, Nature, & Facts. Encyclopedia Britannica. https://www.britannica.com/topic/pers onality.
- Homayouni, A., Aghajanipour, H., Nikpour, G., & Khanmohammadi, A. (2009). Personality and Stress: Personality Factors that Affect on Emerge of Stress. *European Psychiatry*, 24(S1). https://doi.org/10.1016/s0924-9338(09)71480-4
- Jackson S., Schneider T. *Psychology of Extraversion*. 2014. Extraversion and stress; pp. 121–131.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The Big Five Inventory – versions 4a and 5. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.
- Khan, J., Bashir, S., Muneera, D., & Zarar, R. (2023). The role of non-governmental organizations (NGOs) in prevention and treatment of HIV/AIDS in District Kech. International Journal of Special Education, 38(1)
- Lim, A. G. (2020, June 15). *Big Five personality traits*. Simply Psychology. https://www.simplypsychology.org/big-fivepersonality.html.
- Lecic-Tosevski, D., Vukovic, O., & Stepanovic, J. (2011). Stress and personality. *Psychiatriki*, 22(4), 290–297.
- Lu, L. (1994). University transition: major and minor life stressors, personality characteristics and mental health. *Psychological Medicine*, 24(1), 81–87. https://doi.org/10.1017/s0033291700026854
- Mousavi, S. K., & Kamali, M. (2021). The relationship of nursing students' personality traits with their

perceived stress in clinical environment. *DOAJ* (*DOAJ: Directory of Open Access Journals*). https://doi.org/10.4103/nms.nms_108_20

- McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective*. Guilford Press.
- McCrae, R. R., & Costa, P. T., Jr. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 159–181). The Guilford Press
- Phillips, A. C. (2013). Perceived stress. In *Springer eBooks* (pp. 1453– 1454). https://doi.org/10.1007/978-1-4419-1005-9_479

Pourabdolisardroud, M. (2011). Investigation the Role of Personality Factors that Cause to Stress in University Students. *European Psychiatry*, 26(S2), 1039. https://doi.org/10.1016/s0924-9338

(11)72744-4

- Rammstedt, B., & John, O. P. (2020). Big five inventory. In *Springer eBooks* (pp. 469–471). https://doi.org/10.1007/978-3-319-24612-3 445
- Rodriguez-Besteiro, S., Tornero-Aguilera, J. F., Fernández-Lucas, J., & Clemente-Suárez, V. J. (2021). Gender Differences in the COVID-19 Pandemic Risk perception, psychology, and Behaviors of Spanish university students. International Journal of Environmental Research and Public Health, 18(8), 3908. https://doi.org/10.3390/ijerph18083908
- Scott, E., PhD. (2022, November 7). *What is stress?* Verywell Mind. https://www.verywellmind.com/stress-and-health-3145086
- Vangara, S. V., Kumari, A., & Kumar, D. (2022). Evaluation of perceived stress and its correlation with personality traits in undergraduate students. *Asian Journal of Medical Sciences*, 13(8), 127– 132. https://doi.org/10.3126/ajms.v13i8.34044

Vollrath, M. E. (2001). Personality and stress. Scandinavian Journal of Psychology, 42(4), 335– 347. https://doi.org/10.1111/1467-9450.00245.