



Role of Stress in Relations to Personality Factors among University Students

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Abstract

The current study aims to evaluate the role of stress in relation to personality factors among university students. The sample comprised of 260 university students studying social and scientific sciences. Data were collected using two scales: the Stress Scale and the Adjective inventory. The demographic factors included in the current study were gender, departments in which they studied, and grade point average earned. The students' ages ranged from 20 to 25 (median = 22). The correlation coefficient indicates that stress has a negative link with self-efficacy but a positive association with neuroticism. According to comparisons, men university students experience less stress than female university students, while students of social sciences have more stress and poorer self-efficacy than students of natural sciences.

Key words: Role, Stress, Personality Factors, University Students



Introduction

Everyone is aware of the terms "stress" and "stressors" in their daily lives. Every day comes a new shift, a new turn, and something new to acclimatise to. Everybody is familiar with the phenomenon of a person's awareness of his or her own skills. Life is the name of the continuous transition from one stage of life to the next. Personality qualities among university students have a substantial impact on how they perceive and react to stress, affecting their mental health and academic success (Luo et.al., 2023). High levels of neuroticism, in particular, have been linked to greater stress perception and unfavourable psychological effects, whereas qualities such as conscientiousness and extraversion might be protective. Coping strategies and social support play an important role in moderating the link between personality, stress, and psychological well-being (Dumitru, V. M., & Cozman, 2012).

Personality is a multifaceted concept. Personality is a tough concept to explain. Personality may also be characterised in terms of several factors. Personality traits can also predict pupils' academic performance. Chai & Low (2015) discovered that many personality traits including extraversion, conscientiousness, and openness to experience are educationally important. There are some gender disparities in terms of the most prevalent personality variables. Many other factors, such as birth order and the disciplines students choose to study, might also contribute to increased stress, modulated self-efficacy, and personality modification among university students. Many variables can contribute to increased stress, self-efficacy, and personality change (Saklofskt et.al., 2012).

Students who are unsure of their talents avoid challenging assignments because they perceive them as personal dangers. Their expectations are modest, and they are not very committed to the goals they decide to pursue. When confronted with challenging assignments, they focus more on their own shortcomings, the challenges they will face, and the negative consequences than on how to function well (Afshar et.al., 2015). Their sense of efficacy is slowly restored after failure or setbacks. They succumb to despair and stress with ease. The way a student views their own skills might have an impact on their academic performance. Pupils who have a positive opinion of it will work hard for academic success. Personality traits that positively impact academic success include if a person is open to new experiences and nervous (Ahadi, & Narimani, 2010).

In order to prevent the issues that come with stress, pupils must learn how to control their stress. But before they can manage their stress, they must determine if self-help is sufficient or if professional assistance is required. Resources for self-help seem to be well received by the general audience. Professional assistance is most likely required if self-help is ineffective or does not provide a valuable solution, or if stress-related issues turn into mental illnesses or physical ailments (Panchu, & Thomas, 2016).

These changes can be influenced by a wide range of factors. One such variable is stress. The right amount of stress may be quite beneficial for university students' adjustment. Severe stress can interfere with kids' ability to study if education stress is not appropriately addressed. Considering personality in terms of five factors can help us think about the students' personalities. Students might vary in their emotional stability, extraversion or introversion, openness to new experiences, agreeableness, and conscientiousness (Galindo-Domínguez, & Bezanilla, 2021). The current study aims to determine the association between university students' stress levels and these personality traits. The current study focusses on a little different aspect, which is the evaluation of



postgraduate students during their last semester(yan & Sui, 2014). Stress levels are higher among fourth- and final-year seniors. Students were drawn from the social and natural sciences faculties. Students' academic success is favourably connected with their openness to experience.

Objectives of the Study

The primary goals of the current study are as follows:

- 1. To evaluate how personality traits relate to university students' perceptions of stress.
- 2. To investigate university students' stress levels.

Method

Sample of Study: About 260 postgraduate students from the university's final (4th) semester made up the sample; 180 of them were female and 80 were male.

Tools: The following tools were employed in this investigation:

A. Stress Scale: Rafia created the Stress Scale in 1991. Although Rafia utilised 78 questions in the study, the 87 items she initially produced were used to create the items that tested the construct of general stress for the purposes of this investigation.

The Adjective Checklist by Gough and Heilburn (1965; 1998) was one of the most popular personality tests. On a five-point Likert scale, the replies are assessed. Adjectives with positive loading are added to each factor, while things with negative loading are deducted from them. Add the low (negatively loaded) items and remove the high (positively loaded) items to get a score of N.

Procedure:The Adjective Checklist and Stress Scale were employed to gather data. Before the start of the items, the necessary demographic data was printed. The top page of the pamphlet contained instructions on how to respond to the scales' items. To get consent for the collecting of student data, the department chairpersons were approached. Students in their courses were approached. The pupils were given an explanation of the study's goal. Then, using the given scales, they were asked to rate their answers honestly. Additionally, participants received the guarantee that their name would remain confidential and that the data they provided would only be utilised for study. Then, using the given scales, they were asked to rate their answers honestly.

Results

Results of the present study has described below:

Table 4: Means, Standard deviations and t- values of the scores of the male and female university students on the Adjective Checklist (N=260)

Personality Factors	Gender	N	M	SD	df	t	p
Openness	Females	180	53.88	11.64	258	1.40	0.163
	Males	80	51.58	13.57			
Conscientiousness	Females	180	31.54	10.26	258	0.01	0.992
	Males	80	31.53	11.33			
Extroversion	Females	180	31.86	9.65	258	-0.78	0.435
	Male	80	32.86	9.40			



Agreeableness	Females	180	50.38	12.79	258	2.34	*0.020
	Males	80	46.04	15.85			
Neuroticism	Females	180	26.59	11.50	258	-0.36	0.719
	Males	80	27.19	14.17			

The table indicates that there is no significant difference in the scores of the personality factors between male and female university students in terms of neuroticism ($t = -0.36$, $df = 258$, $p = 0.719$), openness to experience ($t = 1.40$, $df = 258$, $p = 0.163$), consciousness ($t = 0.01$, $df = 258$, $p = 0.992$), and extroversion ($t = -0.78$, $df = 258$, $p = 0.435$). However, the agreeableness scores of male and female university students differ significantly ($t = 2.34$, $df = 258$, $p = 0.020$). According to the data, female university students scored considerably higher on agreeableness ($M = 50.38$, $SD = 12.79$) than male university students ($M = 46.04$, $SD = 15.85$). Therefore, compared to male university students, female students have a larger personality characteristic of agreeableness.

Table 7: Means, Standard deviations and t - values of the scores of university students from natural and social sciences on the Stress Scale ($N=260$)

Discipline	N	M	SD	df	t	p
Social Sciences	140	41.48	20.00	258	2.46	0.014
Natural Sciences	120	35.70	17.39			

According to the results in the above table, there is a significant difference between the natural and social sciences' stress scale ratings ($t = 2.46$, $df = 258$, $p = 0.014$). The findings also imply that university students studying the scientific and social sciences had mean and standard deviations of ($M = 35.70$, $SD = 17.39$) and ($M = 41.48$, $SD = 20.00$), respectively. The present study's prediction that university students studying the natural sciences will experience higher levels of stress than those studying the social sciences is thus supported by this data.

Table 8: Means, Standard deviations and t - values of the scores of university students from natural and social sciences on scores of five personality factors (Adjective checklist)($N=260$)

Personality Factors	Faculties	N	M	SD	df	t	p
O	SS	140	50.41	13.29	258	4.03	*0.000
	NS	120	56.40	10.13			
C	SS	140	29.78	10.49	258	2.93	*0.004
	NS	120	33.58	10.35			
E	SS	140	30.23	9.64	258	3.60	*0.000



	NS	120	34.42	9.64			
A	SS	140	49.09	13.78	258	0.06	0.950
	NS	120	48.98	14.14			
N	SS	140	27.11	10.34	258	0.48	0.632
	NS	120	26.38	14.39			

According to the findings in the above table, there is a significant difference between the university students studying the natural and social sciences' scores on extroversion ($t = 3.60$, $df = 258$, $p = 0.000$), conscientiousness ($t = 2.93$, $df = 258$, $p = 0.004$), and openness to experience ($t = 4.03$, $df = 258$, $p = 0.000$). Additionally, the findings indicate that students studying the natural sciences had higher mean scores on openness to experience ($M = 56.40$, $SD = 10.13$) than students studying the social sciences ($M = 50.41$, $SD = 13.29$). Furthermore, the results show that university students studying the social sciences had lower mean scores on conscientiousness ($M = 29.78$, $SD = 10.49$) than those studying the scientific sciences ($M = 33.58$, $SD = 10.35$).

Additionally, the results show that students in the natural sciences ($M = 34.42$, $SD = 9.64$) had higher mean scores on extroversion than students in the social sciences ($M = 30.23$, $SD = 9.64$). However, the table also reveals a non-significant correlation between the degrees of neuroticism ($t = 0.48$, $df = 258$, $p = 0.632$) and agreeableness ($t = 0.06$, $df = 258$, $p = 0.950$) among university students in the social sciences and the natural sciences.

Conclusion

The purpose of the current study was to examine how stress functions in connection to university students' personality traits. According to the findings, stress has a negative correlation with self-efficacy while having a good correlation with neuroticism.

In comparison to male university students, female students exhibit higher levels of agreeableness according to personality traits. Compared to their female counterparts, male university students exhibit lower levels of stress and better levels of self-efficacy. Academic achievement is favourably connected with extroversion, conscientiousness, and self-efficacy. Compared to their natural science counterparts, social science students experience higher levels of stress and lower levels of self-efficacy. Those studying the natural sciences have greater levels of conscientiousness, extroversion, and openness to new experiences than those studying the social sciences. The study's assessment of the university students' personality types and self-efficacy has proven to be successful. We can also forecast academic achievement based on university students' self-efficacy and personality type. Generally speaking, we can forecast both the good and bad effects of stress on certain personality types. It can be useful in helping students choose their subjects based on their personality types.

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