



ORIGINAL CONTRIBUTION

Relationship of Stress with Academic Performance among University Students

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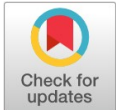
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Abstract— The current study's goal was to investigate the connection between university students' stress levels and their academic achievement. Using a basic random sample procedure, a sample size of 200 people was drawn from the University of Haripur. Data from 100 male and 100 female university students were included in the sample. Student Stress Inventory (SSI), a tool used to gauge stress among college students, was utilized to gather data. The Grade Point Average (GPA) of each student served as a measure of their academic success. The study's results show a strong correlation between stress and university student's academic performance, and stress is negatively connected with academic performance among university students. In comparison to male pupils, female students performed better on the stress test. Academic success is inversely connected with stress. Because the current study was restricted to the university of Haripur and the sample size was also small, it was recommended that this study be conducted in the future with a more diverse population and a larger sample size. The results of the current study will contribute to a better understanding of how stress affects university students' academic performance.

Index Terms— Academic, Relationship, University students, Performance, Stress & success

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Introduction

The fact that stress has been labeled a worldwide phenomenon and that we live in a world with numerous stressful settings possibly explains the high interest in stress research. It has developed into a significant aspect of existence and is regarded as the price that every one of us must pay to survive (Abasimi et al., 2015). The current era is regarded as the stress era. Human beings experience multidimensional stress in every instant and every aspect of their lives. Although stress is regarded as a necessary state because it aids in accomplishment, it can occasionally lead to pressure.

Stress is an essential and inevitable component of daily life. It is inevitable since it corresponds to any external occurrence, whether it is enjoyable or anxiety-inducing, and is important because without some stress, we would be listless and apathetic beings. Whether an event is viewed as a challenge or a threat affects how someone reacts to stress (Berjot & Gillet, 2011).

For parents, instructors, and students themselves, academic accomplishment is very important. Since graduates of educational institutions are expected to influence society's luck, even wider society is aware of the long-term repercussions of academic success (Sajid, Idrees & Hussain, 2018). Unfortunately, college students' academic performance is getting annoying, and many educators are very concerned about this (Sakirudeen & Sanni, 2017). For these students to obtain their greatest academic results, they must overcome numerous

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challenges. Both male and female students experience stress, and how they deal with it may have an impact on how well they perform academically (Sakirudeen & Sanni, 2017).

Stress has been linked in many types of research to poorer academic performance. For instance, a study conducted in Pakistan revealed a link between increased stress and subpar academic performance (Reddy, Menon, & Thattil, 2018). Stress is a condition that is intellectually or emotionally distressing or disruptive and that can have an impact on one's physical health. It is typically characterized by changes in heart rate, blood pressure, muscle tension, irritability, and mood.

Life changes, and we adjust ourselves to match brand-new circumstances. Students may experience stress due to failure in academics or athletics, financial difficulties, health challenges, or the passing of loved ones, family members, or close friends. Stressors are those kinds of situations that cause stress. A person's living style, and physical and mental health, may be impacted by a sudden shift in their circumstances or pressures. A person's response to stress will determine what effect it has on them. When the person gets over the incident, the stress will vanish if they handled it positively by accepting it as a normal part of life and finding ways to deal with it. On the other hand, the significance might cause the individual persistent emotional discomfort. Students' tertiary education and psychological development are provided by universities (Fuente et al., 2022).

Students in universities not only pursue education but also socialize with a variety of people and go through psychological development. According to studies, starting college could cause stress or tension (Mu, Du, & Hou, 2022). Stress among students has significantly increased over the past few decades, and girls appear to be the most affected. This is because university students must adapt to a changing social environment, lifestyle, and educational system.

Learning can be enhanced by beneficial stress or stress at the right level. However, high stress can lead to physical and mental health concerns. It may have an impact on academic performance, personal or professional growth, and self-esteem among students. The soaring interest in stress research is probably because we live in a world that contains many stressful circumstances and stress has been tagged a global phenomenon. Stress has supposedly become a necessary component of existence and is the price we all pay for trying to survive (Abasimi et al., 2015). The comparison of male and female students' academic achievement has been the subject of various sorts of studies. Academically, female pupils perform better than male students (Unity, 2015). The academic performance of female students is reported to be more active than that of male pupils. It has been shown that female pupils perform better academically than male ones (Ullah & Ullah, 2019).

Objective

- To determine the relationship between stress and academic performance among university students.
- To investigate those female students will likely experience more stress as compared to male students.
- To examine whether stress will negatively correlate with academic performance among university students.
- To compare the academic performance of male and female students.

Literature Review

According to Faisal, Noor, and Khair (2019), academic institutions have distinct work environments from non-academic ones. Therefore one might anticipate variations in the signs, triggers, and effects of stress. Stress in academic institutions can have both beneficial and harmful effects if it is not well managed (Khan, Lanin, & Ahmad, 2015). Due to their emotional and sensitive personalities and attitudes toward their environments, one study found that female students experience stress at a higher rate and with more different types than male students (Rehman, Haq, Jam, Ali, & Hijazi, 2010; Sulaiman, Hassan, Spain, & Abdullah, 2009).

In his research on business undergraduates, Reddy, Menon, and Thattil (2018) found a similar conclusion that stress is highly connected with subpar academic performance. Thus, it is necessary to embark on this study. Academic accomplishment is determined by undergraduate students' GPA during the prior semester, while stress is defined in this study as events and situations that cause anxiety. For instance, a study conducted in Pakistan revealed a link between higher levels of stress and subpar academic performance. Academic success is determined by how well students perform in their II, III, and IV semester final exams. The educational institution/students' marks sheet was used to obtain the students' final test scores (based on theory, practicals, and internal assessment). A score of 70% or higher is deemed a distinction, while a score of 50% or less is considered a pass class. The educational institution bases students' grades on the percentage they earned in the semester-ending exam. The academic performance grades in the current study are determined using the same criteria. The academic performance grades in the current study are determined using the same criteria. The academic performance grades in the current study are determined using the same criteria. A poorer GPA and a decline in overall adjustment were predicted by the first year's increased stress (Winter & Yaffe, 2000).

The hypothesis of the present study was given below:

- 1- Stress negatively correlates with academic performance among university students.

- 2- Female students will likely experience more stress as compared to male students.
- 3- Female Students will score higher on academic performance.

Method

Operational definition

Stress

An incident or circumstance is considered to be stressful if it makes the person feel tense, under pressure, or negatively affected, such as anxious or angry.

Academic performance

Academic performance measures how well a student, instructor, or institution has met short- and long-term learning objectives.

Instrument

Student stress inventory

To gauge how stressed out university students are, the SSI was created. The SSI comprised 40 negative items to assess four subscales, each of which had ten items: subscale 1 for physical, subscale 2 for interpersonal relationships, subscale 3 for academics, and subscale 4 for environmental factors (10 items). When it comes to scoring, the SSI was created with an ordinal scale of "Never," "Somewhat often," "Frequent," and "Always." 1 point is awarded for "Never," 2 for "Somewhat Frequent," 3 for "Frequent, and 4 for "Always" for each option. The entire administration procedure will just take 15 to 20 minutes. The area around the administration building should be welcoming and comfortable. To ensure that the respondents provide truthful answers to the questions, the instructions should be delivered clear and concise manner.

Sample

200 university students made up the sample for the current study. Both males and females were included in the study's sample. Data from Haripur university students were gathered for the study.



Fig. 1. Conceptual framework

Research design

The research design to gather the data for this study would be a convenient sampling technique.

Procedure

The investigator personally proceeded toward the participants to collect the information. The researcher obtained formal written consent from concerned authorities to gather data from the university. The participants were given detailed information regarding the nature, purpose, and importance of the investigation. The participants were made sure that the information will remain confidential and only be used for study purposes. The participants were given the right to leave the study at any stage where ever they feel insecure. The organized guidelines were provided regarding the response of scale. After the completion of the scale, the researcher examined the scale to ensure that either all the items were correctly responded to or not. The researcher requested the participants to complete the items left blank either consciously or unconsciously. Each respondent took a maximum of 30 minutes to complete the instrument.

80 percent of respondents responded. A total of 200 questionnaires were circulated out of which 200 were given back. Finally, in the last, participants were thanked for being non-mandatory participants in the study.

Results

The primary goal of the current study was to examine the connection between stress and university students' academic performance. Additionally, gender variations in these variables were looked at. The first step is to find out the reliabilities of the study variables that were evaluated. Then descriptive statistics (means, standard deviation) were calculated. Pearson correlation was used to assess the relationships between stress and academic performance. A *t*-test was used to find out gender differences on SSI .

Table I
Cronbach's alpha reliabilities of SSI among university students (N=200)

Scale	No. of Items	M	SD	Cronbach's Alpha α
SSI	41	92.74	17.816	0.722

Note. SSI Student Stress Inventory.

Table I shows the psychometric properties of SSI. The reliability analysis shows that the alpha coefficient for SSI is 0.722 which indicates that these scales have good internal consistency.

Table II
Relationship between stress with academic performance among university students (N=200)

Scale	1	M	SD
1. SSI	-	2.23	.44
2. Academic Performance	-.236	3.17	.53

Note. SSI student stress inventory **p* > .05*** **p* < .01.

Table II shows the relationship between stress with academic performance among university students. Results showed a negative correlation between stress and academic performance (*p*<.01).

Table III
Mean, standard deviation, t-scores of males and females on SSI and academic performance (N=200)

Scale	Male(n=100)		Female(n=100)		t(198)	p	95% CI	
	M	SD	M	SD			LL	UL
SSI	2.1646	.47183	2.1646	.41643	.528	.021	-.2706	-.0224
Academic Performance	3.0569	.48976	3.2735	.54883	195.487	.004	-.3616	-.0715

Note. SSI and student stress inventory**p* < .05

Table III illustrates the results of the t-test for measuring stress on all the study variables. Results indicated that stress is significantly negatively correlated with academic performance. It showed that females (*p* < 0.5) reported significantly higher levels of stress than males (*p* < 0.5).

Discussion

The current study looked into the connection between academic performance and stress among university students. Data was gathered for this purpose from the University of Haripur. 200 people served as the sample, and several statistical analyses were conducted. The hypotheses were tested using descriptive statistics, alpha reliability, Pearson correlation, and independent sample *t*-test. Results provide descriptive statistics, skewness, kurtosis values, and alpha reliability coefficients. Scale for the SSI and its subscales. Results show that the SSI scale and its subscales have high internal consistency and are appropriate for use. Skewness and kurtosis values indicated that univariate normality is not problematic.

The first hypothesis, "Stress negatively correlates with academic performance among university students," was accepted in the present study. The findings are in line with the previous research. Studies have found that stress is related to lower academic performance. For instance, a study conducted in Pakistan revealed a link between increased stress and subpar academic performance (Sohail, 2013; Waheed, Kaur, Ain, & Qazi, 2013). A poorer GPA and a decline in overall adjustment were predicted by the first year's increased stress (Winter & Yaffe, 2000). University stress is likely to cause students' academic performance to suffer.

The second hypothesis "Female students will likely to experience more stress as compared to male students" was accepted in the present study. Previous research has also shown the same findings. Both male and female students experience differing levels of stress (Amr et al., 2008). Sulaiman et al. (2009) discovered that male pupils were less stressed than female students. One study found that because of their emotional and sensitive personalities and attitudes toward their environments, female students experience stress at a higher rate and with more different types than male students.

The third hypothesis, "Female Students will score higher on academic performance," was accepted in the present study. The findings are in line with the previous research. On the subject of comparing the academic achievements of male and female students, various sorts of research have been conducted. The academic performance of female pupils is superior to that of male students (Youn & Suk, 2018; Unity, 2015). The academic performance of female students is reported to be more active than that of male pupils. It has been shown that female pupils perform better academically than male ones (Ullah & Ullah, 2019).

Conclusion

Academically sound performance is related to the psychological well-being of students. The present study findings revealed a strong correlation between stress and university students' academic performance, and stress is negatively related to academic performance among university students.

Limitations and Suggestions

This research study also got several limitations. It can make the picture clearer and provide a better solution if overcome. The sample size is small due to a shortage of time. It cannot be regarded as a representative sample. The data was only collected from the students of the university of Haripur, which limits its' generalized ability. In future research, it can be extended to other universities in Pakistan to make a comparison. In the present study, the relationship between stress and academic performance was investigated. In future research, this relationship can be explored with other variables like academic self-concept, academic self-efficacy etc. Gender and faculties of students might be influential factors on student's academic performance. This should also be taken into conclusion.

Theoretical & Practical Implications

The present study suggests that university administration needs to assess the stress level of students and provide appropriate mental health care and effective stress management techniques. By doing so, students' performance in academics can be improved and can serve the country in a better way.

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