

# Effect of Perceived Stress and Self Esteem on the Academic Performance of Postgraduate Students' in Pakistan

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## ABSTRACT

Various research studies have perceived stress and self-esteem among students enrolled in universities in post-graduate programmes. This research, while acknowledging the importance of the need to further study the phenomena, explored the effect of perceived stress and self-esteem on the academic performance of postgraduate students in Pakistan. The data was collected from seven public sector universities offering M.Phil. Education Programme using the random sampling technique. A total 362 M.Phil. Education scholars, 282 male and 80 female belonging to both rural and urban backgrounds participated in this study. Correlation analysis was carried out to find any relationship between perceived stress and self-esteem on the academic performance of postgraduate students. The findings of this study revealed that the (i) relationship between perceived stress and academic performance is weak, and has negative correlation; whereas (ii) the relationship between academic performance and self-esteem is positive and has a moderate association. It is also concluded that the association between self-esteem and perceived stress has negative association. It is recommended that there is a great need to minimize the academic stress of the postgraduate students regarding their study and academic performance in the public sector universities in Pakistan. To ensure gainful outcomes of educational undertakings. Universities should focus on students' health and the process of learning and assessments.

**Keywords:** Academic Performance, Perceived Stress, Postgraduate Students, Self-esteem

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## Introduction

The academic performance of students plays a key role in the socio-economic development of a country (Ali et al, 2009). The academic performance of students could be affected by many factors like perceived stress and self-esteem. These factors could strongly influence the performance of students; however these factors differ from country to country. Majority of the researchers around the world apply the GPA (Grade Point Average) to assess the performance of students enrolled in undergraduate and graduate degree programmes (Stephan & Schaban, 2002). The GPA aims to assess the academic performance of the students in a specific semester or duration of studies. Academic performance is based the level of knowledge a student possesses and usually represented by grades or scores attained in assessments, examinations and project work. The calculations on a system that determines an average of the total scores or grades. The GPA could improve with consistent overall improvement in subjects and vice versa.

The incorporation of various factors is considered academic performance that effects on a learner (Ocaña, 2011).

In the developing nations, the centre of education, family and the qualities which a student have, are considered as associated factors (Cueto, 2007). There are many factors that could influence and impact the academic performance of students enrolled in universities. These factors could range from emotional stability to cognitive functioning, social adaptability to personal management, and from institutional support. All of these factors are associated with learning performance of the students (Garbanzo, 2007). Students aspire and are expected to continuously perform successfully throughout their academic life (Garcia et al., 2012). The factors that stimulate the academic performance of students should be explored in order to provide better institutional support, develop robust teaching and learning mechanisms, and improve programme outcomes. The learning process and the factors that could influence students' academic performance should

be analyzed to help students performanc better and with greater satisfaction. The relation between self-esteem and academic achievement across the world has shown conflicting results, indicating academic performance is a result of self-esteem and vice versa.

On the other hand, many findings showed that academic performance of learners depend upon the level of their self-esteem. Malbi & Reasoner (2000) viewed that good academic performance increases the confidence and feelings of self-worth among learners. Similarly, students who have lower self-esteem tend to attain lower levels of achievement and academic progress in comparison of their counterparts (Alves-Martins et al., 2002). The findings seem true intuitively as it is natural to assume that humans tend to participate and perform effectively when their faculties of body, mind, heart and spirit are uniquely balanced (Apichai, 2009).

### Literature Review

The concept of perceived stress is psychological factor that has garnered great attention of researchers and educators around the world for the last twenty years (Lee et al, 2012). Stress is believed to be a part of students' academic life, which may have effects on their lives. Academic performance is mostly accomplished by stressful activities (Agolla & Ongori, 2009) and require a great level of attention, focus and self-management. Stress may not be avoided in human life, as often, it is the process to effort, trial and error and ultimately success. Everyone experiences stress despite of their age, gender, occupation, social and cultural backgrounds, race, and other variables (Oyerindde, 2004). Self-esteem is also affected by the perceptions of stress. The threats to one's self-esteem occur when a person believes that the stressor is uncontrollable or disturbing enough to have a considerable impact in one's life (Baldwin & Hoffmann, 2002). According to students, stress is believed to be the biggest impediment in their academic performance (ACHA, 2007a).

Perceived stress is the psychological condition in which a person feels that the situation or problem is grave and that the competencies and talent of the person insufficient or ineffective to manage the situation (Li et al., 2014). A person may not be able to see reason in a stressful situation and assume a defeated state of mind and spirit (Lee, 2011). Perceived Stress Scale (PSS) is utilized by the researchers around the world for the measurement of the degree of stress. Psychological stress is considered if a person is having stress greater than one's capacity and capability to cope with it (Cohen et al., 1983). Nudart (2013) in his research study of investigating academic performance of students against moderate, negative and significant association considered a number of variables and confirmed their association by emphasizing that there is a strong link which combines them all. The important link was the presence of significant stress levels in the good and poor academic performance.

The patterns of stress comprise both specific and non-specific responses which are made by an organism or the disturbance in the equilibrium which is disturbed (Sharma et al. 2013). Stress and anxiety are the most common and present the greatest threat to the well-being of individuals and the stability of world economies. The demanding 21<sup>st</sup> century has had a considerable impact on the stress and anxiety levels of individuals of all ages due to the challenging family, social, political and economic situations. Humans perhaps may have never had such challenging situations and circumstances as experienced by individuals of all ages in the modern world. The fast-paced and continuously evolving environment poses a threat and a challenge for people around the globe (Behere et al. 2011).

Psychologists have endorsed the importance of self-esteem in human beings. It is one of the most valuable and important characteristics (Husseini, 2013) and there is a mutual relationship between academic performance and self-esteem, which indicates that

the higher self-esteem, the higher academic performance. In other words, academic performance and success contributes to one's self-esteem (Hatamian, 2016). Self-esteem is one of the many important factors that impact the failures and successes a student experiences (Husseini, 2013).

Higher self-esteem has been found to be the facilitator of good academic performance (Naderi et. al, 2009). The review of literature strongly inclines towards academic performance as an important indicator of a student's talent, efforts, drive and to a considerable extent, a positive sense of self-worth and self-esteem. Different researches have proved the existence of a positive correlation between good academic performance and high self-esteem. It may be concluded that self-esteem is associated with academic performance. Thus, educational and institutional objectives should focus on ways of engaging the learners to enhance their self-esteem, motivation to learn and opportunities to excel and gain confidence to improve the overall outcomes of the academic attainment and student well-being.

### Research Problem

Students' health and academic performance are considered vital for their future and professional growth and development. There is a great need to understand the phenomena and the individual factors of perceived stress, self-esteem and academic performance among university students in our country, and their mutual relationship impact on students' learning outcomes. The current study will be an attempt to study the factors associated with the academic performance at the university level. The findings of this study aim to provide insights into the phenomena of perceived stress, self-esteem and academic

performance among university students. Such information will serve as an evaluative feedback to the Higher Education Department, Ministry of Education and Administration of the Universities to enhance the academic performance of university students across Pakistan. Furthermore, it is intended that the global academia may also obtain benefit from these outcomes of this study. The objectives of the study are as follows:

### Objectives

1. To find out the effect of perceived stress on the academic performance of postgraduate students
2. To calculate the effect of self-esteem on the academic performance of postgraduate students
3. To explore correlation among academic performance, self-esteem and perceived stress of postgraduate students

### Research Questions

1. What is the effect of perceived stress on the academic performance of postgraduate students?
2. What is self-esteem effect on the academic performance of postgraduate students?
3. What is the difference among academic performance, self-esteem and perceived stress of postgraduate students?

### Methodology of Research

#### Design and Sampling of the study

The study was survey-type. A sample of 362 students, (80 female and 282 male) from seven public universities of the province of Punjab belonging to the department of Education participated in this study. Students were randomly selected and requested to participate voluntarily in answering the questionnaire.

**Table 1:** Demographic characteristics of the participants of the research

		N	%
University	University of the Punjab (Lahore)	49	13.5%
	University of Education (Lahore)	55	15.2%

	University of Sargodha	40	11.0%
	GC University (Faisalabad)	55	15.2%
	University of Agriculture (Faisalabad)	69	19.1%
	Bahauddin-Zakariya University (Multan)	54	14.9%
	The Islamia University of Bahawalpur (Bahawalpur)	40	11.0%
Gender	Male	282	77.9%
	Female	80	22.1%
Residential Place	Urban	177	48.9%
	Rural	185	51.1%
Age	20-30	291	80.4%
	31-40	71	19.6%
	any other	0	0.0%
Marital status	Married	296	81.8%
	Unmarried	63	17.4%
	Divorced	3	0.8%
Semester	First	0	0.0%
	Second	0	0.0%
	Third	362	100.0%
Academic Performance (AP) (%) marks in M.Phil)	70-79	255	70.4%
	80-100	107	29.6%

The distribution of the demographical characteristics in Table 1 are examined, it is determined that 77.9% of the students participated in the research are male, 22.1% are female, the percentage of students in this study is 13.5% students from University of the Punjab, Lahore 15.2% students from University of Education, Lahore, 11% students from University of Sargodha Sargodha, 15.2% students from GC University, Faisalabad, 19.1% students from University of Agriculture, Faisalabad, 14.9% students from Bahauddin Zakariya University, Multan and 11.0% students from The Islamia University, Bahawalpur participated. Whereas the age range of the participants in this study was 80.4% were 20-30 years and 19.6% were 31-40 years old. 70.4% got 70-79 marks whereas 29.6% students secured 80-100% marks.

A total of 362 students, (80 females and 282 males) M.Phil Education research students studying at the selected public universities of Punjab, in the Department of Education, participated in this research study. Distribution of the participants' demographic characteristics is presented in Table

### Instrumentation

For the assessment of self-esteem and perceived stress, Rosenberg's Self Esteem Scale (RSES; Rosenberg, 1965) and Cohen's Perceived Stress Scale (CPSS) (1983) were utilized respectively. Whereas for the purpose of calculation of academic performance the Cumulative Grade Point Average (CGPA) of students' achieved was taken.

### Data Collection

The data was collected in the form of a questionnaire personally by the researcher. The students were introduced to the researcher with the help of their research supervisors. The subjects were also informed that all the collected information from them will be used entirely for

the purpose of research and will be kept confidential.

### Data Analysis

Researcher used inferential statistics and SPSS version 23 to analyze the respective data to get the calculated results.

**Table 2:** Comparison between Academic performance, % marks in M.Phil. regarding different Perceived Stress Scales

Statement	AP	N	Mean	SD	SE	t-value	Prob.
1. Upset because of something that happened unexpectedly.	70-79	255	2.95	0.37	0.023	2.01*	0.045
	80-100	107	2.86	0.46	0.045		
2. Felt that you were unable to control the important things in life.	70-79	255	2.95	0.39	0.025	2.27*	0.024
	80-100	107	2.84	0.50	0.048		
3. Felt nervous and "stressed".	70-79	255	2.89	0.54	0.034	3.26**	0.001
	80-100	107	2.67	0.67	0.065		
4. Felt confident about ability to handle personal problems.	70-79	255	2.07	0.48	0.030	4.05**	0.000
	80-100	107	1.85	0.47	0.046		
5. Felt that things were going your way.	70-79	255	2.87	0.46	0.029	3.20**	0.002
	80-100	107	2.69	0.57	0.055		
6. Could not cope with all the things that you had to do.	70-79	255	2.27	0.55	0.034	1.43 <sup>NS</sup>	0.153
	80-100	107	2.18	0.67	0.065		
7. Able to control irritations in life.	70-79	255	2.97	0.42	0.026	3.64**	0.000
	80-100	107	2.78	0.55	0.054		
8. Felt that on the top of the things.	70-79	255	2.13	0.40	0.025	0.93 <sup>NS</sup>	0.355
	80-100	107	2.08	0.37	0.035		
9. Arranged because of things that were outside of control.	70-79	255	2.15	0.55	0.034	1.25 <sup>NS</sup>	0.212
	80-100	107	2.07	0.43	0.041		
10. Felt difficulties were piling up so high that could not overcome them.	70-79	255	2.91	0.47	0.029	3.37**	0.001
	80-100	107	2.72	0.55	0.053		
Perceived Stress Scale (overall)	70-79	255	2.62	0.25	0.016	4.39**	0.000
	80-100	107	2.47	0.35	0.034		

NS = Non-Significant ( $P > 0.05$ ); \* = Significant ( $P < 0.05$ ); \*\* = Highly Significant ( $P < 0.01$ )

SD = Standard Deviation; SE = Standard Error

The table shows valid number of observations having 70-79 % marks in M.Phil.) for 255 respondents and valid number of observations having 80-100 % marks in M.Phil.) for 107 respondents respectively. The mean values for the overall Perceived Stress Scales are 2.62 with 0.25 standard deviation for 70-79 % marks in M.Phil.)

respondents and 2.47 with 0.35 standard deviation for having 80-100 % marks in M.Phil.) respondents respectively. However, the analysis further illustrates that the overall self-esteem scale is significant with t-value 4.39 at two-tailed. The above table further demonstrates item-wise descriptive statistics. Self-esteem scale contained

10 items and is analysed with a 5% probability of error using two-tailed.

**Table 3:** Comparison between Academic Performance, % marks in M.Phil. regarding different Self Esteem Scales

Statement	AP	N	Mean	SD	SE	t-value	Prob.
1. On the whole, satisfied with myself.	70-79 80-100	255 107	1.90 2.09	0.48 0.29	0.030 0.028	-3.89**	0.000
2. At times, think, no good at all.	70-79 80-100	255 107	1.86 2.03	0.41 0.17	0.026 0.016	-4.12**	0.000
3. Feel have a number of good qualities.	70-79 80-100	255 107	2.67 2.96	0.74 0.19	0.046 0.018	-4.08**	0.000
4. Able to do things as well as most other people.	70-79 80-100	255 107	2.04 2.18	0.38 0.43	0.024 0.042	-3.01**	0.003
5. Feel do not have much to be proud of.	70-79 80-100	255 107	2.80 2.99	0.42 0.10	0.026 0.009	-4.71**	0.000
6. Certainly feel useless at times.	70-79 80-100	255 107	2.04 2.21	0.38 0.41	0.024 0.040	-3.88**	0.000
7. Feel a person of worth, at least on an equal plane with others.	70-79 80-100	255 107	1.86 2.09	0.53 0.38	0.033 0.036	-4.17**	0.000
8. Wish could have more respect for myself.	70-79 80-100	255 107	0.11 0.21	0.31 0.41	0.019 0.040	-2.77**	0.006
9. All in all, inclined to feel that I am a failure.	70-79 80-100	255 107	2.68 2.95	0.58 0.21	0.036 0.020	-4.70**	0.000
10. Take a positive attitude towards myself.	70-79 80-100	255 107	2.06 2.20	0.40 0.40	0.025 0.039	-2.89**	0.004
Self-Esteem Scale (overall)	70-79 80-100	255 107	2.00 2.19	0.26 0.15	0.017 0.014	-7.05**	0.000

NS = Non-Significant ( $P > 0.05$ ); \* = Significant ( $P < 0.05$ ); \*\* = Highly Significant ( $P < 0.01$ )

SD = Standard Deviation; SE = Standard Error

The table shows valid number of observations having 70-79 % marks in M.Phil.) for 255 respondents and valid number of observations having 80-100 % marks in M.Phil.) for 107 respondents respectively. The mean values for the overall Perceived Stress Scales are 2.00 with 0.26 standard deviation for 70-79 % marks in M.Phil.) respondents and 2.19 with 0.15 standard deviation

for having 80-100 % marks in M.Phil.) respondents respectively. However, the analysis further illustrates that the overall self-esteem scale is significant with t-value -7.05 at two-tailed. The above table further demonstrates item-wise descriptive statistics. Self-esteem scale contained 10 items and is analysed with a 5% probability of error using two-tailed.

**Table 4:** Correlation (relationship) among academic performance, Perceived stress and Self-esteem

Sr.No.	Variable	M	SD	1	2	3
1	Academic Performance	4.3	0.457	1	-.225**	.348**
2	Perceived Stress	2.575	0.288		1	-.524**
3	Self-Esteem	2.057	0.251			1

Higher values showed Pearson's correlation coefficient; whereas the lower values specified level of significance at 5% probability.

\* = Significant ( $P < 0.05$ ); \*\* = Highly significant ( $P < 0.01$ )

The relationship between Perceived Stress and Academic Performance is -0.225 which is a weak and negative correlation. The relationship amongst academic performance and Self-Esteem Scale is 0.348 which is a moderate association. The relationship between Self-Esteem Scale and Perceived Stress Scale is -0.524 which is a negative association.

### Discussion

Many studies proved that there is a significant relationship between self-esteem and academic performance. A study done by Verdi (2004) proved that self-esteem is associated by psychological phenomena. A research study done by Kan et al. (2009) drew results that increased self-esteem has association with increased academic performance whereas; reduction in self-esteem is associated with reduced academic performance. Also the results of this study are in line with those studies which show that a relationship has been found between self-esteem and academic performance.

A study done by Khan et al. (2013) showed that academic stress affects students' academic performance. The results of this study were significant due to the semester system as students have less time to study and required to study a lot which evidently builds stress. According to another research study done by Safree, Yasin and Dzulkifli (2010) proved similar results. They explored that anxiety, depression and stress are negatively correlated with academic performance of the students. Their study found

that as the stress goes higher, the academic performance of the students goes down.

### Conclusion & Recommendations

This study concluded that there is a negative as well as weak association between the academic performance and perceived stress. Whereas, the relationship between academic performance and self-esteem is not very strong but a moderate association was observed. Furthermore, it is also concluded that there is a negative association between self-esteem and perceived stress.

From the results of the present study, it is recommended that there is a great need to minimize the academic stress of the postgraduate students regarding their study and academic performance in the public sector universities in Pakistan. To ensure gainful outcomes of educational undertakings, universities should focus on students' health and the process of learning and assessments. The CGPA of the students can be improved much better in the public sector universities by increasing self-esteem among them and minimizing their perceived stress.

Distance education is rapidly increasing all over Pakistan. The psychological features of distance learners are diverse; these psychological features may halt or improve students' academic performance. Therefore, it is recommended that similar research studies should be done in Pakistan on the postgraduate distance education learners.

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