

Impact of Stress During Research Activities on the Performance of Research Students



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Abstract: *This research study is designed to examine the influence of stress on the academic performance of students of PMAS Arid University during research activities. The main objectives were to identify the level of stress during the research activities, to analyze the influence of stress on the performance. A descriptive quantitative method was used with the help of a questionnaire for research work in collecting and analyzing the data. Random sampling was used for 50 post graduated respondents with convenient sampling technique. Questionnaire was distributed and gathered personally by the researcher. The finding discovered that respondents were familiar with the nature of work. The finding also showed that research work influences the concentration on other domestic chores, and even on health. This suggests that research work may have a distracting effect on focus and attention which leads absence from classroom discussions, distracts their attention during lectures and lead to failure in completing an assignment on time.*

Keywords: Stress, Academic Performance, Research Activities

Introduction

Stress is about worrying or taking tension about anything or any circumstances. It is interesting to know that stress is a kind of intrinsic motivation to handle the challenges. Other researchers and scholars argued that stress is n emotional or physical tension.

A state of worry or mental tension generated by a challenging situation is defined as stress. Stress is a natural human response that motivates us to deal with problems and risks in our lives. To some extent, everyone is stressed. Stress is defined as a state of emotional or physical stress. It can be triggered by any event or thought that causes you to feel dissatisfied, furious, or nervous. Your body's reaction to a challenge or demand is called stress. Stress can be beneficial

in short bursts, such as when it helps you avoid danger or make a deadline.

Stress definitions span from metallurgical strain to emotional exhaustion. Stress, on the other hand, is defined as stress that a person experiences over an extended period of time as a result of an unresolved problem. This is found in students on occasion, but not as frequently as acute stress. Long-term stress can have an impact on human health. (Dahlin, Joneborg, , & Runeson, 17 May 2005). WHO is the World Health Organization. (Citation1996) believes that in order to properly participate in education, kids must be healthy and emotionally comfortable. (World Health Organization, Citation1996). Academic stress, in particular, has been shown to have a severe impact on university students' physical and

psychological health, as well as their academic performance. (G. Gupchup, M. , & N. , 1 June 2004). Academic Stress is a mental anguish concerning a certain anticipated frustration associated with school failure or even an awareness of the possibility of such failure (Brobbe, July 2021)

Student's guidance and counseling in an important area. Counseling of students required clinical practices. These practices can enhance the professional learning of such students. These students are assessed on both academically and clinical approached learned during the training. Research proved that academic stress leads towards the mental health issues along with other disorders. Such disorders may contribute to lower the academic success. These personality disorders heading towards the frustration, depression, and may be other significant traumatic conditions. (Perlberg & Keinan , 1986)

Stress known to be one of significant fact that creating troubles for students during their academic careers when they are striving for academic successes for their future lives. Academic pressure is one of the variables that contribute to student failure. Stress is a mental and physical response triggered by hormonal signaling. Anxiety is defined as a state of stress and anxiety. (Saqib, 2018, Vol. 8, No. 1)

Stress is a dangerous emotion. When an individual thinks that environmental demands duty or exceed his or her adaptive capacity, psychological stress arises. Stress causes psychological illnesses, which may manifest as a result. (Jex, 1998)

Many different causes can create physical stress, such as dread of something harmful or emotional stress, such as concern about your family or work and a poor study outcome. This is a reaction to stressful situations in your environment. It is crucial to realize that stress can have both positive and bad effects on students. (Manuel, J, R, P, & A, 2003)

Most psychologists believe that mild stress motivates people to achieve and promotes creativity, while stress can impair performance on tough tasks. People's mental and physical

behaviors are affected by stress. It is defined as occurrences or situations that cause people to experience stress, pressure, or negative feelings.

According to Massod et al (2023) academic performance is the educational goal that a student, instructor, or institution achieves over a certain time period. Students' academic performance is significantly reliant on parental involvement in their academic activities in order to achieve a greater degree of quality in academic accomplishment. The students, particularly the females, are highly emotional. They put a lot of pressure on themselves at school. There are numerous things that influence their studies, such as current pressures and teachers' expectations. Teachers' attitudes towards their studies, home restrictions, future and employment concerns (Hussain, Ahmad, Suleman, & Khalid, 2012)

Research activities are defined as actions that result in the creation of new knowledge and/or the use of existing knowledge in novel and creative ways to generate new concepts, approaches, and understandings. This could entail synthesis and analysis of existing research to the extent that it leads to new and creative conclusions.

According to studies, students' confidence in their research skills typically does not match actual proficiency with such skills. Students appear to feel that their knowledge of search engines is sufficient for every research-related activity they may face. Students who believe this fail to recognize that, while the information-seeking skills they have learned are clearly beneficial in some situations, they are less so in others.

As a result, students may begin to recognize that basic abilities are insufficient to meet the demands for writing in all contexts. The most successful student writers are those who recognize themselves as amateurs in some of these circumstances.

These student writers will also realize that writing is more than simply a hobby; it is also a subject of study.

Any formal or informal activity undertaken to

fill a knowledge gap, build on current knowledge, or develop new knowledge is referred to as research.

Answering a research topic, testing a theory, or fulfilling curiosity are all examples of research activities. Some form of study is required for research. This study could be formal, such as a thorough literature review or the rigorous application of the scientific method, or it could be casual, such as a quick google search. Formal research studies can be qualitative or quantitative in character.

Rather of being linear, the research process is frequently iterative. (Valeria E. Molteni and Emily K. Chan, . 1 (2015):)

The findings of research might be captured in a single research product or a collection of research products. Formally published research papers, dissertations, conference proceedings, creative works, presentations, speeches, news and magazine pieces, and blog postings are all examples of research products.

Stress can affect cognitive functioning, memory, attention, and decision-making ability, making it harder for students to concentrate, retain knowledge, and perform well on examinations and assignments, according to research. Furthermore, persistent stress can cause physical health issues such as weariness, headaches, and increased susceptibility to disease, all of which can impair academic performance.

Furthermore, stress can have an impact on students' motivation and participation in their academics. Students who are stressed out may be less inclined to participate in class, finish tasks, or study for tests. This can lead to less effort, lower grades, and disinterest in the course topic.

Stress can contribute to mental health problems including anxiety, sadness, and burnout, which can have a severe impact on students' general well-being and capacity to achieve in school.

As a result, universities must recognize the impact of stress on student performance and provide tools and support to assist students in managing stress and maintaining their mental and physical health. Counselling services, stress reduction programs, financial aid, and other

forms of assistance may be included. Universities can assist students achieve academic goals and thrive in their higher education experience by managing stress and encouraging well-being.

Statement of the problem

The problem statement is about the implications and effects of stress on students' academic performance during their higher education studies. Stress is a natural reaction to difficult events that an individual faces, and it can have both beneficial and harmful consequences. Excessive and chronic stress can lead to negative results such as burnout, anxiety, and depression.

Stress is a typical experience among students in higher education courses as they handle the demands of coursework, assignments, exams, and other duties. This stress can have a substantial impact on students' academic accomplishment, including grades, academic performance, and overall success in their studies. (Cohen, R,C, & U, 1997)s

The problem statement attempts to investigate the numerous elements that contribute to stress among higher education students, as well as how this stress affects their academic performance during research activities. Workload, time management, social pressure, financial stress, and personal concerns are examples of such causes. Furthermore, the statement may look at various measures and interventions that can be put in place to reduce the harmful impact of stress on students' academic performance, such as stress management techniques, counselling, and academic support programs.

Overall, the problem statement emphasizes the significance of understanding the relationship between stress and academic performance among students in higher education studies and during research activities, as well as the importance of identifying effective strategies to assist students in managing stress and achieving academic success.

Objectives:

1. To identify the level of stress during the research activities.

2. To analyze the influence of stress on the performance of research students.
3. To explore the performance of research students.

Research Questions:

1. What is the level of stress during the research activities on the performance of research students?
2. What are the influences of stress on the performance of research students?
3. How to explore the performance of research students?

Significance:

This research will provide information on of stress on students' academic performance. This study will benefit for the University. The study provides stress management recommendations that will improve student thinking such as creativity, problem solving, decision making and learning ability. The research can add up to the literature available to the subject area which can be used by other researchers to serve as a source of reference in further studies. For this, future researchers can read the methodology and the findings of this study to conduct a further research on the subject area.

This study is significant because stress can have a substantial impact on students' performance during research activities at higher levels of school. Students may face high levels of academic pressure, financial constraints, social isolation, and other stressors during their time in higher education. When stress becomes too much, it can have a severe impact on students' academic performance, mental health, and overall well-being.

Theoretical framework:

There had been developed several theories by several authors. Lazarus stress theory was the main theory supporting research study Lazarus stress theory 1984 explained stress as a condition and feeling. The effects of stress are based more on the feeling of threat than on the stressful event itself. According to Lazarus and

Folkman's transactional model of stress no situation or event is inherently stressful. It also helps to study some stressors that affects students' academic performance. The primary assessment, whether a situation is threatening, positive, difficult or harmful. Secondary assessment is about resources available to fight with the stressors.

Conceptual Framework:

The conceptual framework of the study is about the influence of the stress during research work including positive and negative effects of stress. The study gives views about the influence of stress on students' academic performance.

Literature Review:

Stress is a common phenomenon experienced by students during higher level study in education. It can be defined as a physiological and psychological response to an internal or external stressor that disrupts the body's equilibrium. Stress can affect students' academic performance, mental health, and overall well-being. In this literature review, we will examine the impact and influence of stress on students' attainment throughout higher level study in education.

Stress and academic performance:

Stress has been found to have a negative impact on students' academic performance. According to a study by Khan and Jaffri (2021), stress was found to have a significant negative impact on students' grades. Students who reported higher levels of stress were found to have lower GPAs than students who reported lower levels of stress. This finding is consistent with other studies that have found a negative relationship between stress and academic performance.

Stress and mental health:

Stress has also been found to have a negative impact on students' mental health. Stress was a significant predictor of depression and anxiety in university students. A study by (R. Beiter, R. , McCrady, D, & Lin, 2015)) found that stress was associated with a range of mental health

problems, including depression, anxiety, and suicidal ideation.

Stress and coping strategies:

Despite the negative impact of stress on students' academic performance and mental health, there are some strategies that students can use to cope with stress. Student who used positive coping strategies, such as exercise and social support, were less likely to experience symptoms of depression and anxiety than students who used negative coping strategies, such as alcohol and drug use.

Stress is a common phenomenon experienced by students during higher level study in education. It has a negative impact on students' academic performance and mental health. However, there are some strategies that students can use to cope with stress, such as positive coping strategies like exercise and social support. Future research should continue to explore the impact of stress on students' attainment throughout higher level study in education and identify effective interventions to mitigate the negative effects of stress on students' academic performance and mental health.

Identifying the sources of stress among students:

The research aims to identify the various sources of stress that students experience throughout their higher education, including academic pressure, financial concerns, personal relationships, and societal expectations.

The very mention of the word 'stress' brings thoughts such as increased rate of depression, anxiety, cardiovascular disease, and other potentially life-threatening issues to one's mind (Essel & owusu, 2017)

According to (Wheeler 2007,2), stress is physics word which refers to the amount of force used on an object and it relates in real life as to how certain issues that carry force applied to human life. Examples financial difficulties, health challenge issues, conflicts with friends, all carry force or pressure on person's body -mind and spirit. Some of the pressure or force originate from the environment but most often comes from within a person's head in the form of worry,

anxiousness, regret, discouragement and low confidence. Therefore, stress is basically force applied to a person and may result in a strain which is as a result of an unmanaged stress that is when a person is not able to handle a challenge or problem encountered strain result. To some people, the effect is minimal which means they are able to endure pressure whiles in others the effect is enormous and have an adverse effect.

Stress is explained by (pargman, 2006) an uncertain reaction to external and internal factors” that means a negative or positive reaction to environmental stimuli. 16 In this regard, it is how the totality of your body relate to changes and unfamiliar situations that present itself in the course of time. Burnout also refer to as soulless situation is where a person loses the eagerness and motivation in continuing to a particular kind of studies or activity as a result of both external and internal factors. The skills and expertise are still active but the desire and the wellness to perform is dead in the person as such activity or studies become huge responsibility without any joy. Burnout destroys a person’s motivation and may kill the initiatives at studies or school. Service providers like teachers, counsellors and other officers experience this issue much and make them at times to be hostile to the people that they dedicated to serving. It normally affects people whose studies are interaction with people like team leaders, managers, etc. Also, people whose studies are time band that is adhering to strict time schedule’s also experienced burnout. In a situation where an activity or studies required much details and explanations burnout is likely to result in the people who are taking such activities.'

Stress and its manifestations, such as anxiety, depression, and burnout, have always been seen as a common problem among people in different professions and occupations. In the last few decades, alarm has already been provoked by the proliferation of books, research reports, popular articles and the growing number of organized workshops, aiming to teach people how to cope with this phenomenon (Keinan& Perlberg 1986).

The following are symptoms of burnout:

- Trouble sleeping due to worrying about studies
- Getting into too much conflict
- Bored with studies or activity
- Feeling frustrated with studies
- Studying very hard and accomplishing little
- I don't like going to studies
- Social activities are draining.

Research Methodology:

Research methodology deals with processes and procedures for the finding of the research study. It includes research approach, research design, population, sample, sampling technique, research instrument, data collection & analysis.

Rational of the study:

A study on Perceived Effect of Academic Stress to the Performance of Students during Online Class was held by Maria Angelica at Mapua University in Manila Philippines. It was online setup without face-to-face interaction. Research Article is presented by Koawo Edjah, Francis Ankomah, Ebenezer Domey and John Ekow Laryea on Stress and Its Impact on Academic and Social Life of Undergraduate University Students in Ghana in West Africa. of Stress on Students Academic Performance at Secondary School Level at District Vehari is researched by Muhammad Saqib of University of Agriculture Faisalabad Sub-Campus Burewala-Vehari in Pakistan. This study was held to identify the influence of stress during research activities on academic performance of students of PMAS Arid university of Pakistan.

Research Design

The study is descriptive in nature. The nature of the study was based on quantitative research approach. The survey method was used to collect primary data with the help of a questionnaire as instrument of the study.

Research Instrument:

The questionnaire was constructed having 5-point Likert scale which is composed of closed ended items.

Population:

The targeted population of students of PMAS ARID University was the population of the study.

Sample:

The sample was composed of university students who were pursuing higher level study in

M. Phil or PhD. Sample was selected to ensure that the results were representative. Convenient sampling technique was used to collect data from 50 students which was a type of non-probability sampling method. Sample was taken from students easy to reach or contact candidates were in sociology candidates in education & candidates were enrolled in economics in fall 2022 & spring 2023.

Delimitation:

The study was delimited to department of social sciences; education, sociology & economics.

Collect data:

The data was collected through survey method. It was used to collect quantitative data on stress levels and academic performance and about students' experiences with stress and how it affects their performance during research activities.

Data analysis:

The collected data analyzed using descriptive statistical tools such as mean value and regression analysis. This helped to describe the influence of stress on students' academic performance.

DATA ANALYSIS AND INTERPRETATION

This chapter is about the analysis of the data and its interpretations. The chapter discussed the analysis of the students about level of stress and influence of stress during research activities and performance of students.

Table 4.1 The level of stress during the research activities.

S #	Items	Mean	SD
1	You frequently distract from your research work.	3.31	1.084
2	You take long gap to restart your research work	3.00	1.291
3	You feel gloomy during your research work.	3.45	1.001
4	You do not concentrate on other tasks due to involvement in research work.	3.57	1.208
5	It affected your socialization level.	3.57	3.69
6	It seems that research work increased your confusion level.	3.18	1.149

In the table 4.1 the data indicates that, on average, respondents somewhat agree that their involvement in research work affects their ability to concentrate on other tasks (mean score of 3.57). However, there is some variability in the responses, as indicated by the standard deviation of 1.208. This suggests that while some respondents strongly agree or disagree with the statement, others may have more mixed opinions.

Similarly, when it comes to the impact of research work on their socialization level, the mean score is 3.57. This suggests that, on average, respondents somewhat agree that their socialization level is affected by their research work. However, the relatively high standard deviation of 3.69 indicates that there is significant variation in respondents' opinions. Some may strongly agree that their socialization is impacted, while others may strongly disagree or have differing degrees of agreement.

Regarding the statement that research work has increased confusion levels, the mean score is 3.18. This suggests that, on average, respondents somewhat agree that their research work has led to an increase in confusion. The standard

deviation of 1.149 indicates some variability in responses, indicating that while some respondents strongly agree, others may have different levels of agreement or even disagreement.

Finding of 4.1:

The findings indicate that, on average, respondents somewhat agree that their involvement in research work affects their ability to concentrate on other tasks (mean score of 3.57). This suggests that research work may have a distracting effect on their focus and attention. Similarly, respondents somewhat agree (mean score of 3.57) that their socialization level is affected by their research work may impact their ability to socialize or interact with others. However, the relatively high standard deviation of 3.69 indicates significant variation in opinions, with some strong agreement

Furthermore, respondents somewhat agree (mean score of 3.18) that research work has led to an increase in confusion and may create a level of uncertainty or confusion for those involved.

Table 4.2 The influence of stress on the performance of research students.

S #	Items	Mean	SD
1	Stress prevents me from concentrating on my studies.	3.63	1.131
2	<i>Sometime mental stress leads absence from classroom discussions.</i>	3.76	1.090

3	Stress leads to failure in completing an assignment on time.	3.51	1.175
4	Stress distracts my attention during lectures.	3.57	1.080
5	Academic stress boosts my motivation towards academic preparation.	3.41	1.240
6	Academic stress decreases my motivation towards my academic performance.	3.18	1.49

In the table 4.2 the data indicates that, on average, respondents somewhat agree that their mental stress leads absence from classroom discussions. (Mean score of 3.76). However, there is some variability in the responses, as indicated by the standard deviation of 1.175. This suggests that while some respondents strongly agree or disagree with the statement, others may have more mixed opinions.

Similarly, when it comes to the stress prevent from concentrating on their studies, the mean score is 3.63. However, there is some variability in the responses, as indicated by the standard deviation of 1.131. On average, respondents somewhat agree that stress distracts their attention during lectures with the mean value 3.57 while SD 1.080 shows some variability.

Regarding the statement respondents agree that during research stress leads to failure in completing an assignment on time, (mean score of **3.51**). This suggests that, on average, respondents somewhat agree that their research work has led to failure in completing an assignment on time. The standard deviation of **1.080** indicates some variability in responses, indicating that while some respondents strongly

agree, others may have different levels of agreement or even disagreement.

Similarly, the statement that stress distracts attention during lectures the mean is **3.57**. This suggests that, on average, respondents somewhat agree that their research work has distracted their attention during lectures,

Furthermore, respondents agree with mean score **3.18** that stress decreases motivation towards academic performance. The standard deviation of 1.149 indicates some variability in responses, indicating that while some respondents strongly agree, others may have different levels of agreement or even disagreement.

Findings of table 4.2 indicate that, on average, mental stress (Mean score of 3.76) leads absence (mean **3.76**) of students from classroom discussions and distracts their attention during lectures, hence (mean score **3.63**) it prevents respondents from concentrating on their study. Stress (mean **3.18**) decreases motivation towards academic performance so, respondents could not pay attention during lectures, which leads to failure in completing an assignment on time.

Table 4. 3 The performance of research students.

S #	Items	Mean	SD
1	You are satisfied with the nature of your work.	3.84	1.007
2	You understand that your work should always be corrected by an expert.	3.84	.943
3	M. Phil or Ph.D. study has affected your daily routine	3.84	1.067
4	You want to get rid of M. Phil or Ph.D. Research.	2.90	1.212
5	You are not giving much time to M. Phil. Or Ph.D. research now a day.	2.86	.979
6	M. Phil. Or Ph.D. Study has bad effect on your health.	3.00	1.099

This table 4.3 indicates that, on average, respondents somewhat are satisfied with the nature of work, the mean is **3.84**.

Similarly, in the statement number two (mean **3.84**) respondents understand that their work needs to be corrected by an expert with some variability of SD.**943**.

The lowest mean**2.90** is of the item no4 which means that mostly of the respondents were not agreed to get rid of M. Phil or Ph.D. research as regards to standard deviation 1.212

Similarly, respondents are not giving much time to M. Phil. Or Ph.D. research work as mean score is **2.86** and SD **.979** shows that there is low variance.

Regarding, on average, respondents of M. Phil or Ph.D. study has affected their daily routine. Hence there is some variability in the responses with standard deviation **1.099**

Finding:

Findings of table 4.3 indicate that, on average, respondents(mean 3.84) know about the nature of work and its effects on their daily routine somewhat they understand that their work

needs to be corrected by an expert. Respondents are not giving much time (mean **2.86**) to research work so it has bad effects on their health (mean score **3.00**). Respondents do not want to get rid of studies.

Discussion:

The major aim of this important research is to explore the impact of stress on the academic performance of students during research activities of PMAS Arid Agricultural university of Pakistan. It was found that there is a significant impact of stress on research activities of the students at PMAS-UAAR. However earlier a study conducted at MUST University by Masood et al (2023) claimed that there is no significant correlation between these two variables. However in that study, samples were undergraduate students who were asked to share their views about academic performance and stress during studies.

Recommendation:

Enough sleep and exercise are important remedy to stress management.

Guidance and counselling unit should be part of the university so that students can come there to discuss issues affecting them.

There should be a good balance between working hours and study hours so as to avoid stress.

Suggestions:

Although researcher has used quantitative method in this research, the suggestion for the future researcher on this same topic is to combine both qualitative and quantitative methods to get an in-depth theory about the stud having a large size sample.

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