

Relationship between Students' Depression and their Academic Performance at University Level

Muhammad Nageeb Ul Khalil Shaheen¹ Sara Abid² Mahnoor Shaukat³ Khatiba Akhter⁴ Sulma Farooq⁵

ABSTRACT: This study was designed to examine the relationship between the level of depression among university students and their academic performance. This descriptive study used a cross-sectional survey including two universities, i.e. Mirpur University of Sciences and Technology (MUST), Mirpur, AJ&K and the University of Kotli, Azad Jammu and Kashmir (UoKAJK). The population of the study consisted of 2,920 students (1,660 from MUST and 1,260 from UoKAJK). The researchers used a stratified random sampling technique for the selection of a sample of 600 students (341 from MUST and 259 from UoKAJK). The research used a self-developed questionnaire in the current study for measuring students' academic performance, while the depression level of the students was measured using the Beck Depression Inventory (BDI). The study used frequency, mean, standard deviation and Pearson's correlation tests for analyzing the data. The results of the study indicated that the university students exhibited academic performance. The results of the study concluded that there is a negative and significant relationship between the depression level of students and their academic performance. Based on the findings, it is recommended that university authorities implement mental health support programs to address depressed students. These programs may help students manage their depression more effectively, potentially improving academic outcomes.

KEYWORDS: Depression, Levels of Depression, Academic Performance

¹ Assistant Professor, Department of Education, University of Kotli, Azad Jammu & Kashmir, Pakistan.

Email: nageeb.shaheen@gmail.com

² Lecturer, Department of Education, University of Kotli, Azad Jammu & Kashmir, Pakistan. Email: sara.abid306@gmail.com

³ Program Officer Education, Muslim Hands, Kotli, Azad Jammu & Kashmir, Pakistan.

Email: mahnoorjaral27@gmail.com

⁴ Lecturer, Department of Education, University of Kotli, Azad Jammu & Kashmir, Pakistan. Email: khatiba.akhter@yahoo.com

⁵ Visiting Lecturer, Department of Education, University of Kotli, Azad Jammu & Kashmir, Pakistan.

Email: sulmafarooq99@gmail.com

Corresponding Author:

Muhammad Nageeb Ul Khalil Shaheen

✉ nageeb.shaheen@gmail.com

Introduction

Depression is one of the most serious conditions that negatively affects a person's day-to-day functioning. It affects students' behavior, emotions, questions, and thoughts. Unfortunately, this troubling phenomenon warrants attention from educators, mental health professionals, and policymakers to ensure the well-being and academic success of vulnerable youth. Fortunately, it can be treated. According to Seligman (1973), depression is a mental illness that makes it difficult for a person to communicate with friends and family, lead a fulfilling life, and participate in society.

Quince et al. (2012) suggest that the transition from adolescence to adulthood, typically occurring during university years, is a critical period of significant change and growth. This phase is marked by numerous challenges, including social adjustment, stress assessment, and academic pressures, which can jeopardize

students' mental health. Sarokhani et al.'s (2013) research indicates that university students are vulnerable to mental health issues, with approximately one-third experiencing mild to severe depression at some point during their academic careers.

According to Khan et al. (2020), factors contributing to students' mental health concerns include social isolation and loneliness, academic pressure and stress, financial concerns, body image issues, and substance abuse. Moreover, lack of social support, poor coping mechanisms, stigma surrounding mental illness, and limited access to mental health resources can exacerbate these concerns. Studies suggest that university students' mental health concerns may be more prevalent compared to the general population.

Alhussain et al. (2020) suggest that there may be greater difficulties for students from lower socioeconomic class. Additionally, depressed students in achievement-goal situations (such as universities) would score worse, have negative feelings, and lack confidence because they perceive themselves as failures and the world as inscrutable. Students with poor self-esteem often struggle academically due to their reluctance to take on challenging tasks and responsibilities. This hesitation stems from a lack of confidence in their abilities, leading to missed opportunities for growth and development. As a result, poor self-esteem can harm academic performance and hinder students' potential.

Furthermore, Mellal et al.'s (2014) research suggests that individuals with low self-esteem tend to ruminate on regretful situations and emotions, whether positive or negative. This rumination can perpetuate a cycle of self-doubt and negativity, further exacerbating poor self-esteem. According to Abror et al. (2019), there is a significant link between depression, educational circumstances, and economic conditions among university students, ultimately leading to low test scores. This connection highlights the impact of mental health on academic performance. This investigation also discovered that depression is a distinct illness. Similarly, kids who are depressed perform well, but this correlation disappears when the depression is treated. Depression not only undermines self-esteem but also makes it more difficult for an individual to achieve academic success.

Ngasa et al. (2017) suggest that the students who are depressed often put off a lot of assignments, tests, and homework. If they find the course more challenging than their friends who don't, they will quit the course and drop out of university more often. Moyano et al. (2021) highlight that students who are depressed may display negative behaviours that ultimately hinder their learning and cause them to feel uneasy.

Hanel et al.'s (2021) research suggests that certain positive attitudes are associated with excellent performance and success in the classroom, and these attitudes can also reduce the risk of depression. Specifically, Fallahchai et al. (2019) reveal that adaptive perfectionism can foster motivation and drive students to achieve their goals, leading to favourable results.

This study examines the relationship between the depression levels of the students and their academic performance at Mirpur University of Sciences and Technology, as well as at the University of Kotli.

Statement of Problem

Improving students' academic performance is the key area of concern for all academicians across the world. At the university level, the students feel a lot of stress as they have to complete the tasks assigned by their

teachers within a very short period of time. Hence, there was a dire need to check their performance level. So, this study was focused on analysing the academic performance of students at the university level.

Objective of the Study

The main objective of the study was to examine the relationship between the depression level of students and their academic performance at the university level.

Review of the Related Literature

Many financial and psychological problems affect the health of students (Royal College of Psychiatrists, [2011](#)). Previous research indicates that depression is more common among students who have lower job aspirations (Hoebel et al., [2017](#)). The study discovered that 24.4% of the students at the university were from low-income countries and had low-to moderate-level depressive symptoms after performing further analysis on 37 studies from 20 different countries (Akhtar et al., [2020](#)). Another cross-cultural study that included university students from 23 different nations found that lower family wealth was associated with greater rates of physical examination use and depressive disorder (Shcheglova, [2018](#)). This study also shows that lower parental education is associated with a higher likelihood of depression. This link was also found in a sample of six Chinese universities: A sample of six Chinese universities also revealed this association: depression was more likely to be related to lower family income and parental education, possibly because of stronger parental bonds (Xiang et al., [2024](#)). When their children attend university, they will be able to provide them with both practical and financial help.

Macaskill ([2013](#)) identifies a variety of reasons, such as high-performance requirements, new learning, and expectations for success, that would cause these students to feel more stressed in the higher education setting. Positive attitudes are also associated with a higher risk of depression and poor health (Rackoff & Newman, [2020](#)), and neuroticism is a powerful predictor of depression among university students (Tang et al., [2023](#)).

Some characteristics associated with academic performance and success are also associated with a higher risk. Positive regulation can help students accomplish their goals and stay motivated to generate high-quality work (Fallahchai et al., [2019](#)). Extreme self-criticism and reliance on oneself to achieve impossible goals are hallmarks of pathological perfection.

Relationship between Depression and Academic Performance

A student's learning may suffer from a number of negative consequences when their cognitive and physical abilities deteriorate due to depression. Depressed students are more likely to skip class, not complete their coursework, and maybe not graduate (Abu-Ruz et al., [2018](#)). Wagner et al. ([2022](#)) examined the relationship between depression and academic performance in university students using depression assessments.

The academic achievement and significant absenteeism are indicators of educational impairment. Results indicate that all degrees of depression are linked to absenteeism and discontent with university, and those higher levels of depression are linked to higher levels of learning difficulties. Similarly, significant levels of depression were linked to low academic performance and high absenteeism, according to recent research of

16 Jordanian university children (Abu-Ruz et al., 2018). Hysenbegasi et al. (2005) also concluded in another study that depression is directly associated with lower university grade point average (GPA) performance.

Research Methodology

This study was all about describing things, and the researchers went with a cross-sectional survey to gather the data. They had quite a big group to work with—2,920 students in total, which included 1,660 from MUST and 1,260 from UoKAJK. To pick their sample, the researchers opted for a stratified random sampling technique, which is kind of a fancy way of saying they made sure to get a little bit from each group. In the end, they settled on 600 students, with 341 from MUST and 259 from UoKAJK. To dig into the students' academic performance, the researchers developed their own questionnaire, and to measure the depression level of the students, the Beck Depression Inventory (BDI) was used. The researchers collected data personally. For analysing all that data, they used a mix of tests, e.g. frequency count, percentage, mean, standard deviation and Pearson's correlation. It was a solid approach to get a good understanding of what they were looking at.

Results

Table 1

Depression among University Students

Levels of depression	Range of scores	Frequency
These ups and downs are considered normal	1-10	67
Mild mood disturbance	11-16	81
Borderline clinical depression	17-20	133
Moderate depression	21-30	298
Severe depression	31-40	21
Extreme depression	Over 40	0
Total	-	600

The depression analysis revealed varying levels of depression among the 600 participants. The results are categorised into five levels:

1. Normal (Range: 1-10, Frequency: 67): Indicating no significant depressive symptoms.
2. Mild Mood Disturbance (Range: 11-16, Frequency: 87): Suggesting slight depressive symptoms.
3. Borderline Clinical Depression (Range: 17-20, Frequency: 133): Indicating uncertain or moderate depressive symptoms.
4. Moderate Depression (Range: 21-30, Frequency: 298): Revealing a significant proportion of students experiencing moderate depressive symptoms.
5. Severe Depression (Range: 31-40, Frequency: 21):
6. There is no one with extreme depression, indicating intense depressive symptoms

Out of 600 participants, 67 (11.2%) participants exhibited normal levels of depression, 87 (14.5%) participants experienced mild mood disturbance, 133 (22.2%) participants showed borderline clinical depression, 298 (49.7%) participants had moderate depression and 21 (3.5%) participants suffered from severe depression.

Table 2*Academic Performance*

Dimensions	Mean	Std. Deviation
Planning	2.82	1.05
Time Management	2.99	1.04
Communication	2.92	1.16
Learning Skills	2.70	1.16
Study Skills	2.79	1.02
Self-Efficacy	2.81	1.17
Cognitive Strategies	2.86	1.02
Average Academic Performance	2.84	1.09

Table 2 shows the results of the academic performance of university students. It can be seen that the students partially agreed (as mean scores ranged from 2.50 to 3.50) that they were performing well in their academics.

Table 3*Pearson's Correlation: Up and Down Depression and Academic Performance*

Variables	Mean	SD	Sig	r
Up and Down Depression	3.61	0.35	.722	-.011
Academic Performance	2.84	1.09		

Pearson's correlation examined the relationship between up and down depression and academic performance. The results indicated a negative and non-significant relationship between up and down depression and academic performance of university students, as $p=.722>0.05$. The value of $r=-.011$ indicates a very weak (almost negligible) and negative relationship between variables. This suggests that up and down depression did not influence the academic performance of the students.

Table 4*Pearson's Correlation: Mild Mood Disturbance and Academic Performance*

Variables	Mean	SD	Sig	r
Mild Mood Disturbance	14.5	5.26	.001	-.436
Academic Performance	2.84	1.09		

Pearson's correlation examined the relationship between mild mood disturbance and academic performance. The results indicated a negative and significant relationship between mild mood disturbance and academic performance of university students, with $p=.001<0.05$. The value of $r=-.436$ indicates a moderate and negative relationship. This suggests that mild mood disturbance influenced academic performance negatively.

Table 5*Pearson's Correlation: Borderline Clinical Depression and Academic Performance*

Variables	Mean	SD	Sig	r
Borderline Clinical Depression	19.6	7.35	.003	-.521
Academic Performance	2.84	1.09		

Pearson's correlation examined the relationship between borderline clinical depression and academic performance. The results indicated a negative and significant relationship between borderline clinical depression and academic performance of university students, with $p=.003<0.05$. The value of $r=-.521$ indicates a moderate and negative relationship. This suggests that borderline clinical depression influenced academic performance negatively.

Table 6*Pearson's Correlation: Moderate Depression and Academic Performance*

Variables	Mean	SD	Sig	r
Moderate Depression	27.7	12.24	.000	-.821
Academic Performance	2.84	1.09		

Pearson's correlation examined the relationship between moderate depression and academic performance. The results indicated a negative and significant relationship between moderate depression and academic performance of university students, with $p=.000<0.05$. The value of $r=-.821$ indicates a strong and negative relationship between variables. This suggests that moderate depression influenced academic performance negatively.

Table 7*Pearson's Correlation: Severe Depression and Academic Performance*

Variables	Mean	SD	Sig	R
Severe Depression	32.9	13.36	.000	-.792
Academic Performance	2.84	1.09		

Pearson's correlation examined the relationship between severe depression and academic performance. The results indicated a negative and significant relationship between severe depression and academic performance of university students, with $p=.000<0.05$. The value of $r=-.792$ indicates a strong and negative relationship between variables. This suggests that severe depression influenced academic performance negatively.

Conclusions

From the results of the study, it is concluded that:

1. The university students are facing depression. A few students are facing a normal level of students, while the number increases for mild mood depression and borderline clinical depression. However, almost half of the students are facing moderate depression, and a few participants are suffering from severe depression.

2. The students partially agreed that they are performing well in their academics, which indicates that the performance of students in their academics is somewhat satisfactory.
3. The academic performance of the students has not been influenced by the normal depression level of the students. While the students facing mild mood disturbance and borderline clinical depression have a negative and moderate influence on their academic performance. Moreover, this influence becomes negative and strong in the case of moderate and severe depression.

Recommendations

Based on the findings, it is recommended that university authorities implement mental health support programs to address both depressed students, as depression shows a negative influence on the academic performance of the students. These programs may help students manage their depression more effectively, potentially improving academic outcomes. Such resources are important as they foster a healthier environment for personal and academic growth.

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