Sociology & Cultural Research Review (SCRR)
Available Online: https://scrrjournal.com
Print ISSN: 3007-3103 Online ISSN: 3007-3111
Platform & Workflow by: Open Journal Systems

The Impact of Depression and Anxiety on Academic Performance among University Students: A Case Study at the University Of Sargodha

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ABSTRACT

The study aims to establish the status of anxiety and depression levels affecting the academic performance of university students. The study seeks to investigate academic support services together with strategies that would boost student achievement. The research investigation focused on studying the impact that anxiety and depression have on university students' educational performance. The current research evaluates how university students experience academic performance changes because of anxiety and depression. A total of 384 students following a simple random sampling protocol were summoned from the faculty of Social Sciences, University of Sargodha, to participate in the study while maintaining scholarly diversity for complete assessment of mental health-academic performance relationships. The Statistical Package for the Social Sciences (SPSS) Version 24 was used by the researcher to assess the data. The results indicate that anxiety and depression negatively impact students' ability to engage fully in their studies and social interactions, with many reporting a sense of hopelessness about their future. Despite these struggles, a positive aspect is that a majority of respondents recognized the value of academic support services and felt a sense of enjoyment in tasks that contribute to skill development, showing resilience and a commitment to improving their skills.

Keywords: *Depression, Anxiety, Academic Performance.*

Introduction

Common mental illnesses, including anxiety and depression, are linked to substantial disability. University study is a time of transition to independence that is linked to academic, social, and economic constraints that might leave students susceptible to emotional problems. Rapid changes in mood and behavior are among the many psychological, physiological, and cognitive developmental changes that take place during this time. In fact, almost one-third of students are probably dealing with anxiety and sadness at any one moment. Students in Pakistan seem to be just as vulnerable, despite the fact that less is known about their problem-solving rates. Effective treatment of anxiety and depression is crucial since these conditions might affect students' academic performance. Although cognitive behavioral therapy (CBT) and other psychotherapies are beneficial, students may find it difficult to access them. Few studies have examined how therapy for depression and anxiety affects academic performance, while online treatments can make effective interventions more accessible (Sarokhani et al., 2013).

Mental wellness among students gets affected by psychological conditions and financial aspects. Certain theories indicate that students classified as lower in objective socioeconomic position experience a higher risk of depression (Hoebel et al., 2017). University education, together with life adjustments, causes students to experience physical deterioration and mental health problems. The multiple adaptations university students face involve diverse obstacles that span from academic responsibilities and assessments to maintaining a healthy way of life and financial control and securing employment and establishing new social connections, and learning self-reliance. Being in a higher education environment brings both advanced teaching levels and tough assignments together with demanding performance standards (Pitt et al., 2018).

Students showing high neuroticism levels have a higher probability to develop severe depression besides poor mental health outcomes. The predisposition to develop depression links with personality qualities which normally lead to effective academic success and high performance. The prediction of depression can occur in two ways, depending on perfectionism: as a beneficial influence (maladaptive) or as a protective factor (adaptive). Students who demonstrate adaptive perfectionism tend to show a higher likelihood of accomplishing their objectives and maintaining their motivation for success (Chai et al., 2020). Academic performance remains lower among sad students because sadness reduces their mental capabilities and affects their bodily system as well. Students experience academic deterioration because of depression, while the condition often leads them away from seeking medical services. Students who experience depression tend to absent themselves from lessons and testing sessions and fail their classes, and discontinue their education (Abu Ruz et al. 2018).

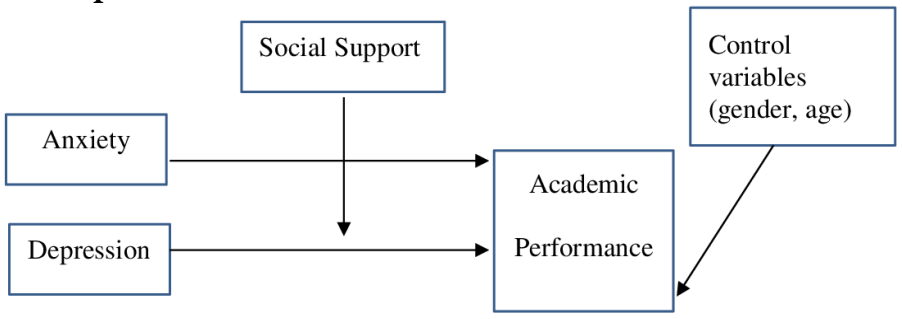
Academic performance among college students shows deterioration based on their scores on the Beck Depression Inventory for depression symptom assessment. Academic impairment manifested through declining student work quantity and many unattended classes. Every degree of depression causes students to skip school while also losing interest in their academic work. However, heavier depression symptoms correlate directly with increased academic limitations. A study conducted on Jordanian university students during 2018 highlighted how intensified depression symptoms result in students taking fewer classes while obtaining less than optimal educational results (Abu Ruz et al., 2018).

Objective of the Study

The purpose of this research is to find the impact of depression and anxiety on academic performance among university students.

1. To find out the current situation of depression & anxiety on academic performance among university students.
2. To find out the psycho-social and educational impacts of depression & anxiety among university students.

Conceptual Framework



This thesis analyzes the academic performance of university students facing depression and anxiety through essential psychological and educational theories. According to Cognitive-Behavioral Theory, negative thinking patterns shown by depressed and anxious people lead to poor concentration alongside reduced motivation and impaired time management skills, which directly influence academic performance. Academic stress overwhelms students with psychological distress according to the Transactional Model of Stress and Coping (Lazarus & Folkman), thus causing them to adopt unsuccessful coping methods that interfere with their academic progress. Academic studies show how mental health difficulties reduce internal drive according to Self-Determination Theory, therefore diminishing student involvement with scholarly work. An excessive amount of

anxiety based on the Stress-Performance Curve (Yerkes-Dodson Law) drives students outside their optimal stress point, thus reducing their academic performance results. The combination of these theories describes how depression and anxiety cause cognitive disruption and decreased motivation, as well as impaired emotional regulation, which results in inferior academic performance.

Review of Literature

Zuckerbrot et al. (2018) explained that emotional discomfort takes two major forms as depression and anxiety, among both students and general population members. Medical experts commonly miss these illnesses, even though appropriate treatments exist in great numbers. The high rates of sadness and anxiety among students exceed general reports, indicating poor health outcomes among student groups when compared to non-student groups. Research from the 2014 Adult Psychiatric Morbidity Survey for England shows depression or anxiety afflictions at a rate of 39% among people aged 16 to 74. The statistics show that the number of persons affected has increased by 24% since 2007. Anxiety and depression problems were present in 17% of the English population during 2014. University students fall within the age bracket of 17 to 24 as they complete adolescence. The numerous developmental changes in puberty include fast emotional and behavioral shifts.

Lattie et al. (2019) said that documented mental health indications among university students showed increasing numbers in recent years. Recent epidemiological data documents that university students diagnosed with mental illnesses grew from 22% to 36% over the last ten years. In their most recent annual report, the Center for Collegiate Mental Health records depression as a primary factor that brings students to counseling services at American universities. Using data from 24 research studies, researchers determined that depression affected 10% to 85% of college students at a weighted mean rate of 30.5%. Likewise, a different systematic review that included 35 papers found that 33% of college students suffer from depression on a weighted mean basis.

Awadalla et al. (2020) find out how common depression is among Karachi university students from middle-, upper-middle-, and upper-class families in Pakistan. According to the study, 27% of students have depression, and students from upper-middle-class backgrounds are more likely to have it than students from higher socioeconomic groups. The total prevalence of depression among university students in Macau, Hong Kong, and mainland China was 28.9% (95% CI: 27.08–30.77%), with 35.2% in Macau, 41.0% in Hong Kong, and 16.8% in mainland China, according to a recent study.

A systematic review by Lim et al. (2018) measured the community prevalence of depression in 30 countries from a total of 90 studies (single point prevalence = 68 studies, one-year prevalence = 9 studies, and lifetime prevalence = 13 studies). The general population's prevalence rates are thought to be lower than those of college students. Compared to the community samples, these rates are greater. Among those surveyed the prevalence of depression at a single point in time reached 12.9% while the year-long prevalence stood at 7.2% and the lifetime prevalence reached 10.8%. Most young people encounter a variety of obstacles and responsibilities throughout their academic careers in order to succeed in the highly diverse socioeconomic environment and academic demands of higher education. Additionally, students may feel pressured to perform well in order to stand out in the job market, and financial stresses have been exacerbated by growing tuition expenses and the availability of student loans. These pressures have an impact on students' academic performance and advancement, desire to remain in college, and adjustment to university (Goff, 2011).

For instance, Ibrahim et al. (2013) noted in their systematic review men experience depression at a greater incidence than women, while six other studies show no statistically significant gender differences. However, research demonstrated identical rates of depression between male and female college students. The depression prevalence among Turkish university students reaches 27.1% based on reported data while depression ratings between males and females show no significant differences.

Aktekin et al. (2001) found male university students reported higher stress and depression scores than female students using Major Depression Inventory and the greater Education Stress Inventory.

Dardas, et al., (2016) found those students who experienced moderate levels of anxiety performed better academically, suggesting that a healthy amount of anxiety related to failure-related dread might boost students' drive to do better on various assignments.

The prevalence rates of anxiety observed in this study at 22.3% proved similar to results obtained by Marthoenis et al. (2018) which reported 27.4% among Malaysian students despite different cut-off points (8 in the study versus 10 in this research). Research conducted before this study found anxiety at a higher prevalence level than this current study because 47.1% of Turkish students completed the long-form Depression Anxiety Stress Scales, but 64.3% of Egyptian students completed the shorter version.

Bernal-Morales et al. (2015) explained that a variety of distinct psychosocial stresses that university students encounter may make them more susceptible to anxiety and despair. For young people, moving to a university may be a stressful time. They may struggle to balance their heavy academic workload with other responsibilities and suffer homesickness.

A meta-analysis by Ibrahim et al. (2013) found that the prevalence of depression among university students ranges from 10% to 85%, with considerable variation across different studies and regions. Similarly, anxiety disorders are also highly prevalent, with studies suggesting that up to 41% of students report significant anxiety symptoms (Beiter et al., 2015). These high prevalence rates highlight the critical need for effective mental health support and interventions within the university setting.

Bayram & Bilgel (2008) explained that several factors contribute to the high levels of depression and anxiety among university students. Academic stress is a significant contributor, with students often facing intense pressure to perform well in their studies. Additionally, the social environment can also play a crucial role; students may struggle with loneliness, social isolation, and difficulties in forming new relationships, which can exacerbate feelings of depression and anxiety. Financial stress is another important factor, as many students face the burden of tuition fees, living expenses, and potential student debt.

The data from Abdel Wahed & Hassan (2017) demonstrates that anxiety affects 15% to 64.3% of people. The connection between anxieties exists with various personality traits and feelings of loneliness, and different levels of self-confidence and self-esteem in college students. Ratanasiripong et al. (2018) explained that students with low self-esteem generally develop anxiety and experience higher academic pressure during their first college semester.

Methodology

This research took a quantitative research design and an interview schedule was the main instrument of data collection. The quantitative methods can be used especially in analysis of numerical data and using statistical tools to recognize the patterns and correlations between variables (Matthews & Ross, 2010). A five-point DAS-type scale was used because of consistent determination and effective comparisons among responses. The strategy of structured interview schedule provided us with an element of homogeneity yet the participants were clear about what they were asked to additionally the schedule was highly appropriate when it comes to the university students owing to the fact that it is a large diverse group that would need standard response so that it can be interpreted properly. The sample community of the research was students at the University of Sargodha. The human universe and unit of analysis included both male and female students on the faculty of Social Sciences. This

population has been of interest to the study as it was aimed at getting a wide and representative sample of the experience of these students on matters related to academic performance and mental issues.

Simple random sampling method was applied in order to achieve an equal representation and to do away with selection bias. A random sample of 384 students has been selected based on computer-generated list of numbers and all the participants have been chosen among the pool of eligible students. Data collection instrument was a structured questionnaire which was done face-to-face. Scales that had undergone testing before were included in the questionnaire, such as the Beck Depression Inventory (BDI-II) that measures depression, the Hamilton Anxiety Rating Scale (anxiety) and the Academic Performance Scale created by Carson Birchmeier. These instruments guaranteed standardizations and reliability of responses. To make it clear and consistent, data was pre-tested on twenty students without any repetitions and/or problems which gives confirmation to its validity in broader study.

For data analysis, the researcher employed SPSS Version 24, using both descriptive statistics and empirical assessments. Descriptive analysis was conducted to present the fundamental characteristics of the collected data, followed by inferential analysis using the correlation and Chi-square tests to explore the strength and significance of relationships between variables. Data were presented through tables for clarity.

To ensure the validity and reliability of the data, the questionnaire was thoroughly reviewed and based on well-established instruments. This validation ensured that the tools used effectively captured the intended variables. Reliability was confirmed through pre-testing and internal consistency.

Results and Discussion

Table .1 Percentage and frequency based on respondent's demographics

Variables	Frequency (*f*)	Percentage (%)
Age		
18-24	55	14.3
25-34	104	27.1
35-44	154	40.1
45 to above	71	18.5
Gender		
Male	172	44.8
Female	212	55.2
Total	384	100.0
Qualification		
Bs (Honours)	97	25.3
M.Phil.	197	51.3
Ph.D.	90	23.4
Occupation		
Government Employed	113	29.4
Private Employed	168	43.8
Self-employed	103	26.8
Income		
Less than 40k	86	22.4
41000 to 50000	100	26
51000 to 60000	121	31.5
61000 to above	77	20.1
Marital status		
Single	222	57.8
Married	162	42.2
Family type		
Nuclear	93	24.2
Joint	157	40.9
Extended	134	34.9
Family members		
1 – 3	73	19
4- 5	106	27.6
6 – 7	125	32.6
8 or above	80	20.8
Total	384	100.0

The table presents the distribution of respondents by age group. The majority of respondents, 40.1% (n=154), fall within the 35-44 age group. This is followed by the 25-34 age group, comprising 27.1% (n=104) of the sample. The 45 and above category accounts for 18.5% (n=71) of respondents, while the smallest group, aged 18-24, represents 14.3% (n=55) of the total.

Females constitute the majority, representing 55.2% (n=212) of the sample, while males account for 44.8% (n=172).

The majority, 51.3% (n=197), hold an M.Phil. degree, followed by 25.3% (n=97) who have a BS (Honours) degree. Meanwhile, 23.4% (n=90) of the respondents have obtained a Ph.D.

The largest group, 43.8% (n=168), belongs to households with private employment, followed by 29.4% (n=113) from government-employed households. Additionally, 26.8% (n=103) of respondents come from self-employed households.

The table also summarizes the household income distribution of respondents, the largest income group, 31.5% (n=121), falls within the 51,000 to 60,000 range. This is followed by 26% (n=100) of respondents who earn between 41,000 and 50,000, and 22.4% (n=86) who earn less than 40,000. Meanwhile, 20.1% (n=77) report household incomes of 61,000 and above.

The majority, 57.8% (n=222), are single, while 42.2% (n=162) are married. This indicates a larger proportion of single respondents compared to married ones in the sample.

The most common family type is joint, comprising 40.9% (n=157) of respondents. This is followed by extended families, accounting for 34.9% (n=134), while 24.2% (n=93) of respondents belong to nuclear families. The data reflects a higher prevalence of joint and extended family structures among the respondents.

The largest group, 32.6% (n=125), consists of families with 6-7 members, followed by 27.6% (n=106) with 4-5 members. Additionally, 20.8% (n=80) of respondents belong to families with 8 or more members, while 19% (n=73) come from smaller families of 1-3 members. This data highlights the variation in family sizes among the respondents.

Hypothesis 1: Higher levels of anxiety associated with uncontrollable worrying are negatively correlated with students' ability to focus during lectures or study sessions.

Table 2. There is a significant relationship between the inability to stop or control worrying and difficulties in focusing during lectures or study sessions.

	There is a significant relationship between the inability to stop or control worrying and difficulties in focusing during lectures or study sessions.					
	Strongly disagree	**disagree**	**Neutral**	**Agree**	**Strongly agree**	**Total**
Not at all	0	5	23	24	29	61
	0.0%	1.3%	0.8%	6.2%	7.6%	15.9%
several days	8	18	7	52	38	123
	2.1%	4.7%	1.8%	13.5%	9.9%	32%
More than half the days	6	7	7	30	29	79
	1.6%	1.8%	1.8%	7.8%	7.6%	20.6%
Nearly every days	3	15	7	45	51	121
	0.8	3.9	1.8%	11.7%	13.3%	31.5%
Total	17	45	24	151	147	384
	4.4	11.7	6.2	39.3	38.3	100.0%

Chi-square = 14.093 d.f= 12 P-value = 0.06***

Gamma = .002 ***Significant

Hypothesis 1 posits that higher levels of anxiety associated with uncontrollable worrying are negatively correlated with students' ability to focus during lectures or study sessions. Table 2 provides

evidence for this relationship, revealing a significant association between the inability to control worrying and difficulties in concentrating. The data indicates that a notable percentage of respondents (39.3%) reported disagreeing with the notion that they do not experience anxiety, while a substantial 38.3% strongly disagreed. In contrast, those who felt they could manage their worrying included only a small proportion in the "strongly agree" (4.4%) and "agree" (11.7%) categories, suggesting a direct link between high anxiety levels and challenges in maintaining focus. The Chi-square value of 14.093 with a p-value of 0.061 further supports the significant relationship, implying that as anxiety levels rise due to uncontrollable worrying, students are increasingly likely to struggle with concentration during academic tasks.

	Hypothesis 2: Higher levels of perceived hopelessness regarding the future are linked to lower levels of motivation to pursue and achieve academic goals. **Table 3.** There is a significant negative correlation between feelings of hopelessness about the future and motivation to achieve academic goals,

There is a significant negative correlation between feelings of hopelessness about the future and motivation to achieve academic goals,

	Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Total**
Strongly disagree	3 0.8% 0 0.0%	2	5	7	3	20
		0.5%	1.3%	1.8%	0.8%	5.2%
Disagree		6	9	11	10	36
		1.6%	2.3%	2.9%	2.6%	9.4%
Neutral	3	4	1	5	8	21
	0.8%	1.0%	0.3%	1.3%	2.1%	5.5%
Agree	9	13	31	74	59	186
	2.3%	3.4%	8.1%	19.3%	15.4%	48.4%
Strongly agree	6	10	18	39	48	121
	1.6%	2.6%	4.7%	10.2%	12.5%	31.5%
Total	21	35	64	136	128	384
	5.5%	9.1%	16.7%	35.4%	33.3%	100.0%

Chi-square = 24.866 d.f= 12 P-value = 0.01***
Gamma = .014
*****Significant**

Hypothesis 2 suggests that higher levels of perceived hopelessness regarding the future are linked to lower levels of motivation to pursue and achieve academic goals. Table 3 provides evidence supporting this hypothesis by illustrating a significant negative correlation between feelings of hopelessness about the future and academic motivation. The data shows that among the 384 respondents, a considerable percentage (48.4%) agreed and 31.5% strongly agreed that they feel hopeless, indicating a significant number experiencing these feelings. In contrast, only a small portion expressed disagreement or neutrality regarding their hopelessness, with 5.5% strongly disagreeing and 9.1% disagreeing. The Chi-square value of 24.866, with a p-value of 0.01, further emphasizes the significant relationship, suggesting that as feelings of hopelessness increase, the motivation to achieve academic goals decreases. This reinforces the notion that a lack of hope can negatively impact students' drive to succeed academically.

Hypothesis 3: higher levels of anxiety are less likely to actively participate in group work or discussions compared to individuals with lower levels of anxiety
Table 4. correlation between anxiety and actively participate in group work or discussions compared

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	Strongly disagree		**Disagree**		**Neutral**	**Agree**	**Strongly agree**	**Total**
Strongly disagree			**1**	**2**	**2**	**5**	**4**	**14**
	0.3%		0.5%	0.5%	1.3%	1%	3.6%	
Disagree	1		3	2	9	9	24	
	0.3%		0.8%	0.5%	2.3%			
2.3%	6.2%							
Neutral	5	10	19	11	8	53		
	1.3%	2.6%	4.9%	2.9%	2.1%	13.8%		
Agree								
	9	35	38	62	37	181		
	2.3%	9.1%	9.9%	16.1%	9.6%	47.1%		
Strongly agree	4	6	18	45	39	112		
	1.0%	1.6%	4.7%	11.7%	10.2%	29.2%		
Total	20	56	79	132	97	384		
	5.2%	14.6%	20.6%	34.4%	25.3%	100.0%		

Chi-square = 35.195 d.f= 12 P-value = 0.04*
Gamma = .060
Significant

The data presented in Table 4 examine the correlation between anxiety levels and active participation in group work or discussions. The results indicate a significant relationship, with a Chi-square value of 35.195 and a p-value of 0.04, suggesting that higher levels of anxiety are associated with reduced participation. As anxiety increases (represented by those who "Agree" or "Strongly Agree"), the percentage of active participants decreases. For instance, 47.1% of participants who agreed that anxiety affects their participation reported less engagement in group work or discussions, compared to only 3.6% who strongly disagreed. The gamma value of 0.060 indicates a weak positive association between anxiety and reluctance to participate, confirming the hypothesis that individuals with higher anxiety are less likely to engage in group discussions.

Conclusion

In conclusion, the thesis reveals a pervasive experience of anxiety, stress, and emotional challenges among respondents, affecting various aspects of their academic and personal lives. Somewhere between a third and half of the respondents said that they had been nervous, anxious, or unable to control their worry on multiple days or even more than half the days, and in large proportions said that they had feelings of being restless and worry. The fact that symptoms like impaired concentration, depressed mood and sleep problems are very common also reveals the importance of anxiety and depression in such population. Many of the respondents confirmed that the school-related academic performance is also very poor because such mental health problems not only reduce their motivation and self-evaluation but also lower their performance in academic activities and group discussions.

Besides, the statistics shows that anxiety and depression also adversely affect the students to follow-up their studies and social life fully and most the students admitted to have a sense of hopelessness regarding their future. Although, the struggle is real, there is a positive side to it as most of the respondents identified the importance of academic support services and even got a sense of pleasure in performing the activities that help in their skill building, were resilient and hopeful to develop their skills. It was also noted that a considerable percentage of the respondents had high aspirations with regard to their academic achievement with majority showing that they discuss their work, attend lectures and are proactive enough to complete their tasks before time. This state of stress combined with the motivation indicates a population that attempts to achieve greater heights in academia throughout its struggle with significant mental health issues. Support and mental

health resources, such as addressing these issues, could support and help to lessen their pain to find a more giving educational setting.

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