

The Academic-Mental Health Nexus: Understanding the Correlation between Anxiety, Depression and Student Success at College Level

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Abstract: This study explores the relationship between mental health issues, such as anxiety, stress, and depression, and student success at the college level. A Correlational research design was utilized to carry out an investigation. A total of 7000 students from three private colleges of Multan, including Kips College Multan, City Science College Multan, and Punjab Group of Colleges Multan, served as the population. A sample size of 350 students was selected using a random sampling technique. A close-ended questionnaire was administered to analyze the impact of mental health on students' academic performance. Data was analyzed using descriptive and inferential statistics. Results of the study showed college students were greatly impacted by depression, stress, and anxiety. It was also perceived that students who were suffering from depression, stress, and anxiety had poor performance at the college level. It is recommended that students should be educated about the impact of depression, anxiety, and stress on their academic performance and alert them to the importance of seeing a mental health practitioner when their condition worsens.

Keywords: Mental Health, Students, Success, Anxiety, Stress, Depression

Introduction

Mental health plays a critical role in students' academic success, impacting their ability to concentrate, retain information, and engage in learning activities. A mentally sound and emotionally content individual will be able to live a life far more accomplishing than an individual who is trapped inside his own mind. Mental health is a matter of grave concern. In contemporary times, when faced with all the social and economic pressures and the need to live a life of good standing, many individuals face different mental issues of different calibers. Braghieri et al. (2022) have discoursed that there are different pressures from family, academics, and society that most individuals can't handle or deal with.

Mental health is a state of psychological development – it is a comparatively continual and permanent personality role. If not in the correct state, it can be a hindrance to the personal and social functioning of any individual. Students' poor mental health is linked to poor life quality, poor academic achievement, decreased well-being, and—most importantly—poor overall health (Ansari et al., 2024). The ongoing social and emotional strain that university students experience increases their susceptibility to mental health issues. Moreover, Mirza et al. (2021) discuss that anxiety is sparked by a transient environmental circumstance like an exam, an accident, punishment, etc. Further, anxiety has been shown to have a major impact on students' performance in school and their learning. Children's social, emotional, and academic development are significantly harmed by academic stress, depression, and anxiety.

According to the National Crime Records Survey (2010), more than six children on average commit suicide, which is a staggering number of children attempting to take their own life due to academic and societal

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pressures (Akhdan & Aminatun, [2022](#)). Furthermore, Romano, et al. ([2020](#)) have reviewed that academic anxiety and depression in students may be influenced by a variety of elements, including a propensity for time management and leisure satisfaction, thorough organization of learning activities, a balanced level of aspirations, study habits, etc. Moreover, Ahmetovic et al. ([2020](#)) have reported an alarming rate of increase in mental health issues, mainly depression and anxiety, in college students. It has been observed that college is the prime time of a student's academic journey. Any severe predicaments faced by students at this stage lead to unfavorable lifelong conditions. Even though mostly researchers and scholars have declared the present situation as an austere dilemma. Yet, there seems to be an absence of tangible evidence regarding the matter. There is a need to determine the present academic mental health nexus and to examine the relationship between anxiety, depression, and student success.

Objectives

1. To examine the relationship between depression and academic success of college-level students.
2. To examine the relationship between anxiety and academic success of college-level students.
3. To examine the relationship between stress and academic success of college-level students.

Literature Review

In contemporary times, many college students are being faced with severe mental health issues, mostly as individuals are entering college and starting their journey toward adulthood and are confronted with new responsibilities. Blanco et al. ([2008](#)) agree that most individuals either work part-time or depend financially on their parents. In both cases, these individuals, apart from taking stress regarding their educational workload, also have to take on more adult-like responsibilities without having yet mastered the skills and cognitive maturity of adulthood. Moreover, Byrd and McKinney ([2012](#)) agree that apart from managing their academic workload, most students are faced with identity crises and separation from their families. In this context, many college students experience the first onset of mental health and substance use problems or an exacerbation of their symptoms.

Furthermore, Pedrelli ([2015](#)) observed a correlation between students' mental health and low levels of academic performance, as well as low quality of life, decreased well-being, and, most importantly, poor physical state. Individuals studying in colleges are more prone to intellectual fitness issues. The intellectual fitness of college individuals in developed nations has been the subject of extensive investigation. It became evident that many children experience mental health issues during their time in school. Moreover, Eisenberg et al. ([2009](#)) have also claimed that depression and anxiety have been linked with lower levels of academic performance, as these issues can lead to sleep deprivation, eating disorders, loss of appetite, physical weakness, forgetfulness, and even panic attacks.

Whereas Salimi et al. ([2023](#)) have found after covid-19 pandemic, there has been an increase in the mental health issues of college-level students. The prevalence of academic anxiety and psychological distress has been magnified to a large extent. Mental fitness is pertinent and absolutely required to perform any function as a well-respected individual in society. An individual who is unhealthy mentally will not be able to perform well academically or socially. Furthermore, Oswalt et al. ([2020](#)) concluded, based on the national sample, that self-reported diagnoses of several anxiety and depression cases have been increasing among college students. Mental health issues should not be taken lightly and should be dealt with as soon as possible; otherwise, they can lead to various disastrous outcomes.

Methodology

A correlational research design was used for this study. The main objective of the current study was to examine the relationship between mental health issues, such as anxiety, stress, and depression, and student success at the college level. A total of 7000 students from three private colleges of Multan, including Kips College Multan, City Science College Multan, and Punjab Group of Colleges Multan, served as the population. A sample size of 350 students was selected using a random sampling technique. The sample size was selected as per the recommendations of Gay et al. ([2012](#)). According to this, the recommended sample size should be at least ten percent of the population. For the data collection tool, a self-rating questionnaire consisting of statements from the DASS-21 scale was used. The prevalence of three parameters of mental health, depression, anxiety, and stress, were measured in this study. The rating scale consisted of a five-point Likert scale. A number of three

hundred and sixty-five questionnaires were distributed amongst the selected sample, out of which three hundred and fifty responded questionnaire forms were returned. All ethical considerations were met throughout the study.

Data Analysis

Descriptive analysis and inferential analysis were conducted for the purpose of data analysis. To analyze the prevalence of anxiety, stress and depression in college level students mean was calculated. And to analyze the relationship between indicators of mental health and academic success of college level students, Pearson correlation was used.

Table 1

Demographic information of the sample

Variables		Frequency	Percentage
Gender	Male	77	32%
	Female	238	68%
Age	14-16	70	20%
	16-18	270	77%
	18-20	10	03%
Education Level	1 st year	203	58%
	2 nd year	144	43%

The data portrayed in Table1 shows that 32% of the 350 individuals are male, while 68% are female. This indicates a higher representation of females in the population. Further, 77% percent participants are from the age group of 16-18 years old, 20% are from the age group of 14-16 year old whilst only 3% are from 18-20 years old. Moreover, 58% participants were from first year whilst 43% participants were in their second year of college.

Table 2

Descriptive analysis of the prevalence of mental health indicators

Indicators	Mean
Depression	8.8
Anxiety	9.2
Stress	9.9

Table 2 shows the descriptive analysis of prevalence of mental health indicators. The mean of prevalence of anxiety is 8.8 which shows most of the respondents had moderate levels of anxiety. The mean of the prevalence of depression is 9.22 which shows most of the respondents had moderate level of depression. The mean of prevalence of stress is 9.89 which shows that most of the respondents moderate high level of stress.

Table 3

Correlation matrix of stress and student academic success

		Student Academic Success	Stress
Student Academic Success	Pearson Correlation	1	.093
	Sig. (2-tailed)		.05
	N	350	350
Stress	Pearson Correlation	.093	1
	Sig. (2-tailed)	.05	
	N	350	350

Table 3 shows relationship between stress and students’ academic success at college level. The value of pearson coefficient relation between academic performance and stress is .093 and the p-value is equal to 0.05 which means that there is a statistical weak positive relationship between stress and academic success of college level students.

Table 4
Correlation matrix of anxiety and student academic success

		Student Academic Success	Anxiety
Student Academic Success	Pearson Correlation	1	.017
	Sig. (2-tailed)		.04
	N	350	350
Anxiety	Pearson Correlation	.017	1
	Sig. (2-tailed)	.04	
	N	350	350

Table 4 shows the relationship between anxiety and students' academic success at college level. The value of Pearson coefficient relation between academic performance and stress is .017 and the p-value is less than 0.05 which means that there is a very weak positive statistical relationship between anxiety and academic success of college level students.

Table 5
Correlation matrix of depression and student academic success

		Student Academic Success	Depression
Student Academic Success	Pearson Correlation	1	.63
	Sig. (2-tailed)		.04
	N	350	350
Depression	Pearson Correlation	.63	1
	Sig. (2-tailed)	.04	
	N	350	350

Table 5 shows the relationship between depression and students' academic success at college level. The value of Pearson coefficient relation between academic performance and depression is .63 and the p-value is less than 0.05 which means that there is a very strong positive statistical relationship between depression and academic success of college level students.

Discussion

The study shows that mental health has a greater influence on students' academic success. The study showed that there is a positive moderate high relationship between students' academic performance and depression. Whereas it was established by Li et al. (2023) that a significant correlation existed between depression and anxiety symptoms of college students. Moreover, Lattie et al. (2019) also agree that poor mental health has a negative impact on the academic success levels of college-level students. The study also showed a relationship between stress as well as anxiety and the academic success of college-level students. Awadalla et al. (2020) also agree that the majority of the student population was found to be suffering from mental health issues during their study.

There was a general consensus among respondents regarding the prevalence of stress, anxiety, and depression among college-level students. Ramón-Arbués et al. (2020) also found a moderate prevalence of depression, anxiety, and stress among college students. Furthermore, Campbell (2022) also agrees due to mental health issues, students are more likely to drop out of college or not finish their academic program. Nonetheless, students who attend colleges and universities that offer counseling, stress-relief programs, and mental health support typically achieve higher academic goals. The key to reducing these harmful impacts is early intervention and the establishment of a supportive atmosphere. In order to help students thrive academically, institutions must prioritize mental health care as a crucial component of their educational strategy. This is because fostering both intellectual and emotional well-being is crucial.

Conclusion

The results of the study indicate that students' academic success is significantly impacted by their mental health. Furthermore, the research study offers beneficial perceptions regarding the mental health nexus among college students. This emphasizes the significance of taking into account various viewpoints and dealing with mental

health issues at the college level. The findings indicate that there are notable associations between these variables. Specifically, there is a very strong positive relationship between depression and the academic success of college-level students. At the same time, a weak positive relationship between stress, as well as anxiety, and academic success of college-level students was observed. Additionally, the research revealed that problems like stress, anxiety, and depression could impair focus, memory, and task-completion skills, which lowers academic accomplishment. Pupils who have mental health issues frequently show decreased participation, less engagement in class, and increased absenteeism rates, all of which are factors in their performance decline.

Recommendations

Based on the results of the study, there presents a set of recommendations that will reduce depression in students and improve their educational attainment, as follows:

- It is suggested a friendly environment between children and parents and is also necessary for parents to maintain a peaceful environment at home.
- There is a need for students to be aware of the symptoms of different mental health problems and how they can negatively impact their lives.
- It is recommended that students change their daily routines and not think negative or unhelpful thoughts as they increase the level of depression in an individual.
- There is a need to educate students about the impact of depression, anxiety, and stress on their academic performance and alert them to the importance of seeing a mental health practitioner when their condition worsens.

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