A Correlation Study of Mental Health and Academic Achievement of Secondary Students

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Abstract

This study assesses the mental health levels of secondary students and further investigates their association with academic achievement. A quantitative research approach was adopted in which a random sampling technique was employed in which 100 class XI students were selected to represent the population. Data were collected with the help of a standardized Mental Health Questionnaire (MHQ) developed by Dr. Bano Akhtar and Sushma Talesara (2017) and academic achievement was measured by the students' final Grade 10 examination academic scores. Descriptive analysis (mean, standard deviation and percentage) was used to summarize and analyze data. Pearson correlation coefficient (Pearson r) (Inferential analysis) was used to find the relationship between mental health and academic achievement. The study revealed a significant positive correlation between mental health and academic achievement of secondary students, with an r-value of 0.648016, concluding that students with better mental health levels are more likely to score better academically. Mental health is one of the key variables affecting academic achievement and this work suggests policy makers should collaborate with schools and parents to implement programs that will help students to understand their mental health, manage stress and how to be resilient, which may benefit their mental well-being and improve their academic performance. Further investigations into the factors such as financial and social status, mental resilience and stress management strategies could provide a clearer and more reliable understanding of how each influences students' outcomes.

Keywords: Mental H e a l th, Academic A chievement, Secondary Students, Well-being, Mental Resilience

1.0 Introduction

Academic performance of students is significantly influenced by their mental health. According to Student Wellbeing Hub, well-being is a multifaceted term which is more than physical health. It is a merging of a person's emotional, mental and social health and it reflects how they view themselves and their life in general. It may be said that students who struggle with information retention, motivation and concentration are those that are anxious, stressed or depressed and this ultimately dismissively influence their academic outcomes. Talawar and Das (2014), Pearson's correlation indicated a positive correlation between mental health and academic performance, showed that students with improved mental health performed better academically and emphasized that providing mental health support in schools, teacher education, Ekka et al. (2020), counseling and co-curricular activities can enhance students' mental health and academic achievements and promote mental health awareness programs.

1.1 Needs and significance

Despite growing awareness of mental well-being issues among students in secondary school such as academic pressure, stress from the society and emotional hurdles which gradually have vital impacts on their mental well-beings and eventually academic outcomes, (Owens et al., 2012), this area remains mostly neglected in schools. Durlak et al., (2011), highlighted that emotional instability, particularly, anxiety and depression, can reduce focus, motivation and hinder cognitive performance, which results in poor educational attainment. According to Kumari and Kumar (2022), there are many determinants which influence students' mental health such as misconception, environmental factors, financial problems, unavailability of resources and technological influences Additionally, mental outcomes can be improved by early detection, adequate orientation and awareness courses, guidance and counseling services, policy reforms and knowledge-oriented mental care services like yoga and meditation tours.

Past studies such as that of Suldo et al. (2014), Ali (2024), highlighted a positive correlation between mental health and academic achievement of student but there is a need for a study that examines specifically secondary students' mental health and academic achievement under the Central Board of Secondary Education in Lucknow, Uttar Pradesh, India. Furthermore, there are limited mental health systems in schools and no enough evidence on how various levels of mental health influences students' academic achievement. Thus, the contemporary study aims to bridge the gap by examining the mental health levels of secondary students and evaluating their correlation with academic achievement.

1.2 Research Objectives

1. 1.To study the mental health levels of secondary school students.
2. To study the relationship between mental health and academic achievement of secondary students.

1.3 Research Hypothesis

H_0: There is no significant relationship between mental health and academic achievement of secondary students.

2.0 Research Methodology

The study utilized a quantitative research approach using a correlations research design to evaluate the correlation between mental health and academic achievement of secondary students. Two variables were studied in this paper (Mental health and Academic achievement), in which 100 class XI students were randomly selected from a secondary school under the CBSE board in Lucknow, India. A standardized Mental Health Questionnaire (Sushma Talesara & Akhtar Bano, 2017) was used to collect data which was used to measure the mental health levels of secondary students and students' academic achievement was estimated from their class 10 final examination scores. The contemporary study used descriptive statistics (mean, Percentage and standard deviation) to summarize data and further utilized inferential statistics, specifically, Pearson correlation coefficient (Pearson's r) to investigate the relationship between mental health and academic achievement. The researcher also used Excel to compute values.

3.0 Results of the study:

1.Objective no.1: To study mental health level of secondary Students

The first objective was to study mental health level of students in secondary schools. Data were analyzed with the help of percentage.

Table 1. Levels and percentage of mental health of secondary students

LEVEL	SCORES	NO. OF STUDENTS	PERCENTAGE
Good	Above 152.55	12	12%
Moderate	88.51-152.55	68	68%
Poor	Below 88.51	20	20%

According to the scale given by Dr. Sushma's Mental Health Scale, it indicated that higher scores reveal better mental health. As exposed in table 1, students' scores were classified under good, moderate and poor mental health groups. Students that scored above 152.55 fell under good mental health and within this category fall 12 (12%) of the students were surveyed. The majority, 68 students (68%), scored between 88.51 and 152.55 meaning they had moderate mental health. This shows that they faced some challenges but were functioning within a normal range. Lastly, 20 students scored below 88.51, placing them in the poor mental health category, meaning they experienced significant emotional distress. These findings call for mental health support, especially for students in the poor and moderate categories.

2. Objective no.2: To study the relationship between mental health and academic achievement of secondary students

The second objective was to study the relationship between mental health and academic achievements of secondary level students. Data collected were analyzed with the help of Product Pearson coefficient (Pearson's r) and results were given in table 2.

Table 2. Correlation coefficient between mental health and academic achievement

Variable	r-value	Remark
Mental health	0.648016	Significant at 0.05 significance level
Academic achievement		

From table 2, it can be seen that the correlation coefficient is 0.648016 which is significant at 0.05 level with the df =98. It indicates that there is a positive significant correlation between mental health and academic achievement of secondary students. Thus, the null hypothesis that there is no significant relationship between mental health and academic achievement of student is rejected. Further the percentages of commonness between mental health and academic achievement of secondary level students is 42% which is positive. It may therefore be said that **both mental health and** academic achievement of secondary students were found to have positive significant correlation.

4. Discussion

The first objective was to study the mental health level of secondary students. The results revealed a mean score of 120.53 with a standard deviation of 32.02. According to Dr. Sushma's Mental Health Scale (2017), the higher scores indicate better mental health. Students scoring above 152.55 are classified as having good mental health, those scoring between 88.51 and 152.55 are considered to have moderate mental health and scores below 88.51 indicate poor mental health.

The second objective was to study the relationship between mental health and academic performance of

secondary students. The outcome of the study found a notable link between mental health and academic performance of secondary school students, accentuating its significance for educators, policymakers and parents in developing blueprints that advocate for students' well-being whilst enhancing academic success. By addressing mental health within the education system, this research contributes to the development of a comprehensive learning environment where students can excel in all dimensions (academically and emotionally).

The findings are in line with previous studies, Singh (2015), Neena et al. (2024), showing that students with greater mental resilience are likely to participate, think critically and overcome barriers leading to academic success. Family support, uplifting peers and a constructive educational setting contribute to optimal student well-being and greater academic achievement. According to the Directorate of Eduction, Government of National Capital Territory of Delhi (2021), the introduction of happiness curriculum in Delhi's government schools, aims to enhance students' well-beings by mindfulness, socio-emotional education and deeper thinking. It is reported that schools that embedded mental health education into their curriculum have fostered improved learning outcomes, increased attentiveness and diminished absence levels. In addition, a study conducted by the Australian Council for Education Research (2023) exposed that students in primary schools practicing mindfulness are more focused, manage stress and have greater problem-solving abilities as reported by the majority of teachers.

In correspondence, the research by Gokhan (2020) indicated that mental health of adolescents is an essential factor that can have a potential influence on their academic achievement, either positively or negatively. Similarly, Ali. (2024) found a significant correlation between mental health and academic achievement of students. Ranjita et.al. (2023) elaborated that students who perform better academically are those who have better mental well-being, while those with lower mental health tend to demonstrate subpar academic performance. Rabbani & Barman (2023) also concluded a positive correlation between mental health and academic achievement of students. Since both studies show the same results, it may be suggested that helping students take care of their mental health could also improve their school performance.

In contrast, some studies such as those by Shahram et.al (2019), Abdul et.al. (2022), found no link between mental health and academic achievement. Thapliyal (2022) suggested that schools should include basic mental health checkups, provide proper counseling services and raise awareness about mental health.

5.Conclusion and Recommendations

Key findings:

1. The mental health findings revealed an overall average score of 120.53, with most students falling within the moderate range. Although a small percentage of students were reported to have good mental health, still a great percentage of the students manifested moderate mental health.
2. Mental health and academic achievement of secondary students were found to have positive significant correlation.

Schools should consider introducing peer support groups, mentorship programs and access to mental health professionals. These efforts can help create a positive learning environment where students feel supported in both dimensions of their learning. In addition, parents should facilitate their children's mental well-beings by introducing open communication in the household to create a stress-free environment. Students also need to play a vital role in taking care of their psychological health by

practicing mindfulness and self-care activities in ensuring that their mental health is prioritized to yield good academic results.

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