

# Relationship between Mental Health and Academic Achievement of Adolescent Students in Kolkata District, West Bengal

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**Abstract:** The paper aims at analysing the impact of mental health on academic achievement of adolescent students of Kolkata. Mental health is the most important aspect of well-being of human. Adolescence is the most crucial & formative phase of human life where good mental health is very important for a balanced lifestyle for present and future. The researcher selected 100 sample of adolescent students giving representation to gender (Boys/Girls) and type of school (Private/Government) they belong. The Mental Health Inventory developed by Jagadish and Srivastav (1983) was used as the tool to measure the mental health status of the students. The academic achievement score of those students were also collected from the schools of Kolkata. Collected data were analysed with the help of Mean, Standard Deviation, t-test and Pearson's Product Moment Correlation. The result revealed that there is a positive correlation between the mental health and academic achievement of adolescent students of Kolkata district. The study also found that there is no significant difference between adolescent girls and boys regarding mental health. But there is significant difference between adolescent girls and boys regarding academic achievement in Kolkata district. There is no significant difference between private and government school adolescent students regarding mental health. But there is significant difference between private and government school adolescent students regarding academic achievement in Kolkata district.

**Keywords:** Academic achievement, Adolescent students, Mental health.

## 1. Introduction

Good mental health is necessary for healthy life style practices. A mentally healthy person can have a balanced lifestyle. They can realize their own potentialities and can contribute to the society. A person with good mental health can easily deal with the stress or pressure which we are getting now-a-days due to fast life style practices, causing anxiety, depression & stress. It is known by all that depression is the new pandemic in our society. So, a person who is mentally healthy will be able to balance their emotions with or without the help of their loved ones on whom they can depend for positivity and encouragement.

Adolescence is the phase of storm and stress where students are in most vulnerable state. At this stage they face many mental health issues which affect their all-round development. Adolescents are the assets of our country whom we need to

nurture into healthy adults to make them future resources of our nation.

Academic achievement is the most important goals or outcomes of education. It can be short-term or long-term educational goals. Academic achievement can be measured by summative evaluation or formative evaluation. The desire of high academic achievement creates a lot of pressure or stress on students.

## 2. Objectives of the Study

- To study the level of mental health status of the adolescent students of Kolkata.
- To find out the relationship between Mental Health and academic achievement of adolescent students of Kolkata.
- To find out the significant difference between girls & boys (Gender) regarding mental health of adolescent students in Kolkata.
- To find out the significant difference between girls & Boys (Gender) regarding Academic Achievement of adolescent students in Kolkata.
- To find out the significant difference between government & private school students regarding mental health of adolescent students of Kolkata.
- To find out the significant difference between government & private school students regarding academic achievement of adolescent students of Kolkata district.

## 3. Hypothesis

- There is no significant difference in relationship between mental health and academic achievement of adolescent students of Kolkata.
- There is no significant difference between male and female adolescent school students of Kolkata regarding mental health and academic achievement.
- There is no significant difference between Private and Government school adolescent students of Kolkata regarding mental health and academic achievement.

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#### 4. Methodology

##### A. Sample

Random sampling method was used for sample selection. A total of 100 adolescent students of Kolkata studying in class VIII to XI standard were selected, out of which 50 students are girls, 50 are boys and 50 students belong to private school students, 50 students belong to government school.

##### B. Tools

To test the formulated hypotheses for the study, data was collected with the help of Mental Health Inventory by Jagadish & Srivastav (1983) and academic achievement scores were also used.

##### C. Statistical techniques used

The statistical techniques used for data analysis were the Pearson's Product Moment Correlation Method to find out the relationship between the mental health and academic achievement of adolescent school students of Kolkata district. Mean, Standard Deviation (Descriptive Statistics) were also calculated from the raw data. Then t-test (parametric test) was used to find out the significant mean difference between two groups gender (girls & boys) and type of school (private & government) of adolescent students regarding mental health & academic achievement in Kolkata district.

#### 5. Data Analysis and Data Interpretation

Hypothesis-1: There is no significant difference in relationship between mental health and academic achievement of adolescent students of Kolkata.

The Coefficient of correlation 'r' between Mental Health and Academic Achievement of adolescent school students of Kolkata district is 0.534.

The table 1, shows that the obtained 'r' value is greater than the table value at 0.01 level of significance and hence the null hypothesis is rejected. Hence, it can be said that Mental health and Academic achievement are positively correlated.

Hypothesis-2: There is no significant difference between male and female adolescent school students of Kolkata regarding mental health and academic achievement.

It is found that the critical value 't' with 98 degree of freedom (df) at 1% level of significance is almost 2.62. The computed t-value that is 1.43 is smaller than the critical table value 2.62 and is not significant. Therefore, the null hypothesis is accepted.

The table 2, shows that mean score of girls in Mental Health is higher than that of boys but the difference is negligible and not significant. So, the hypothesis is accepted. Therefore, it may be concluded that there is no significant difference between adolescent girls and boys of Kolkata district regarding Mental Health.

It is found that the critical value 't' with 98 degree of freedom (df) at 1% level of significance is almost 2.62. The computed t-value i.e., 7.49 is much greater than the critical table value 2.62 and is significant. Therefore, the null hypothesis is rejected.

The table 3 shows that mean score of girls in academic achievement is higher than that of boys but the difference is not negligible and significant. Therefore, it may be concluded that there is significant difference academic achievement of adolescent girls and boys of Kolkata district.

Hypothesis-3: There is no significant difference between private and government school adolescent students of Kolkata regarding mental health and academic achievement.

It is found that the critical value 't' with 98 degree of freedom (df) at 1% level of significance is almost 2.62. The computed t-value i.e., 1.48 is smaller than the critical table value 2.62 and is not significant. Therefore, the null hypothesis is accepted.

Table 1  
Variables, 'r' value and their significant level

S.No.	Category	No. of samples	Df (N-2)	'r' value	Correlation
1	Mental Health	100	98	0.534	Positively correlated
2	Academic Achievement	100	98		

Table 2  
Difference in mental health of adolescent school students with respect to their gender

Gender	No. of samples	Mean	SD	t-value	Significant level (0.01 level)
Boys	50	41.06	6.42	1.43	Not Significant
Girls	50	43.16	7.03		

Table 3  
Difference in academic achievement of adolescent school students with respect to their gender

Gender	No. of samples	Mean	SD	t - value	Significant level (0.01 level)
Boys	50	58.07	1.09	7.49	Significant
Girls	50	61.01	2.24		

Table 4  
Difference in mental health of adolescent school students with respect to their type of Schools (private/government)

Type of school	No. of samples	Mean	SD	t - value	Significant level (0.01 level)
Private	50	43.16	7.01	1.48	Not Significant
Govt.	50	40.24	6.28		

Table 5  
Difference in academic achievement of adolescent school students with respect to their type of schools (private/government)

Type of school	No. of samples	Mean	SD	t - value	Significant level (0.01 level)
Private	50	59.92	1.02	3.36	Significant
Govt.	50	58.09	1.98		

The table 4 shows that mean score of Private school students in Mental health is higher than that of Govt. school students but the difference is negligible and not significant. Therefore, it may be concluded that there is no significant difference in mental health of private and govt. school's adolescent students of Kolkata district.

It is found that the critical value 't' with 98 Degree of Freedom at 1% level of significance is almost 2.62. The computed t-value that is. 3.36 is greater than the critical table value 2.62 and is significant. Therefore, the null hypothesis is rejected.

The table 5, shows that mean score of private school students in academic achievement is higher than that of Govt. school students and the difference is significant. Therefore, it may be concluded that there is significant difference academic achievement of private and govt. school's adolescent students of Kolkata district.

### 6. Conclusion

The mental health and academic achievement of the adolescent students of Kolkata are positively correlated. There is no significant difference between adolescent girls and boys of Kolkata district regarding mental health. But there is significant difference between academic achievement of adolescent girls and boys of Kolkata district. There is no significant difference between mental health of private and govt. school's adolescent students of Kolkata district. But there is significant difference between academic achievement of private and govt. school's adolescent students of Kolkata district.

Teacher should create a healthy, interesting and student friendly atmosphere in the classroom where child can freely

learn and solve their problems with the help of the teachers. Guidance and counselling cells are necessary in every school for mental well-being of the students. There should a be proper place for Co-curricular activities in daily time-table to channelize students' unhealthy habits & negative thoughts in a healthy way. Teachers should help the students to identify their hobbies. Coping strategies should be taught to the students to survive in this fast era of depression, anxiety and stress. School should be more careful about teenage bullying, ragging and peer pressure.

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