AN INVESTIGATION INTO THE IMPACT OF ACHIEVEMENT
MOTIVATION, TEST ANXIETY AND MENTAL HEALTH
ON THE ACADEMIC ACHIEVEMENT OF STUDENTS
AT THE SECONDARY LEVEL UNDER
TWO DIFFERENT BOARDS

ABSTRACT

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Education is an index of the development of human beings. Because it is a pre-requisite for progress and development and in the order of priorities, it has been accorded a high priority as an integral part of country’s developmental process. It is the most dynamic force in the life of an individual in influencing his physical, mental, emotional, social, moral, spiritual and aesthetic development. A well-educated man is able to meet the conflicting challenges and tide over all the difficulties which confront him in day-to-day living. Education, in short, is able to instill in the child a sense of maturity and responsibility by bringing in him the desired changes according to his needs and demands of ever changing society, of which he is an integral part. In this sense, education is that conducive process which leads a person out of darkness, poverty, ignorance, superstitions and misery by developing his individuality in all aspects – mental, emotional, physical and social. An individual, with all-round development, becomes a responsible, dynamic, resourceful and enterprising citizen of strong, good, moral character and uses all his capacities to develop his own self, his society and his nation to the highest extent by contributing his best to national honour, glory, culture and civilisation. Education, on one hand, develops the full potentiality as well as personality of an individual making him intelligent, learned, bold, courageous and strong with good moral character; on the other hand, it contributes to the growth and development of the society in particular and the nation at large.

Academic achievement has become an index of child’s future particularly so in highly competitive world. Academic achievement has special importance for both the student, and those around him/her. Educational and psychological researches have been identified multiple factors that play a role in predicting adolescents’ academic achievement. There can be no doubt that it is affected by many factors that may reduce it, like anxiety, stress, test anxiety, poor mental health, lack of motivation, etc. However, education can become a burden to a country as low academic achievement is one of the major problems facing the families, society and government at large.

Research on students’ academic achievement has generally taken the form of
finding human or environmental variables which correlate with higher achievement and which can be used as predictors of achievement. Among the various variables identified, the most important is individual differences. Different researchers emphasized different dimension of individual differences which correlate with higher achievement and which hold out some hope for positive action for educational practice of these dimension, achievement motivation, test anxiety and students’ mental health are major ones.

There has been extensive research on the influences of students’ achievement motivation. Achievement and motivation are important determinants of effort when an individual expects that his performance will be evaluated in relation to some standard of excellence. It is one of the basic ingredients necessary for one’s success in life. Different studies have been made to correlate motivational variable with academic success and failure. Some, studies have examined motivation independently, while others collectively with other factors. It is evident that high n-Achievement is bound to have better learning and superior performance. McClelland and his associates have asserted “pupils with high n-Achievement score show evidence of better learning and performance”.

Researchers generally agree that a specific degree of test anxiety may motivate the students in their test performance and make him/her inclined to better academic achievement. However, a high test anxiety score may be one of the obstacles to academic achievement. Test anxiety, especially worry has impact on academic performance, and working memory. He holds that test-anxiety creates irrelevant thoughts, preoccupation, and decreased attention and concentration which leads to academic difficulties. In addition, test anxiety is link to memory and can have effect on academic achievement, because both of them disrupt attention and concentration. The worry component of anxiety might interfere with test performance by diverting the individual’s attention from the task at hand. They claimed that anxiety worked as a mediator of performance “where the particular conditions of learning and evaluation are sufficiently threatening to disrupt test taking”. At the risk of being over simplistic, they formulated the following relationship:

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\text{Perceived Threat} \rightarrow \text{Anxiety Arousal} \rightarrow \text{Impaired Performance.}
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The other factor of academic achievement is the mental health of the students.
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Mental health or, better still, mental disorder significantly interrelates with the life style as well as the academic arena of the individual. A balanced mental health is the determinant force of educational achievement. In a compulsory school system, education may be seen merely as an activity in which individuals participate in the context of their interests and involvement in the culture. School age is a dynamic period of physical growth and development, when the student undergoes rapid mental, emotional, and social changes. Students’ healthy social and emotional development is an essential underpinning to school readiness, academic success, and overall well-being.

RATIONALE OF THE STUDY

Modern society stresses success in examinations as a central indicator in determining a student's future path in life. In India, with the march of democracy and the proposals for the compulsory free education at the elementary level a different view of the scope and responsibility of educators has emerged. This goal is envisaged in maximizing the achievement of all children. Scholastic achievement has become an index of child's future in this highly competitive world. It is only a drop in the vast sea of education and great many students would appear not to give themselves credit commensurate with their known or rated abilities. There is a highly competitive educational system that stresses the acquisition of knowledge at all costs by the students in Indian society. Students have to take many highly competitive centralized examinations, such as the Secondary (Madhyamik) Examination at Xth grade, Higher Secondary Examination (XIIth grade), various Entrance Examinations, etc. Performance in these high stake exams is crucial for seeking admission for higher education and to gain access to prestigious careers. Hence the achievement dream still exists, and researchers are continuing to launch investigations of academic performance in the context of what affects it, how it can be achieved, and how it can be sustained.

The psychological factors and their effects on academic situations are the growing concerns of the educational researchers and practitioners attributed to a notable lack of rigorous scientific inquiry in some important factors in the fields of students’ achievement. A review of the related literature reveals numerous studies addressing the psychological factors topics in general; while few studies are found to target the special psychological factors in educational situations. Although educational reforms and
efforts have been made in improving academic achievement, inadequate student performance continues to be a problem. Identifying the need of the society as well as the secondary schools, the researcher found it very urgent to explore the impact of achievement motivation, test anxiety and mental health into academic achievement of the students which cannot be overemphasized for a developing country like India as well as the State of West Bengal. It has continuously been facing wastage of human resources in various endeavors of national development. The reason obviously lies in the fact that there hardly exists any research, of this kind in West Bengal, unveiled the nature of impact of these factors in together on academic achievement of the students of secondary education under two different affiliating boards.

Several researches on achievement motivation explored that achievement motivation is significantly correlated with academic performance. According to these studies, people with high achievement motivation are high academic achievers. They always set high levels of aspirations. Achievement motivation is a strong predictor of high academic performance and efficient schooling. Motivational theorists agree that academic motivation positively influences academic achievement. Test anxiety plays an important role in the adolescent’s academic life and it accounts for variation in their academic performance, achievement or academic success. Though some the research findings argued that test anxiety is essential in mobilizing the potentialities of the students to their academic achievement more efficiently, but increased amount for prolonged period will have venomous effect on the mental health and academic achievement of the students. Test anxiety acts also to distort performance, and makes motivation fluctuate, focusing it constructively, or annihilating it totally, in a sense of uselessness and hopelessness. Research on the role of test anxiety on performance has repeatedly demonstrated that high levels of cognitive test anxiety promote the probability of notable declines in exam performance. For students in middle and high school, mental health risks and academic risks affect each other. Students who do poorly in school may have mental health risks, which adversely affect their achievement and in turn contribute to mental health risks.

The investigator found no research exists in West Bengal that specifically explores the impacts of test anxiety, achievement motivation and mental health among high school students under two different boards. This state and trend of research affairs does make heavy demands upon the selected study. Hence it is an urgent need to
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investigate the impact of factors such as, test anxiety; academic motivation and mental health affecting students’ academic achievement. It can be beneficial for providing better opportunities for high school students, not only for adolescents’ academic life but also their wellbeing at schools. Hence, the present study aimed at determining the Impacts of Achievement Motivation, Test Anxiety and Mental Health on Achievement of students studying at Secondary Level of Education in various schools affiliated by WBBSE and CISCE.

STATEMENT OF THE PROBLEM

The problem, selected for the present study, may be stated as –

“An Investigation into the Impact of Achievement Motivation, Test Anxiety and Mental Health on the Academic Achievement of Students at the Secondary Level under Two Different Boards.”

OBJECTIVES OF THE STUDY

The following objectives are laid down by the researcher to conduct his proposed study:

- To construct and standardized Academic Achievement Test for the students of class X under two different boards of secondary education.
- To construct and standardized Multi-dimensional Scale of Test Anxiety to find out the levels of test anxiety of the students of class X under two different boards of secondary education.
- To estimate the relative effect of achievement motivation of students of class X on their academic achievement.
- To estimate the relative effect of test anxiety of students of class X on their academic achievement.
- To estimate the relative effect of mental health of Students of class X on their academic achievement.
- To estimate the inter-relationship among achievement motivation, test anxiety and mental health of students of class X with different levels of academic achievement under two different boards of secondary education.
- To estimate the predictability and impacts of achievement motivation, test
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anxiety and mental health on academic achievement of students of class X under two different boards of secondary education.

To present the model equation for predicting academic achievement on the basis of the variations of achievement motivation, test anxiety and mental health of the students of class X under two different boards of secondary education.

NULL HYPOTHESES OF THE STUDY

The following null-hypotheses were constructed for the present study:

$H_0^1$: The impact of achievement motivation in terms of degrees on academic achievement of the students of class-X under two different boards of secondary education will not differ significantly.

$H_0^2$: The impact of test anxiety in terms of degrees on the academic achievement of the students of class-X under two different boards of secondary education will not differ significantly.

$H_0^3$: The impact of mental health in terms of degrees on the academic achievements of the students of class-X under two different boards of secondary education will not differ significantly.

$H_0^4$: The relationship between achievement motivation and test anxiety with respect of academic achievement of the students of class-X under two different boards of secondary education will not be significant.

$H_0^5$: The relationship between achievement motivation and mental health with respect of academic achievement of the students of class-X under two different boards of secondary education will not be significant.

$H_0^6$: The relationship between test anxiety and mental health with respect of academic achievement of the students of class-X under two different boards of secondary education will not be significant.

$H_0^7$: The relationship between achievement motivation, test anxiety and mental health with respect of academic achievement of the students of class-X under two different boards of secondary education will not be significant.
VARIABLES OF THE STUDY

The independent variables of the study were - Achievement Motivation, Test Anxiety and, Mental Health and the dependent variable was Academic Achievement of the students.

METHODOLOGY

Normative survey method of descriptive research is followed in conducting this investigation. As the prime concern of this research was to establish the regression model and present the prediction equation in predicting students’ academic achievement by their achievement motivation, test anxiety and mental health on the basis of the inter-relationship of these variables. Hence, the researcher adopted bivariate correlation and stepwise multiple regression method in analysing the data and in interpreting the research findings.

SAMPLE

Six WBBSE secondary co-ed schools and six CISCE secondary co-ed schools from Malda, North Dinajpur and Jalpaiguri districts were selected and from each every schools twenty boy and twenty girl students were included into the sample randomly. The total number of schools were 12 and total no. of sample were 480 among whom 240 were girls and 240 were boys. The ratio of the CISCE Board students and WBBSE Board students selected as the sample was 1:1.

TOOLS USED IN THE STUDY

The following tools were used for collection of data in the study:

- Academic Achievement Test.
- Deo-Mohan Achievement Motivation Scale.
- Multi-dimensional Scale of Test Anxiety.
- RCEB Mental Health Battery.
After the presentation of the descriptive statistics, the investigator verified the distribution to explore whether the data were parametric or non-parametric in nature and whether the data had required characteristics for conducting multiple regression analysis. The data were found parametric and all the assumptions required to be met for conducting multiple regression analysis were fulfilled by the data. Hence, multiple regression analysis was used.

The correlations between criterion variable and predictors were found statistically significant and quite large in nature. Achievement motivation and mental health showed positive relation with academic achievement. But test anxiety showed a negative relation with academic achievement. All the levels of the predictors also showed statistically significant correlation with academic achievement, except only the average level of all the predictors.

The major findings of the study in terms of the null hypotheses were as follows

The achievement motivation and low and high levels of achievement motivation significantly predicted academic achievement. The influence of achievement motivation was large and positive. It was found that the impact of achievement motivation in terms of degrees on academic achievement of the students of class-X under two different boards of secondary education differed significantly. The difference was found significant in terms of the gender and the boards of secondary education.

The test anxiety and its low level significantly predicted academic achievement. It was found that the impact of test anxiety in terms of degrees on academic achievement of the students of class-X under two different boards of secondary education differ significantly. The difference is significant only in terms of the gender, as the boards of secondary education shows an insignificant difference.

The mental health significantly predicted academic achievement. But, its levels were not found significant in predicting academic achievement. Therefore, it was interpreted that the impact of mental on academic achievement of the students of class-X under two different boards of secondary education differed significantly in terms of the gender of the students.
The achievement motivation, test anxiety, low level of achievement motivation, high level of achievement motivation, and low level of test anxiety predicted academic achievement significantly. The high level of test anxiety was not found significant in predicting academic achievement. It was found that the relationship between achievement motivation and test anxiety with respect of academic achievement of the students of class-X under two different boards of secondary education was statistically significant.

The test anxiety, mental health, and low level of test anxiety predicted academic achievement significantly. But, the high level of test anxiety, and the levels of mental health failed in predicting academic achievement significantly. It was explored that the relationship between test anxiety and mental health with respect of academic achievement of the students of class-X under two different boards of secondary education was statistically significant.

The achievement motivation, mental health, and low level of achievement motivation, two-way interaction of high level of achievement motivation and low level of mental health and two-way interaction of high level of achievement motivation and high level of mental health predicted academic achievement significantly. It was found that the relationship between achievement motivation and mental health with respect of academic achievement of the students of class-X under two different boards of secondary education was statistically significant.

The achievement motivation, mental health, test anxiety, low level of achievement motivation, high level of achievement motivation, and two-way interaction of high level of achievement motivation and average level of mental health predicted academic achievement significantly. It was explored that the relationship between achievement motivation, test anxiety and mental health with respect of academic achievement of the students of class-X under two different boards of secondary education was statistically significant.