



IMPACT OF SHADOW EDUCATION ON ACADEMIC PERFORMANCE IN MATHEMATICS

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Paper Received On: 21 August 2024

Peer Reviewed On: 25 September 2024

Published On: 01 October 2024

Abstract

Shadow education providing education other than the main stream education system. We call that main education system as the formal education system. Shadow education is known as the private tutoring or as supplementary support system. This system prevails in both the developed and the developing countries like India. The researcher has taken high school students as sample. The study determines how private tuition has impacted the academic performance of the students by exploring and analyzing their experiences in relation to connection with shadow education. 60 students of class X were taken as sample. Respondents were students. Questionnaire was provided with questions that shows the impact of shadow education. Cross-sectional study was done. Finding show a positive results. Engagement in shadow education effected the student's academic performance. Few School teachers and parents were also interviewed. Results show that there is a positive effects of shadow education.

Keywords: shadow education, regular school, private tuition, scores, performance

INTRODUCTION:

Shadow education refers to a phenomenon where students receive additional, private instruction outside of regular school hours, often in the form of private tutoring or cram schools. Shadow education goes in addition to or parallel to the formal education system. The extent to which shadow education exists in various countries which are developed or developing has long been a subject of academic inquiry throughout the world.

Data from the existing literature indicates that the growth of shadow education is generally upward-trending and has cropped up in higher rates. Parents spend money for the extra tuitions and therefore parent must be wanting good results from their children. The researcher has taken grade X students as the subject and their performance in the subjects that they have opted for tuitions. When students join any home or private tuitions they also evaluate themselves on the basis of the marks the scored in school examinations.

TITLE OF THE PROBLEM:

Impact of Shadow education on academic performance in Mathematics

SIGNIFICANCE OF THE STUDY:

Education is a process regarding teaching learning and achieving the aims of education as well as success in academic performance. Parents definitely want their child to grow up with more knowledge and thus ready to face the problems of life. Parents want them to perform well by scoring outstanding marks and thus get success in competition. This is one of the reasons why many students are getting engaged in private tuitions. The study will help the students, parents and the teachers to know that the shadow education system has some effects on learning and scoring better.

OBJECTIVE:

- (i) To study the difference in the marks scored after joining private tuition.
- (ii) To study the impact of shadow education on formal education system.

HYPOTHESIS:

H_0 : There is no significant difference between the average marks obtained by the students who are going tuition and those not going

H_a : There is significant difference between the average marks obtained by the students who have joined and who have not joined.

SAMPLE:

Investigator's study concerned only within the schools of Telco area. The researcher selected co-education schools with ICSE board with three sections. 60 respondents were selected as sample including 30 tuitions goer and 30 non -tuition goers Gender factor is not considered at the time of data collection. Stratified sampling has also been used for the selection of students from each group.

METHODOLOGY:

In this research the investigator adopted survey method to find the impact of shadow education on academic performance in mathematics of class X students in Telco area. Half yearly marks of the students are taken as data for calculation.

TOOL:

The data are collected by interviews, questionnaire and observation. The questionnaire was for students and some parents and some school teachers were also interviewed

STATISTICAL TECHNIQUE:

Statistical techniques such as percentage analysis and arithmetic mean were used.

DATA ANALYSIS AND FINDINGS:

Marks obtained by sample of 20 students each who have joined and not joined tuitions respectively studied and the following results were observed

Hypothesis

$$H_0: \mu_1 - \mu_2 = 0$$

$$H_a: \mu_1 - \mu_2 \neq 0$$

Where μ_1 = The mean marks of Group 1 who are not going tuition.

μ_2 = The mean marks of Group 2 who are going for tuition.

Since we have to compare mean of two different groups,

So we have to perform two –Sample t-test.

Two-sample T- test and

CI (Confidence Interval): Mathematics tuitions not going, Mathematics tuition going

Two –sample T test for Maths tuition not going Vs Maths tuition going

TABLE 1		
RESULTS	GROUP1(Maths Tuition Not going)	GROUP 2(Maths Tuition going)
N	30	30
Mean	46.5	59.6
Std. Deviation	15.6	13.7
S.E Mean	2.9	2.5

Difference = μ (Maths tuition not going) - μ (Maths tuition going)

Estimate for difference: -13.10

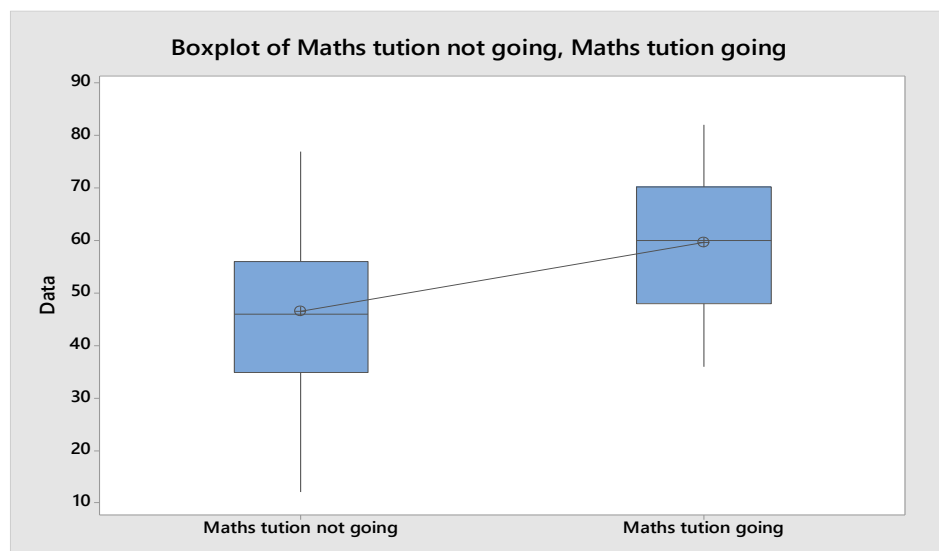
95% CI for difference: (-20.68, -5.52)

T-Test of difference = 0 (vs \neq): T-Value = -3.46

P-Value = 0.001 DF = 58

Both use Pooled Std. Dev = 14.6739

Since p value is lower than 0.005 so we reject null hypothesis. Hence μ_1 and μ_2 are having significant difference.



It is clear from the Box Plot that that the Mean marks obtained by the students who are going to tuition are more than the Mean marks of the students who are not going to tuition.

FINDINGS AND DISCUSSION:

There are many students in Telco who are motivated towards studies and are actively performing well in their academics as well as in extra-curricular activities. To cover the concepts thoroughly, extra effort and hard work and extra help is required in case of missed concepts from the school. Students go to private tuitions to enhance their knowledge and clear the doubts. This is just because they want to score high in their school examination and so better academic results are seen by them. The tutors always motivate them for their betterment and hard work. Private tutors give full attention to their students because they joined only to focus on the lessons. The researcher had also concluded after interviewing the parents and teachers that school education is not enough for the students to cope and move parallel with the present competitive scenario. Therefore

CONCLUSION:

Curriculum of the school is always for the overall development of the students. When they are in higher classes they need to be serious about their studies and completing homework. Students spend time in understanding the new concepts of the subjects when they are promoted to a new class. Students become serious for the subjects like science and mathematics which they try to understand the concept taught by the school teachers. Sometimes, they miss the studies and by any reason they cannot understand the topics. To cover those missed and unlearnt part of the context many students join tuition. Many join so that they can be updated in the studies at schools. During tuition time individual difference can be considered by the tutor and thus they get lot of help. Students ultimately score well in the school subjects especially mathematics. This Shadow Education system can be a result of various factors, such as:

Supplementary support: Students may seek extra help for better understand concepts or catch up on missed material.

Competitive Pressure: In today's scenario in every field it is seen that there is a competition organized. These competitions are much more in academic field which acts as a pressure on students mind. In highly competitive educational environments, students may feel compelled to receive additional instruction to stay ahead of their peers.

Curriculum Limitations: Regular school may not provide adequate coverage of certain subjects or topics, leading students to seek external resources.

Shadow education can have both positive and negative effects on students

Positive effects: Improved academic performance, improvement in scoring marks in the school, Increase in confidence and enhanced understanding of the subjects.

Negative Effects: Added stress and pressure, financial burden on families, difficulty in managing time etc.

Education has always been an important aspect in India and

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