## Original Research Article

# Factors affecting the Completion of Mathematics Homework in a Middle Secondary School in Bhutan

## **ABSTRACT**

Studies have identified some of the key factors affecting the completion of homework in the process of learning in schools. Schools and teachers often struggle motivating the school children in completing their homework at a stipulated time. This study was aimed at investigating some of the factors affecting the completion of home work by the students in Bhutan in mathematics. This study employed quantitative methodology and administered survey questionnaire among 79 students from classes VII to X randomly in one of the Middle Secondary Schools in Bhutan. Majority of the students (n=68, 96%) reported that they were too tired to work on their assignment after a hectic day's schedule followed by (n=66, 83.5%) lack of parental care. The study concludes that students are either overloaded or lacked motivation given no parental care. The study recommends proper planning of school activities and encourage active parental involvement in motivating students to complete their homework. Further studies involving larger number of students and schools in Bhutan would help formulate better homework management policy in motivating the school children in completing their homework for better learning.

Keywords: Factors, Homework, Mathematics, Motivation

## INTRODUCTION

Homework is an important task assigned to the students for supplementing their understanding on a particular concept. Homework is defined as the task that students are needed to complete at their home [1]. It is also [2] defined as "tasks assigned to students by school teachers that are meant to be carried out during non-school hours." [3] claimed that the homework is an extended work which helps to strengthen the students' learning. In the study conducted by [2], It was found that the number of advantages in completing the homework were improvements in factual knowledge, understanding concept, attitudes to learning, study skills, self-discipline, and problem solving skills.

Studies found and concluded that the homework improved academic achievement for high school students. It also helped the students to develop their study habits and encouraged the students to explore relevant resources from various sources. However, homework can become a significant issue if teachers and parents do not intervene and support the children. Some of the factors for not completing the

homework were; students did not understand the assignment, some lacked support at home, while others are making their choice not to complete the task [4].

## **Purpose**

Studies have identified some of the key factors affecting the completion of homework in the process of learning in schools. Schools and teachers often struggle motivating the school children in completing their homework at a stipulated time. Very often in school, it remained the subject of discussion during general staff meeting [5] and departmental meeting [6]. This study was aimed at investigating some of the factors affecting the completion of home work by the students in Bhutan in mathematics.

## LITERATURE REVIEW

Homework is a task assigned that has to be completed outside the classroom for supplementing the understanding on a particular concept. Assigning and evaluating the homework in class has become a part of the education system. According to [7] homework drills the students to make sure that the students understand the prerequisite skills for the day's lesson. It plays a very important role in improving academic performance [8] and [9]. The researchers [10] and [11] stated that homework acts as a channel of communication between teachers and parents, as well as students too. Another researcher [12] added that the existence of systematic assigning, collecting, evaluating and returning with constructive feedback on the homework is a sign of good classroom management.

Although homework gives additional work for teachers, it is necessary for effective teaching. [13] shared that the teachers have the best intention of evaluating students' homework with the appropriate rubrics. The students should be made clear on how their homework will be evaluated. Students feel that feedback provided by the teacher on homework notebook shows that the teacher cares about their work [14]. It gives an affirmation for their efforts put into completion of their homework on time. Under no circumstances the teacher should fail to assign, collect or evaluate the homework on time. Improvement in academics and learning are not the only purposes of homework, it instills a good work ethic into the students [15].

The study conducted by [16] found out that homework contributed in developing a sense of responsibility in the student. Further, [17] stated that homework helps to develop a sense of greater self-direction and self-discipline, time management, and more independent problem solving. Although homework has lots of benefits in students' learning [18] states that there is no way to show homework's effect on actual student learning. One of the researchers [18] found out that there is no significant correlation of homework completion to the academic achievement and personal growth of learning. Further it has been found out that homework has a negative impact on the academic achievement of economically disadvantaged students [15]. [17] has noted that students living in poverty have lots of problems completing homework.

## **METHODOLOGY**

This study employed quantitative methodology and administered survey questionnaire among 79 students from classes VII to X randomly in one of the Middle Secondary Schools in Bhutan. A survey questionnaire adapted from [12] was used to gather data from the participants asking relevant questions. The participants were selected purposely [19] among the students taught by the researcher.

## Research Site, Participants & Sampling

The participants were selected randomly from classes 7<sup>th</sup> to 10<sup>th</sup> grade at Arekha Middle Secondary School. There were 79 students participating in the study.

#### **Data Collection Tools**

The study adopted the 10th-item questionnaire developed by [20] and a 5-point Likert-type scale where 1 refers to "strongly agree" and 5 refers to "strongly disagree". Therefore, there are 5 classes with a class interval of 0.8 to find out the factors that affected the completion of the mathematics homework on time.

## **Data Analysis**

The data collected from survey questionnaires were analyzed using Statistical Package for Social Sciences (SPSS). Descriptive Statistics, namely frequency and percentage were calculated to determine the factors that affected the completion of the mathematics homework on time.

## **RESULTS**

## The factors affecting completion of home work

The highest ranked factor for not completing homework (n=68, 96%) was "I am too tired to work on my assignment after a hectic day's schedule." followed by (n=66, 83.5%) "My parents do not care if I do my homework assignments" (Table 1). Next highest ranked were (n=66, 70.8%) "The assignment is too complicated that it eats up my time looking for other resources" and "Teachers give too many requirements other than assignment" (Table 1). On the other hand, the lowest rank reason was (n=3, 3.8%) "I misplace the instructions because I don't write them in my notebook" followed by (n=14, 17.8%) "The subject matter does not appeal to me" and "I prefer to network with my friends and play with my mobile phone because it's more interesting" (Table 1)

Table 1 The factors affecting completion of home work

Item	Frequency	%	Rank
I'm too tired to work on my homework after a hectic day's schedule	68	96	1
My parents do not care if I do my homework assignments	66	83.5	2
The assignment is too complicated that it eats up my time looking for other			
resources	56	70.8	3
Teachers give too many requirements other than assignment	56	70.8	4
I do not know the answer because the teacher's instructions are not clear		60.8	
	48		5
I prioritize working on my homework and assignments needed for the next day	36	45.6	6
I don't understand the lesson	34	43	7
The subject matter does not appeal to me	14	17.8	8
I prefer to net with my friends and play my mobile phone because it's more			
interesting	14	17.8	9
I misplace the instructions because I don't write them on my notebook	3	3.8	10

## DISCUSSION

The highest ranked factors affecting the completion of the homework was the students were overburdened with school tasks and hectic day schedule. [20] and [21] also found out that 78% of the participants agreed the students were overburdened by homework. Given homework is the task assigned by teachers that gives them the exposure in learning new concepts or information [22] teachers will have to assign homework. However, our finding suggests need to minimize the number of questions while assigning homework to the students or managing school activities properly.

The second highest ranked factor affecting the completion of the homework by the participant was lack of parental support during the completion of homework. Past studies (e.g. [23]; [24]; [25]) and [26] have concluded that parental support in completing homework is very important as parents spend more time with their children. However, [27] found out the challenges of parents to assist the students in completing homework in case the parents are uneducated.

The third factors affecting the completion of homework was it requires time management to cope with the challenges of getting the task done on time. As the tasks were assigned to the student as the follow-up of the lesson learned and to evaluate their understanding, students should be able to exhibit their learning. This study supports earlier findings by [28]; [29] and [30] where time management affected the completion of homework on time.

The study conducted by [31]; [20]; [30] and [28] found out that most of the participants shared that the factor would be subject itself. However, this study found that difficulty and time spent on social media were second lowest ranked reasons and misplacing homework instruction was the lowest ranked reason.

More studies involving different schools in Bhutan would be required to explain this reason. Probably, involvement of researcher in teaching this subject to the research participants could have influenced the way they responded. However, if reason is due to lack of interest then immediate feedback to the task would help develop interest in the subject and motivate the students in completing their work on time [32].

## CONCLUSION

Many of the students found it difficult to complete the homework on time due to the overburdened school tasks, lack of parental support at home, time management issues, teachers providing them with too many requirements other than assignments with no clear instructions and the toughness of the subject. Providing competency based learning activities with lesser homework is recommended. Initiate Parenting programs for advocacy to support the students in completing homework.

## **CONSENT AND ETHICAL APPROVAL**

Written approval to conduct the study in the school was obtained from the school administration and respective class teachers before data collection. Moreover, consent letters were duly signed by all the participants before attending the survey questionnaire.

## **LIMITATION**

The current study focused the students of only one Middle Secondary School involving Mathematics subject and the sample in this study was relatively small. It cannot be generalized to students of Bhutan and worldwide. The methodology employed in this study is limited to quantitative method only.

## RECOMMENDATION

A further study with involvement of students, teachers and parents nationwide for triangulation is recommended. The conduct of further research using mixed mode method is recommended which would give more authentic factors. It is also recommended that the teachers provided students with lesser homework centered on competency based learning for better learning in school. The other recommendation that would help students enable completing homework on time is advocating parents and providing the space of ownership for supporting the students.

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