

ATTITUDE TOWARDS ONLINE CLASS INRELATION TO MATHEMATICS LEARNING AMONG SECONDARY STUDENTS

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Abstract

Students' attitude towards mathematics has been a factor that is known to influence students' achievement in It has been established that students' attitudes toward mathematics can have an impact on their mathematical achievement. The goal of this study is to determine how pupils feel about mathematics and whether there are any differences between students of different genders in this regard at a particular Maldivian school. A survey asking about students' attitudes toward mathematics was given to 200 secondary pupils in total. The pupils provided answers to questions on their own level of confidence in mathematics and how useful they thought it was. The findings indicate that there is no gender difference in the students' attitudes and that their level of positive attitude toward mathematics is average. Students' attitude towards mathematics has been a factor that is known to influence students' achievement in

Introduction

Understanding maths is a crucial skill in today's world (Baroody, 1987). It is a tool that we can utilise in our daily lives to get through the challenges we confront (Bishop, 1996). As a result, math has long been regarded as one of the most crucial core subjects in the curriculum. The likelihood of teaching mathematics in schools and colleges worldwide is higher than that of any other topic (A. Orton, D. Orton, & Frobisher, 2004). Standardized tests and evaluations, however, show that students don't perform at the level that is expected.

Over time, the issue of student underachievement in mathematics has spread to worry all nations, rather than just a few (Pisa, 2003). Maldivian children have consistently performed very poorly in math.

According to Ministry of Education of Maldives, only 28.4% of students who have participated in GCE O level

Cambridge examination in 2007 have passed above "C" grade. The results of 2008 also showed similar kind of trend where 66.8% of students getting grades below the expected level (Ministry of Education, 2011). These alarming results divert the attention of researcher to find out the reasons for the low performance of Maldivian students in mathematics. However, Maldives do not have any research conducted on this area suggesting reasons for low performance of the students.

Need and Importance of the Study

Currently, the usage of applications in learning and teaching processes has risen due to the online class style brought about by COVID 19. Finding out how secondary students feel about taking online classes in relation to learning mathematics is the main contribution of this study. The students may be reached extremely effectively with this online class strategy. The pupils can quickly access subject knowledge through this way. Each student follows a distinct path when studying mathematics online. Secondary students' mathematical learning is enhanced by technological support. Online math classes encourage a shift in the teacher-learner dynamic and provide unrestricted access to network resources. For use with secondary pupils, this approach is regarded as successful. The use of online classes improves motivation, autonomy, participation, mathematical concepts, outcomes, and grades.

Objectives of the Study

- To determine whether there are any gender-related significant differences in secondary students' attitudes on learning mathematics in online classes.
- To determine whether there are any notable differences in secondary students' attitudes regarding online learning in terms of localised mathematics instruction.
- To determine whether there are any notable differences in secondary students' attitudes toward taking online classes in terms of where in the school they learn mathematics.

Hypothesis Formulated for the Study

- There is no discernible gender difference in secondary students' attitudes regarding online classes related to learning mathematics.
- There are no appreciable differences in secondary pupils' attitudes regarding online instruction in terms of localised mathematics learning.
- There are no appreciable differences in secondary students' attitudes toward online instruction in terms of learning mathematics based on where they attend school.

Terms and Definitions

Online Class

According to Hodges et al., creating the necessary materials for online teacher training takes time. Bojovic et al., Chakraborty, and other researchers found that teachers still lack confidence in using online assessment tools. According to Aguilera-Hermida, teachers' experiences can be closely related to students' experiences.

Secondary Students

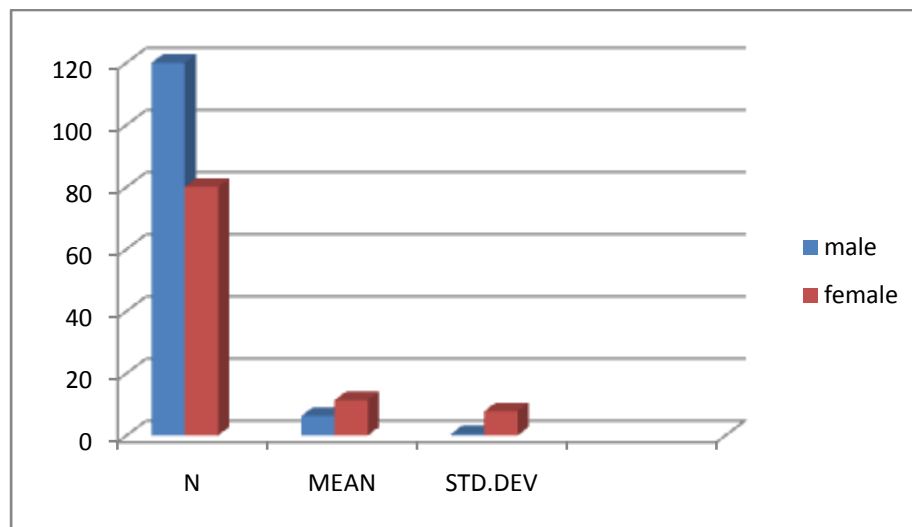
The Madurai district's secondary school pupils are in the grade of education known as secondary students, which covers standards 1X through X11. Like government schools and government-aided schools in Madurai, these institutions could be connected. Data was gathered from 200 secondary school pupils in 6 schools in the Madurai district.

Hypothesis 1

There is no discernible gender difference in secondary students' attitudes toward online classes related to learning mathematics.

Table 4.1 Mean, S.D and 'T' Value for the Significant Difference Attitude Towards Online Class in Relation to Mathematics Learning in Terms of Gender

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Male	120	6.27	0.448	1.95	1.96	Not significant
Female	80	11.37	1.931			

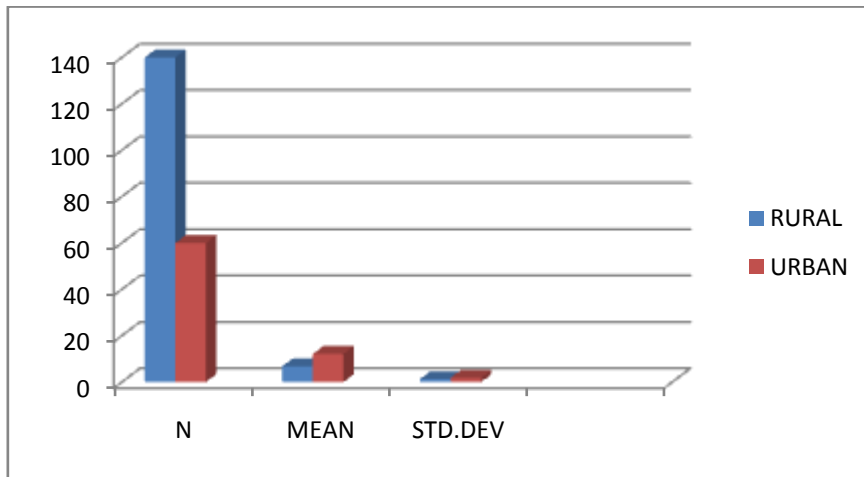


Hypothesis No: 2

There is no discernible change in secondary pupils' attitudes regarding online classes in terms of learning mathematics locally.

Table 4.2 Mean, S.D and 'T' Value for the Significant Difference Attitude Towards Online Class in Relation to Mathematics Learning in Terms of Locality

Locality	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Rural	140	6.821	1.26	1.06	1.96	Not significant
Urban	60	12.13	1.76			

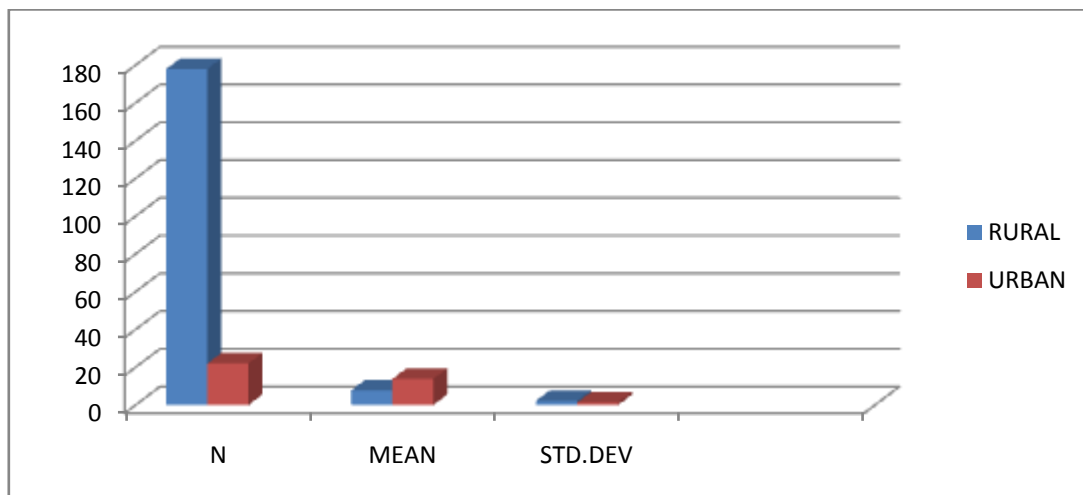


Hypothesis No: 3

There is no discernible difference in secondary students' attitudes toward online classes in terms of learning mathematics based on where they attend school.

Table 4.3 Mean, S.D and 't' Value for the Significant Difference Attitude towards Online Class in Relation to Mathematics Learning in Terms of School Location

School location	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Rural	178	7.84	2.28	1.19	1.96	Not significant
Urban	22	13.8	1.32			



Recommendations

The study's results are useful for classroom instruction on a daily basis. The findings suggest that Direct Experience Method might be implemented in classrooms for online learners. The Direct Experience Method encourages better comprehension and retention, which enhances the math skills of the concerned learners. As a result, the Direct Experience

Method could be used in all educational settings, particularly for the benefit of students who experience serious learning difficulties.

Conclusion

Since the students' favourable attitude toward mathematics is at a medium level, it can be concluded from this research that there may still be potential for development. It's interesting to note that respondents to this study have a generally positive attitude, despite Maldivian students' lower math performance. The study also demonstrates that there are no appreciable differences between male and female students in terms of their attitudes toward mathematics. Therefore, there is no attitude disparity between genders. It is strongly advised that every effort be made to change students' attitudes about mathematics and that additional research be done to identify the elements impacting students' attitudes should. Additionally, research could be done to determine whether there is a connection between student behaviour and academic performance in Madurai's schools.

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