



“A Study Of Mathematical Interest Of Class 8th Students Studying In Parishadiya Upper Primary Schools In Pilibhit District”

Megha Agrawal, (Lecturer, District Institute of Education and Training, Bisalpur, Pilibhit)
Darvesh Kumar, (Principal, District Institute of Education and Training, Bisalpur, Pilibhit)
**Mahendra Kumar Singh (Joint Director of Education (Finance), Directorate of Education,
Prayagraj)**

Abstract

Mathematics has a very important role in modern education and it also plays a crucial role to develop logical thinking, problem solving skills and the ability to analyze situations. One of the key factors that influence how students engage with mathematics is their level of interest. This interest can significantly affect how long they stay involved with the subject, their academic performance and their decisions about future careers, especially in science, technology, engineering and mathematical fields. The purpose of this study was to compare the levels of interest in mathematics among class 8th students with respect to their gender. The data for the present study has been collected from 100 students (50 boys and 50 girls) using simple random sampling technique. For the collection of data Mathematical Interest Inventory by Dubey was used to measure the mathematical interest. For the analysis of data t-test was applied to find out the significant difference between two groups i.e. boys and girls.

Introduction

Mathematics plays a crucial role in children's education from ancient times as it imparts essential life skills. The National Policy on Education (2020) has highlighted the significance of Mathematics in School Education. So, Mathematics is an essential subject for students in upper primary schools. A primary objective of mathematics education is to cultivate a lasting passion and confidence in the discipline. Gender has been a subject of considerable attention and discussion in the area of mathematics education. Historically, stereotypes and biases have indicated that males have greater mathematical skills and interest than females. These beliefs can influence students' self-image, assurance, and enthusiasm, possibly resulting in differences in levels of interest in mathematics. Nonetheless, it is essential to scrutinize and question these beliefs to cultivate a more inclusive and fair educational space for every student. Among the various factors influencing interest, gender has been widely studied. Research on gender and mathematical interest has yielded mixed findings. Frenzel, Goetz, and Pekrun (2007) found that girls often reported less enjoyment and interest in mathematics compared to boys, shaped by classroom practices and social expectations. Else-

Quest, Hyde, and Linn (2010), in a meta-analysis of international data, concluded that performance differences between genders were negligible, but boys expressed higher confidence and interest. These results stress the importance of distinguishing achievement from interest. Hyde and Mertz (2009) further showed that given equal opportunities, girls demonstrated performance and interest levels equal to or greater than boys, challenging stereotypes of boys' natural superiority in mathematics. In the Indian context, Singh (2018) reported that boys generally showed greater mathematical interest, attributing this to parental expectations and societal perceptions of mathematics as a male domain. The results of present study are in accordance with numerous studies demonstrating the influence of gender on the Mathematical Interest of students.

Importance of present study

The research paper titled " **A study of Mathematical interest of class 8th students studying in parishadiya upper primary schools in Pilibhit district** " aims to investigate the significance of mathematical interest among class 8th students of upper primary school with a specific focus on gender differences. The need for this study arises from the crucial role that mathematical interest plays in shaping students' learning outcomes, persistence, and future career aspirations. School years hold significant importance, as the perspectives on mathematics developed during this period frequently carry over into advanced studies and career decisions. While earlier studies have looked into gender disparities in math performance, there are comparatively fewer investigations into the differing levels of mathematical interest between boys and girls, particularly in the Indian context where societal expectations and cultural norms significantly shape learning behaviors. Recognizing the ways in which gender influences mathematical interest can offer important insights for teachers in creating interventions that foster fair learning opportunities. This research can help create supportive classroom settings by recognizing gaps and tackling stereotypes, allowing both boys and girls to cultivate lasting interest and assurance in mathematics.

Objectives

For the present study following objective was formulated:

To find out the differences in interest in mathematics of class 8th students with regard to their gender.

Hypotheses

On the basis of above stated objectives following hypotheses was framed:

There is no significant difference between boys and girls on the variable of mathematical interest.

Methodology

For the present study descriptive survey method was used to examine the mathematical interest of class 8th students.

Sample

For the study, a sample of 100 students (50 boys and 50 girls) studying in class 8th in parishadiya upper primary schools was drawn at Pilibhit district (U. P.) by employing random sampling method.

Tool

For the present study, Mathematical Interest Inventory by L. N. Dubey was used to measure the mathematical interest of class 8th students. This inventory only indicates the extent of like and dislike to a given group of activities or subjects. There are 40 items in the used inventory. There was no right or wrong answers. 20 items in the inventory indicates liking and 20 items indicates disliking for mathematics. The

positive response on the item indicating liking has been awarded one mark and for negative response on the same item has been awarded zero. The reverse order has been used for the items indicating disliking. The questionnaire was quite valid as ensured by its content validity.

Collection of Data

The researcher personally visited the sample schools and collected the data from students of mathematics studying in class 8th of parishadiya upper primary schools in district Pilibhit.

Analysis of Data

The data were analysed by using statistical technique (Mean and Standard Deviation (SD)) for describing, analysing and interpreting the situational analysis of achievement of boys and girls of class 8th of upper primary school in district Pilibhit. Comparative achievement of students was found by applying t-test. Its description is given in Table1.

Ho1: There is no significant difference between boys and girls on the variable of mathematical interest.

Table 1: Group statistics regarding mathematical interest

Variable	Boys		Girls		t- value
	Mean	S.D.	Mean	S.D.	
Mathematical interest	28.4	5.12	26.28	5.15	2.07

According to Table 1, the resulting t-value (2.07) is greater than the table value (1.98) at the 0.05 level of significance. This indicates that the level of mathematical interest between boys and girls is statistically significant. Therefore, it can be concluded that gender has a significant effect on mathematical interest. So, the null hypotheses **Ho1** is completely rejected. On analysing the data, it is found that boys in this study demonstrated comparatively higher mathematical interest than girls.

Conclusions

The findings of the study led to the following main conclusions. Mathematical interest among boys and girls shows that the overall performance of students significantly differed. Findings show that the performance of boys was better than performance of girls. On the basis of findings of the present study this could be suggested that the girls who show less interest in mathematics should be provided additional support and motivation as well as gender-inclusive teaching and learning resources should be developed. Girls should be guided to connect in mathematics with real-life applications and self-study at home through games, puzzles and fun activity.

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