

## A comparative study of Arithmetic skills of boys and girls of IX class studying in English and Hindi medium schools

■ USHA KOTHARI

Address for correspondence:

**USHA KOTHARI**

Department of Home  
Science, Faculty of Science,  
Jai Narain Vyas University,  
JODHPUR (RAJASTHAN)  
INDIA  
[ushakothari@gmail.com](mailto:ushakothari@gmail.com)

### ABSTRACT

The present study is a comparative study to find out level of arithmetic skill among boys and girls of English and Hindi medium studying in class IX. The purposive sampling technique was used in the selection of 200 samples-100 each from both English and Hindi medium schools distributing 50-50 equally among boys and girls. The objective was to compare the level of arithmetic skills of boys and girls studying in English and Hindi medium schools. The study concluded that the boys of English medium showed more grade appropriate mathematics in comparison to boys of Hindi medium school. The result highlights that there was no significant difference between girls and boys of English and Hindi medium on arithmetic assessment scale *i.e.* in concept, operation and application.

**KEY WORDS :** Arithmetic skill, Arithmetic ability, Grade level

**How to cite this paper:** Kothari, Usha (2011). A comparative study of Arithmetic skills of boys and girls of IX class studying in English and Hindi medium schools. *Asian J. Home Sci.*, 6 (2) : 250-253.

**Article chronicle: Received:** 27.08.2011; **Accepted:** 15.11.2011

A mathematical skill is the ability to represent or process information in one or all of the many mathematical domains (e.g., geometry) or in one or a set of individual competencies within each domain. Children used a greater variety of problem-solving strategies during calculations, including sophisticated strategies more typically observed in older students. Individuals display a mathematical disability when their performance on standardized calculation tests or on numerical reasoning tasks is comparatively low, given their age, education and intellectual reasoning ability.

According to psychologists, the mathematical abilities that are required for narrative are pivotal in being able to think mathematically, so that stronger those abilities are, the better equipped an individual will be to do mathematics.

Although the study of mathematical cognition is hardly new, recent and renewed interests in delineating cognitive influences on mathematical ability coincides with efforts to promote successful mathematics achievement for all students, including children with learning difficulties in mathematics. In this paper, a few of the neuropsychological factors have been considered that correlate with mathematics ability, some that mediate cognitive correlates of mathematical performance, and others that predict later mathematical achievement outcomes. Relatively new methodological approaches allow oneself to look beyond static group differences between children with versus without mathematical disabilities.

Educationalists propose that teachers' knowledge of these factors can serve to enhance their ability to identify children at risk for poor math achievement, and to thereby determine which children may benefit from instructional modifications of mathematics activities aimed at reducing processing demands. The objectives of the study was to compare the level of arithmetic skills of boys and girls studying in English and Hindi medium schools. It was hypothesized that English medium boys and girls will show significant difference in arithmetic skill as compared to Hindi medium boys and girls.

### RESEARCH METHODS

#### Sample:

The purposive sampling technique was used in the selection of sample for present study. Sample size consisted of total 200 samples-100 each from both English and Hindi medium schools distributing 50-50 equally among boys and girls.

#### Tools for the data collection:

Education assessment tool (Arithmetic)- Child guidance centre and Adolescent guidance service centre (National Institute of Public Co-operation and Child Development), New Delhi was used for the study which is the derived form of Comprehensive inventory of basic skills by Albert. H. Brigance. The test was administered in a group of 15-20 students at a time.