AN ANALYTICAL STUDY OF COGNITIVE STYLE:  
A KEY DETERMINANT OF MATHEMATICS ACHIEVEMENT  
AMONG SCHOOL STUDENTS

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ABSTRACT:
The present study was undertaken to study the effect of cognitive style on mathematics achievement of secondary school students. Mathematics achievement was treated as dependent variable whereas; cognitive style and gender were treated as independent variables. A sample of 400 secondary school students was selected through multi-stage random sampling technique. Cognitive style (CSI) test developed by Jha (2011) [10] was used to measure cognitive style of students. Mathematics Achievement Test (MAT) developed by Singh and Jaidka (2015) [17] was used to assess the mathematics achievement of secondary school students. The obtained data were analyzed using Two Way ANOVA with 5×2 factorial design. Levene’s Test of Homogeneity of Variance was also applied to test the assumption of homogeneity of variance for ANOVA. Main effects of cognitive style and gender on mathematics achievement of secondary school students were found to be significant. Further, significant interaction effect of cognitive style and gender was also reported on mathematics achievement of secondary school students. Curriculum experts should develop an effective instructional curriculum that will facilitate the identification, recognition and development of students’ cognitive ability which in turn contribute to their personal, academic and career success.

KEYWORDS: Gender, Cognitive Style and Mathematics Achievement.

REFERENCES


