

**Application of Mahalanobis Δ^2 on Achievement Tests on Mathematics: A Study on
Higher Secondary Level Students**

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Abstract

Present work deals with the problem addressing the nature of achievement in mathematics for two groups of higher secondary level students. Objective of this study was to find out the difference in achievement in mathematics for different learners in different grades in higher secondary level of Assam, India. Descriptive and inferential statistics like central tendency, correlation, t-test and Mahalanobis Distance were used to study the problem of achievement. Achievement in tenth, eleventh and twelfth grade for two different academic year and two different colleges were taken as sample of the study. Mahalanobis distance is considered to test the dynamical nature of achievement of two groups of learner. It is concluded that there is a similar decreasing nature of achievement in mathematics for two groups of learners from different colleges.

Key words: Mahalanobis distance, mathematics, higher secondary level, achievement test