

INVESTIGATING DISCREPANCIES IN RELIABILITY COEFFICIENT OF SURVEY OF STUDENTS' ATTITUDES TOWARDS STATISTICS (SATS 36) FOR A PAKISTANI SAMPLE

GHULAM MUHAMMAD ASHRAFI
Department of Education
University of Sargodha

MUHAMMAD ILYAS TARIQ
Founding Director
University of Sargodha

***ABSTRACT_** This study aims to investigate discrepancies in reliability coefficient of survey of students' attitude towards statistics in Pakistani sample. The study was descriptive in nature and survey design was used to collect data. The sample consisted of 201 undergraduate, graduate, and postgraduate of computer science, mathematics, and education students enrolled at University of Sargodha, Sub Campus Mianwali in statistics course. The instrument SATS 36 proposed by Schau (2003) was adopted. It contains six components i.e. affect, cognitive competence, value, difficulty, interest, and effort pertaining to the student's attitude towards statistics. The Cronbach's alpha (internal consistency) value of the SATS 36 was found to be 0.862. A difference was noted between Cronbach's Alpha values in this study and the study conducted by Schau (2003) not only the composite but also in the sub components. Statistical techniques to measure the reliability estimates were applied to analyze the item statistics, Inter-item correlation matrix, correlation matrix, factor analysis, item-total statistics, and scale statistics of attitudes. Furthermore, descriptive analytical approach was applied to analyze attitude of students across gender, age, discipline, admission in program, and residence. It was concluded that in Pakistani sample, difference in Cronbach's Alpha and other statistical measures were due to context, scale, sample and sample size, poor research culture, learning environment.*

***KEYWORDS:** Cronbach's alpha, reliability, item statistics, Inter-item correlation matrix, item-total statistics, and scale statistics.*