PONDICHERRY UNIVERSITY

DEPARTMENT OF STATISTICS

Ramanujan School of Mathematical Sciences

All Students, Research Scholars and Faculty Members are cordially invited for Expert Lecture Series Program

on

Large-sample tests for comparing Likert-type scale data

Delivered By

Dr. Arindam Sengupta
(Associate Professor and Former Head)

Department of Statistics, University of Calcutta, Kolkata

Schedule and Venue of the Program:

Date	Time	Venue
January 28, 2019	02:15 pm -03:45 pm	Seminar Hall
	Tea-Break	Dep. of Statistics, RSMS, PU
	04:00 pm-05:30 pm	

Dr. Navin Chandra
(Co-ordinator)

Dr. P. Tirupathi Rao
(Convener and Head)

Large-sample tests for comparing Likert-type scale data

ABSTRACT: Likert-type scaling involves ordinal data compiled by frequencies into categories; with existence of underlying continuous latent variables assumed. In comparing two independent sets of Likert-type scale data with responses on the same items, often the two sample t-test or Mann-Whitney test is used. Statistical assumptions behind the t-test are however not valid in the context of Likert-type scale data.

We propose asymptotic tests for comparison of two independent sets of Likert-type scale data using large-sample properties of the class boundaries of the latent variables that determine the categories. Both considerations of differences in perceptions of the categories and differences in views with perceptions remaining same, are covered. The proposed tests are compared with regard to asymptotic efficiency with the two sample t-test and Mann-Whitney U test.