1163-62-549

Maxwell D Lovig* (maxwelllovig@gmail.com), 78 Arrowhead Way, Woodbury, CT 06798, and Sumaita Rahman (sumaitasr@gmail.com), 421 E Hendrix St. Apt C, Greensboro, NC 27405. A Mixture Binary RRT Model With A Unified Measure Of Privacy And Efficiency.

In this study, we introduce a mixture binary Randomized Response Technique (RRT) model by combining the elements of the Greenberg Unrelated Question model and the Warner Indirect Question model. We also account for untruthful responding in the proposed model. A unified measure of model efficiency and respondent privacy is also presented. Finally, we present a simulation study to validate the theoretical findings.

(Received September 09, 2020)