Estimation of Finite Population Variance in Presence of Random Non-Response Using Auxiliary Variables

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Abstract

This paper proposes some general estimators for finite population variance in presence of random non-response using an auxiliary variable. All possible non-response cases are considered here. The properties of these estimators are studied. Finally, a simulation study has been done to compare their performance.

Keywords: Randomized Response, Ratio and Regression Estimators, Simple Random with or without Replacement.