



Latent Class Analysis with Missing Data under Complex Sampling: Results of a Simulation Study

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This paper presents the results of a simulation study to evaluate the performance of full information maximum likelihood (FIML) with latent class analysis (LCA) under complex survey sampling. We will simulate cluster samples from stratified populations using informative selection probabilities. Missing values will be induced under both MAR and NMAR nonresponse mechanisms for both the indicators and the grouping variables. Latent class models will be fit and evaluated under both mild and severe violations of the MAR assumptions in order to investigate the properties of the FIML approach. The simulated populations and missing data mechanisms will be based upon real data from the U.S. National Crime Victimization Survey, a nationally representative household survey aimed at measuring crime victimization in the United States.