Split Questionnaire Design for Panel Surveys

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Survey research is a backbone for obtaining information from the population for making sound policy decisions. Due to increasing demand for information, the survey questionnaires have become longer and burdensome which may lead to nonresponse and measurement error. One option is to split the questionnaire into several components and only administer a sample of components to each sampled individual. The components can be assigned in a manner that will allow estimation of certain parameters. The unobserved components are multiply imputed using parametric, semiparametric or nonparametric models to several completed data sets. Each completed data set is then analyzed separately and the estimates and the standard errors are combined to form a single inference. This strategy reduces the respondent burden which may increase the response rate and reduce response errors. The split questionnaire has been applied and evaluated in some cross-sectional settings. This talk will explore the split questionnaire option in a longitudinal settings. Three design options will be evaluated: (1) Administering the same components across the waves; (2) Administering Different components; and (3) the rotation of the components in some systematic manner. The inference properties under these design options will be evaluated using simulated and actual data sets.

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