

# Comparison of Unit Non-response, Item Non-response, and Response Patterns across Modes in Public Statistical Surveys: Examination by the 7th National Survey on Family in Japan

SAITO Tomohiro and KIKUCHI Jun

In this study, we analyze the impact of different response and collection methods—interview collection, postal collection, and online responses—on three key aspects: (1) unit non-response, (2) item non-response, and (3) response patterns (measurement errors). This analysis uses the “7th National Survey on Family in Japan,” conducted in 2022, as a case study. The main findings are summarized below.

First, changes to the distribution and collection methods of the survey, including posting surveys to absent households, introducing postal collection, and enabling online responses, did not improve the overall response rate. Second, while the introduction of a mixed-mode survey did not increase the rate of missing responses for individual survey items overall, it was observed that married women had relatively high non-response rates for questions related to “birth” and “family consciousness” among online respondents. Third, of the 513 variables analyzed, differences in response patterns based on the mode of response were identified in only a limited number of cases: 11 items (2.5%) for postal collection and 37 items (7.2%) for online responses.

Keywords: National Survey on Family in Japan, mixed-mode surveys, unit non-response, item non-response, response pattern