Preparation Plans and Experiences in Mode Switching in Light of the COVID-19 Pandemic

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Surveys during the Early Stage of COVID-19 Pandemic

- COVID-19 has raised concerns in Taiwan since the late January 2020. Mask wearing and social distancing were soon enforced.
- The Panel Study of Family Dynamics, PSFD, started its wave-18 data collection on Jan. 9th using CAPI, and was affected immediately.
- All in-person interviews have been suspended between late March and late April. Roughly 20% of the respondents had not been interviewed in person at that time. In the end, the fieldwork period was extended from two months to four.



Surveys during the Early Stage of COVID-19 Pandemic

- While CAWI and virtual (face-to-face video) interviews for some respondents had originally been planned in order to reduce the cost, additional mode switching between CAPI and CAWI was also allowed.
- Virtual interviews were mostly conducted using communication applications for mobile devices.
- As a result, the questionnaires for PSFD were completed by about 78.5% of CAPI respondents (88.0% in the previous wave 2018) and 89.3% of CAWI respondents (69.0% in 2018), when calculating the number of completed questionnaires divided by the number of distributed ones.



Surveys during the Early Stage of COVID-19 Pandemic

- Suggestions at that time:
 - Strategies should come out quickly corresponding to national antiepidemic measures.
 - There are needs to allow extra time and personnel for fieldwork, to prepare for switching modes of data collection when available, and to expect lower response rates and more refusals.
- As all the scheduled surveys returned to normal since May, 2020, so did the ISSP 2020 Environment Module started in June. However, the impact of COVID-19 should be cautioned.



- Mode: PAPI for 2010 and CAPI for 2020.
- Sampling design for adults aged 18 or above:
 - 2010: Register-based sampling, using a stratified 3-stage probability proportional to size (PPS) sampling scheme: (1) urbanization level, (2) township and boroughs, (3) persons.
 - 2020: Address-based sampling, using a stratified 4-stage probability proportional to size (PPS) sampling scheme: (1) townships and boroughs, (2) level 1 dissemination areas (L1DA, N=77,019), (3) non-institutional or residential households, and (4) persons
- For data in both years, design weight and post-stratification weight are applied.

• A rough comparison of response rate, which is computed as: (No. of completed interviews)/(No. of issued sample)

| Year | Fielding date | Issued Sample | Completed Interviews | Response Rate |
|-------------------|-------------------------|---------------|----------------------|---------------|
| 2010 ^a | July-Sep,, 2010 | 4,602 | 2,209 | 48.00% |
| 2018 ^b | July, 2018 – Feb., 2019 | 4,096 | 1,842 | 44.97% |
| 2019 ^b | June, 2019 - Feb., 2020 | 4,054 | 1,926 | 47.51% |
| 2020 ^a | June-Dec., 2020 | 4,625 | 1,839 | 39.76% |

^a: Both 2010 and 2020 oversampled the Eastern region that has better environmental quality. ^b: The ISSP 2018 Religion and 2019 Social Inequality used register-based sampling design.





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The ISSP 2020 Environment Module

| Q. Compared to the situation before the COVID-19, has the following changed? | Increased a lot | Increased a little | About the same | Decreased a little | Decreased a lot |
|--|--------------------|-----------------------|----------------|-----------------------|--------------------|
| 1. Personal monthly income | 0.6% | 1.8% | 74.3% | 12.6% | 10.7% |
| 2. Family monthly income | 0.5% | 1.2% | 69.0% | 16.4% | 12.9% |
| 3. Family monthly spending | 1.1% | 5.9% | 72.9% | 17.3% | 2.8% |



Surveys Facing the "Real" COVID-19 Outbreak

- A real outbreak happened in the middle of May, a semi-lockdown is enforced when another panel survey, Taiwan Institute for Governance and Communication Research (TIGCR), has been collecting CAPI data.
- Lessons have been learned from the previous year:
 - Suspension from 20-28 May.
 - Preparation for virtual mode and web survey; telephone interview was given the lowest priority.
 - Contact respondents for mode switch. Link for web survey is provided in emails or mobile phone texts.
- The fieldwork took two and a half more weeks than originally planned.



Surveys Facing the "Real" COVID-19 Outbreak

- Until June 30th, about 83% of the issued sample were completed.
- The questionnaire was completed by 78% of CAPI respondents, 16.2% of virtual interviews, 1.1% of telephone interviews, and 4.6% of CAWI respondents.
- The CSR is capable of mode-switching strategy due to the use of an integrated, multi-mode computer-assisted interviewing system (multi-mode CAI system) developed by the center.



Concluding Remark

- For surveys during outbreaks or pandemic:
 - *Push-to-web* as a choice, if all conditions are suitable.
 - *Virtual mode* as an alternative for in-person interviews, although it has all the pros and cons of CAPI interviews.
 - *Push-to-APP* as another alternative for panel surveys, but technical issues need to be considered.
- Various designs of mixed-mode and mode switching bring challenges to cross-national research.





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