Session 4: Strategies for Hard to Reach Populations

After the three papers were presented, the discussant reviewed the presentations in light of some of her recent personal experiences. She talked about her experience working with the UN on social development goals, such as hunger disparities, climate effects, and how household surveys are still the preferred method for assessing progress toward these goals.

The discussant focused broadly on the need for researchers to employ the best methods possible for studying these hard to reach populations. These best methods include best practices in survey design, questionnaire design, sampling and recruiting.

The discussant noted that because of the nature of these populations, it takes significantly more effort to develop an adequate sampling frame, which often translates into a more expensive and time-intensive study. We are often therefore tempted to use a non-probability sample which limits our ability to make inferences. The LeBaron presentation touched upon using social media to reach these populations. This can be a potentially beneficial and cost-effective recruiting platform, but it needs to be monitored as once the population has been fully saturated, the yield from additional recruitment advertising is minimally effective and increasingly expensive. It is also often difficult to determine weights for samples yielded from these efforts given our inability to determine the frame of the total platform population. There also exists a tension between different research goals, e.g., population estimates versus observed affects over time.

Different social platforms had varied levels of success in reaching participants. There were also significant efforts needed to combat fraudulent participation. These included consent form amendments to clarify that participants would only be paid once, multiple verification methods (e.g., captcha or DOB and age consistency checks), changing the survey link on a daily basis, and closing down surveys overnight and restricting non-US IP addresses to prevent individuals from accessing the survey who were ineligible or intended to use the site for other purposes.

In addition to online platforms, one technique employed by the Hughes paper that focused on LGBTQ experiences was to locate and hire recruitment “Ambassadors”. These individuals were persons in the community who possessed the attributes the researchers were targeting for the sample, and they would be paid to recruit others like themselves using their local network and community connections. It is also important beyond the initial recruitment phase to maintain good contact information and methods for these populations in order to maximize sample for longitudinal reassessments.

Additionally, because of the scarcity of research and access to these populations, qualitative research can provide in-depth insights into the nature of the research topic, correlates and outcomes. The Hughes presentation detailed that they included open ended questions at the end of their survey about the healthcare topics most salient to the LGBTQ population. As a result of qualitative analysis of those items, a number of topics such a gender aware care and acknowledgement of cultural competence arose as key issues of importance that the research team would otherwise not have considered as topic areas.

Assumptions for these methods of data collection. Respondent-driven sampling is a probability-based sampling method under strong assumptions that are typically hard to meet in real-world applications (See work by Heckathorn). It requires respondents to report about members of their network, and the size and diversity of their network will impact the value of their sample contribution. For example, if the recruitment chain is short and narrow as opposed to long and wide, your sample is more likely to be a nonprobability sample (United Nations High Commissioner for Refugees, 2019a). Similarly, venue-based sampling methods can also be probability samples if certain robust assumptions are met (Baio et al., 2011, JOS).

One question that was asked about the Sheridan paper was how health affects were measured to be able to determine that non-respondents were less health than respondents. The presenter explained that the baseline health measures were used to demonstrate that those what were less healthy were more likely to drop out of the study. For the LeBaron study, an audience member asked what the effect may have been of using the ABS sample as a screening mechanism given the low response rate, and how those who did not return the screener may have differed from those who did. Patty said while they are still analyzing the data, there appears to may have been some correlation between nonresponse to the ABS screener survey and likelihood of having Hip Hop kids in the household.

Finally, discussion revisited earlier points about survey questions, and specifically about best methods for assessing demographic characteristics using screener questions. There was a recent special issue in the Journal of Official Statistics focusing on the measurement of sexual identity. An audience that suggested that screener questions are best designed by having and initial question with limited responses (e.g., Do you identify as heterosexual? Yes or No) and then follow-up questions with detailed options to fully delineate the response groups (e.g., Do you identify as transgender, pansexual, lesbian, gay, queer, asexual, cis-gender, etc.) Work from FCSM (Federal Committee on Statistical Methodology) reports support this approach as well. The main difficulty with measuring sexual identity in general is the rapidly changing landscape of descriptive terms and salient issues for sexual minorities. Terms that are salient at the time of survey design may not be relevant at the point of data collection.