

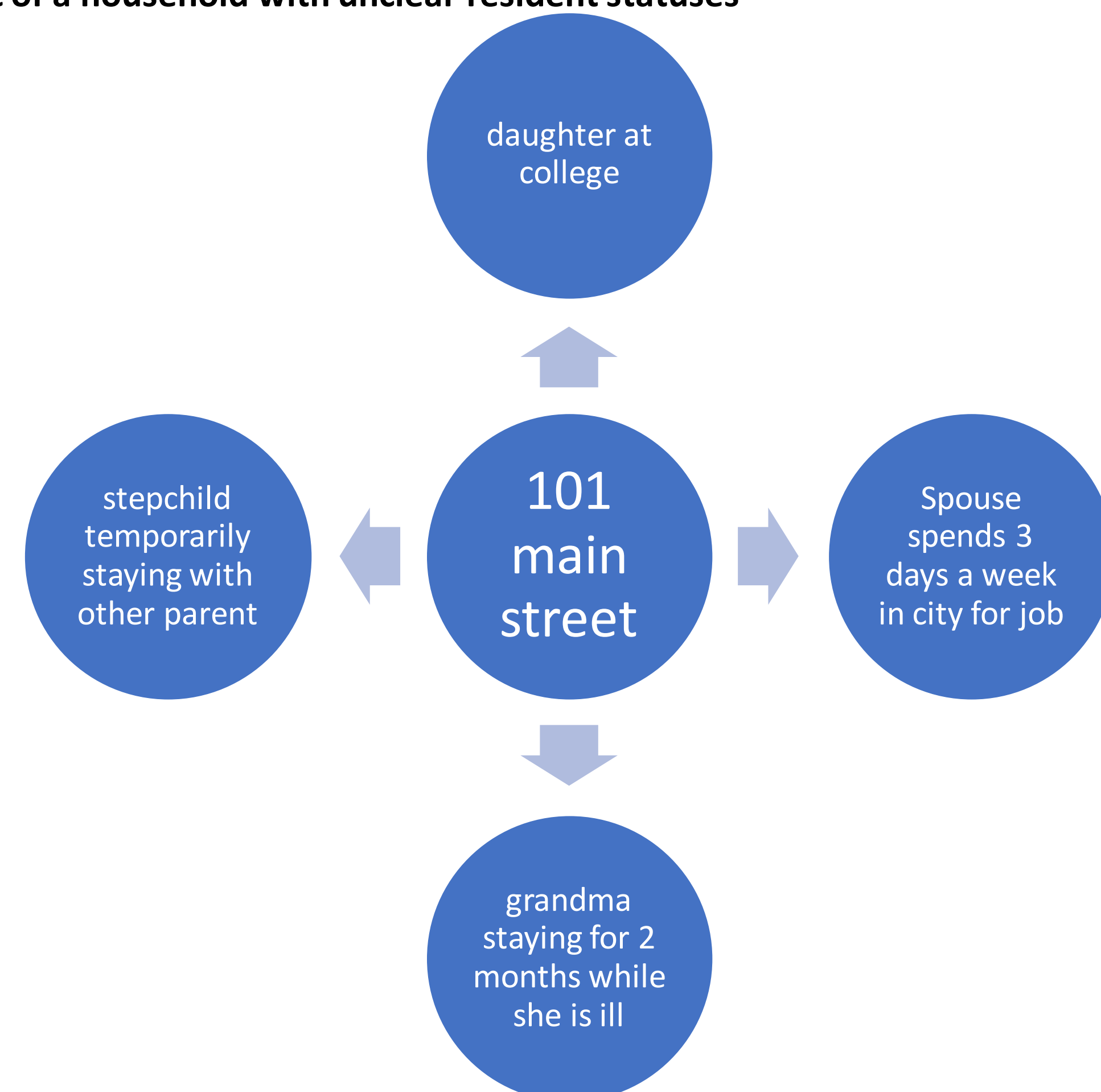
To List or Not to List? That is the Question: An Examination of Existing Research on the Challenges and Best Practices of Household Rostering

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Objective

- The most basic question that most household surveys begin with is, “who lives or stays here”, but this is an inherently complex issue for many people.
- People may live in multiple locations to commute for work, be away at school, be in jail, or they may be staying with family temporarily.
- Our research and forthcoming paper are a literature review of household rostering studies conducted by the US Census Bureau and other organizations.
- This research focuses on individuals erroneously included or excluded from a within sample housing unit, it does not focus on total unit non-response.

Figure 1. Example of a household with unclear resident statuses



Introduction

- The majority of household based federal surveys have found evidence of significant rostering errors (SIPP, NHIS, CPS, Decennial, and ACS).
 - In the 1990 Census it was estimated that 1/3 of gross omissions were due to listing errors (Hogan, 1993).
 - In the CPS, one study estimated 60% or more of person undercounts were missing from covered households (Shapiro, 1993).
- These surveys have tried to reduce rostering errors with a variety of methods: additional coverage probes (e.g. anyone at college, any babies?), interviewer instructions, different question order, definitions and examples, etc.
- Improvements have been made, but there is still evidence of rostering error in all these surveys.
- Even minor variations in methods can yield different person counts.
- In this poster we focus on four studies that took a closer look at this critical issue.

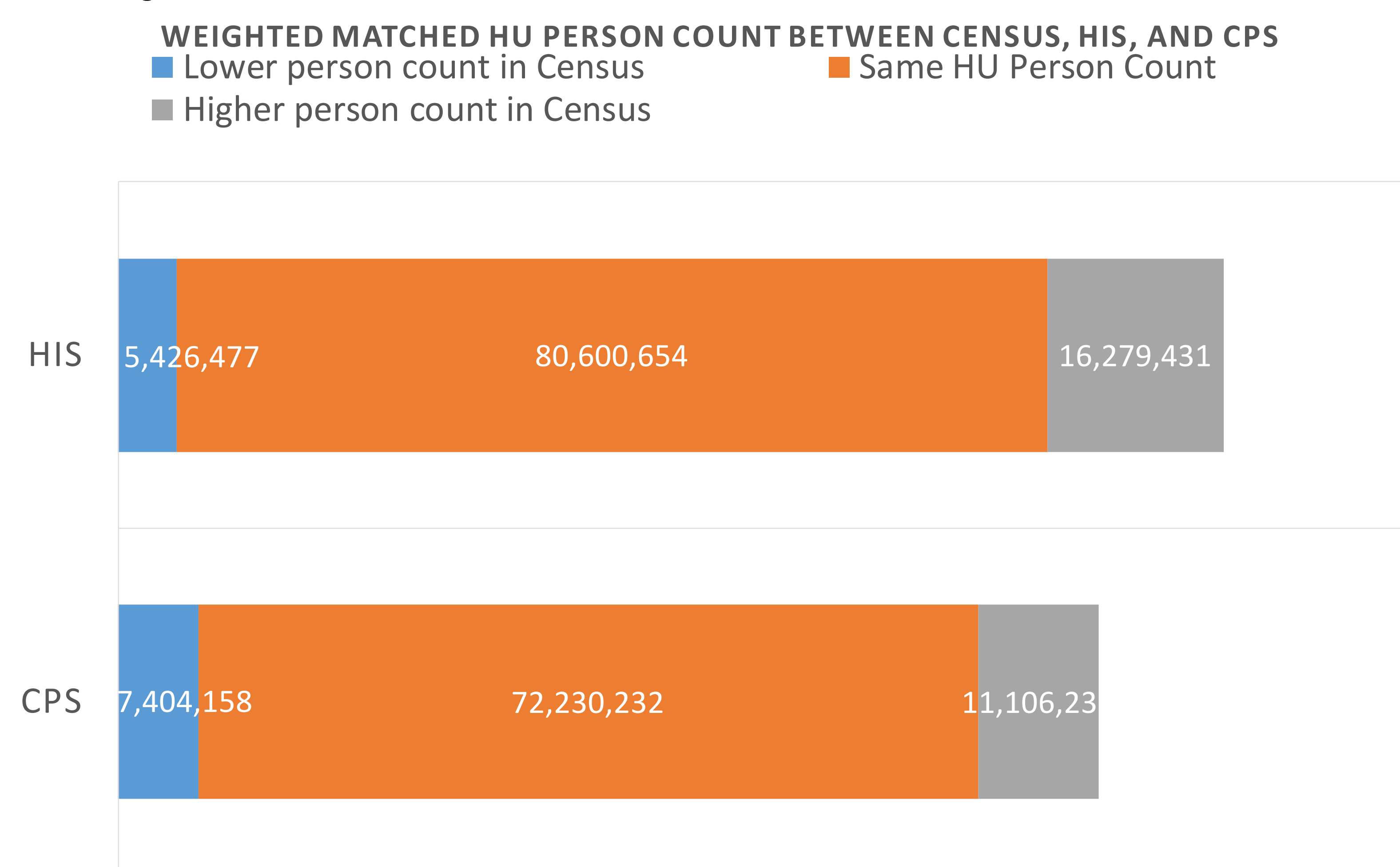
Big Challenge

- Two main reasons for listing errors: (1) deliberate omission and concealment (2) unintentional omission due to a) respondents being unsure whether to list someone b) disconnect between the respondent’s understanding of “who lives here?” and the intended meaning.

Diffendal 1993

- The housing unit person counts between the 1990 Census and the Current Population Survey (CPS) and National Health Interview Survey (NHIS) varied for over 20% of housing units.
- The 1990 Census results were matched by housing units to the CPS and NHIS samples from around the same time period. The housing units were weighted and the individual housing unit person counts were compared.
- The 1990 Census asks about “persons living or staying on April 1”, while the CPS and NHIS ask about “persons living here” with no reference period.

Figure 2. Number of Households Matched between 1990 Census, HIS, and CPS



Tourangeau 1997

- Providing additional coverage questions for complex living situations before asking who lives there helps respondents better understand who to include on a household roster. The option to remain anonymous only reduces under-coverage for black males.
- Three versions of a rostering instrument and protocol were randomly assigned to over 500 households.
 - In the control version a standard SIPP roster was asked followed by additional probes to make sure no individuals were missing from the roster.
 - The 2nd experimental version administered the additional probes before asking for the household roster, in an attempt to reduce omissions.
 - The 3rd experimental version was similar to the 2nd, but respondents were allowed to not use full names on the roster, in an attempt to reduce deliberate concealment.

De La Puente 1995

- Different cultural and societal factors contribute to rostering errors, especially when a sub-population is distrustful of outsiders.
- The authors did ethnographic research and re-interviewed Census households in 39 ethnically diverse sites across the U.S.
- They found five potential causes of household rostering errors:
 - mobility
 - language and illiteracy barriers
 - concealment to protect resources (e.g. illicit income) combined with disbelief in census confidentiality
 - irregular housing and household arrangements
 - resistance, passive or active as a strategy for dealing with outsiders, especially government.

Gerber 1996

- Additional rules and definitions on the roster resulted in fewer errors for complex living situations, however for simpler living situations it resulted in more errors.
- Respondents were presented with 13 imaginary living situations of varying complexity, and then asked to fill out an experimental Decennial household roster.
- The Decennial rosters varied in the amount of definitions and residence rules provided.
- Respondents were then asked about what criteria they were using to decide where to list the person as living.
- Respondents have an intuition about what it means to live somewhere, survey designers need to try and take this into account when designing questions.

Getting to Best Practices

- We need to conduct nationally representative research to estimate the potential impact of rostering errors on survey estimates.
- Optimal rostering procedures need to be developed and empirically tested.
- More recent in-depth research is needed to study changes in people’s living situations (Ashenfelter, 2018).
- For more information on existing literature on household rostering please see Kephart & Krosnick, Forthcoming.

References

Ashenfelter, K. T. (2018). Methods for Determining Who Lives in a Household. In The Palgrave Handbook of Survey Research (pp. 71-78). Palgrave Macmillan, Cham.

De La Puente, M. (1995). Using ethnography to explain why people are missed or erroneously included by the census: Evidence from small area ethnographic studies. Center for Survey Methods Research, US Census Bureau.

Diffendal, G., Donahue, G. (1993). Status Report on the Coverage Analysis of the Census Survey Match Project. Decennial Report Series, US Census Bureau.

Gerber, E., Wellens, T., & Keeley, C. (1996, May). 'Who Lives Here?': The Use of Vignettes in Household Roster Research. In Proceedings of the Section on Survey Research Methods, American Statistical Association (pp. 962-967).

Hogan, H. (1993). The 1990 post-enumeration survey: Operations and results. Journal of the American Statistical Association, 88(423), 1047-1060.

Shapiro, G., Diffendal, G., & Cantor, D. (1993). Survey Undercoverage: Major Causes and New Estimates of Magnitude. In Paper delivered at the US Bureau of the Census Annual Research Conference, Washington, DC (Vol. 292).

Tourangeau, R., Shapiro, G., Kearney, A., & Ernst, L. (1997). Who lives here? Survey undercoverage and household roster questions. Journal of Official Statistics, 13(1), 1.

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