

Does Interviewer-Respondent Socio-Demographic Matching Increase Cooperation in Centralized CATI Household Panels?

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Introduction

According to the compliance principle of liking (Cialdini, 1984; Groves et al., 1992), individuals are more willing to answer a survey if there are commonalities with the interviewers who ask for cooperation. Davis et al. (2009) carried out a meta-survey on effects of socio-demographic interviewer-respondent matching, focusing on public health surveys and gender matching. Although “there is surprisingly little evidence to indicate whether socio-demographic interviewer-respondent matching improves survey response-rates” (p. 1), there is some evidence that effects might come from telephone surveys and from matching variables other than gender, such as age. They concluded that more research is needed using an interpenetrated design, a large number of interviewers, and interactions among socio-demographic characteristics.

Data and modeling approach

In this research, we use an experimental design to analyze if cooperation is higher in cases where interviewers and respondents are matched on interacted sex and age groups. In addition to sex, age can probably be roughly assessed over the phone. We use data from the annually conducted centralized CATI Swiss Household Panel (SHP). The SHP surveys a sample that is representative of the Swiss residential population from the age of 14 years on. In each wave, the household reference person is asked to complete the household grid as a precondition for asking all individuals in the household to complete the individual questionnaires. The SHP uses a random interviewer-respondent assignment both within and across waves. Interviews are conducted in Swiss-German, French, and Italian, by interviewers who have the survey language as mother tongue. For the analyses we use call record data from 2005 to 2009, comprising 165,276 contacts with 14,071 individuals, carried out by a total of 280 interviewers. To measure success of a contact, we use the “Cooperation performance measure” (Lipps, 2008) as dependent variable: a contact is defined as successful (=1) if the sample case *ultimately* cooperates. We distinguish respondents by sex and two age groups

(<=45, 46+ years old). For interviewers, who are younger on average, we use a cut-off age of 30 years. Because interviewer effects in telephone surveys with a random interviewer - sample case assignment are higher during first contacts with respondents (Lipps, 2009), we distinguish between first and second or later contacts. Interviewer sex-agegroup specific cooperation rates of first contacts (standard errors in parentheses) and numbers of interviewers are listed in Table 1:

	Young (<=30 years)	Old (30+ years)
female	.678 (.003) (N=157)	.684 (.004) (N=37)
male	.657 (.004) (N=65)	.687 (.005) (N=21)

Table 1: Interviewer overall cooperation rates by sex and agegroup.

In the models, we control for the interview language, survey year, sample (original from 1999 or refreshment from 2004), stage of the contacting procedure (household grid, or individual questionnaire), status of the individual when asked to complete the individual questionnaire (household reference person or another household member), and whether the sample case was worked during the normal phase or the refusal conversion phase. In addition we control for interviewer experience to avoid confusing it with age (Davis et al., 2009). To account for unobserved individual time-constant cooperation differences, we use fixed effects models. These model *within-individual* variation of cooperation only, dropping individuals without variance in the dependent variable.

Modeling Results

In Table 2, we list the odds ratios of the gender and agegroup matches of the controlled fixed logit models. For ease of interpretation, we mark the “matching” of the cells: cells where sex of interviewers and respondents match with an “S”, cells where agegroups of interviewers and respondents match with an “A”, and finally cells where both match with a capital “SA”. Young female interviewers form the base interviewer group.

Contact Number	Interviewers: Sex-Agegroup	Respondents: Sex-Agegroup						
		Woman young	Man young	Woman old	Man old			
1	Man old	1.35**	S	1.08	A	1.12	SA	1.23*
	Man young	A	1.02	SA	1.01	.98	S	1.00
	Woman old	S	.99		1.06	SA	1.16	A

2+	Man old		1.17*	S	1.15	A	1.22**	SA	1.37**
	Man young	A	.99	SA	.96		.92	S	.87*
	Woman old	S	1.12		1.24**	SA	1.13*	A	1.02

Table 2: Controlled fixed effects logit odds ratios of interviewer-respondent matching variables. * (**): Coefficient significant on the 5 percent (1 percent) level. “S” means in the cell sex is matched, “A” agegroup.

At first contacts, we find a higher likelihood of cooperation of young women and old men when contacted by older male interviewers. At second or later contacts, all but young men cooperate with a higher probability when contacted by older male interviewers; young men and old women also when contacted by older female interviewers.

Conclusions

Overall it seems that age and gender interviewer characteristics are relevant in achieving higher cooperation rates by telephone panel members. This appears to be the case especially for older male interviewers, who perform the best on gaining cooperation across different types of respondents. This holds if important interviewer covariates like experience are controlled for. There is no evidence that special sex age or sex matches yield a higher cooperation. It may be that not only the perceived authority of the institution that sponsors the survey plays a role when it comes to cooperation (Groves et al., 1992) but also of the interviewer who asks for this cooperation. Presumably older men have more authority to convince sample members to participate. A simple recommendation is to use as many older male interviewers as possible for the recruitment phase. It is likely that this strategy would also be successful in other western cultures than Switzerland.

References

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