DOES THE AGE OF A TELEPHONE INTERVIEWER

AFFECT SUBJECTS'S RESPONSES?

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The problem of interviewer bias is a serious concern in a personal interview because of the interviewer-interviewee interaction. The age, sex, race, social status, physical appearance, behavioral mannerisms, and interviewer's voice intonation are all factors which might influence the responses of the interviewee. Some research has been done on the effect of age of the interviewer on subjects' responses in the context of a personal interview (1,2). Essentially, these studies demonstrate that subjects will voice more conservative opinions to older interviewers. Apparently, interviewers over the age of 50 are perceived as figures of authority.

Little research has been done regarding the effect of the age of the interviewer on subjects' responses to a telephone interview. Freeman and Butler (3) found that interviewer variance -- "The portion of the total variance in responses to an interview item which can be attributed to differences among intervierers" -- was greatest when older interviewers (32 years and older) interviewed older respondents than with any other age combination. Their study, however, did not focus on the actual differences in responses of subjects to older and younger interviewers.

The current study was a pilot designed to investigate the effect, if any, of age of interviewer on subject's responses.

METHOD

Two female interviewers, one 71 years of age and the other 20 years of age, were employed for the study. In a pretest, a panel of five business professors confirmed that the phone voices of the two interviewers did indeed correspond to their respective age groups.

The two interviewers were cautioned not to deviate from the schedule, in order to keep constant all factors except for the age of the interviewer. Subjects were systematically selected from the telephone directories of two towns in the northern New Jersey area. Interviewers were instructed to conduct these telephone interviews at approximately the same time of day. The response rates for both interviewers were approximately 70%. The young interviewer successfully completed 104 interviews, and the older interviewer obtained 102 interviews.

Interviewers described themselves as researchers surveying the public's attitudes on various prominent issues. Subjects were asked to indicate the strength of their agreement with eleven different statements. Each statement was scored on a 5-point Likert scale ranging from strongly agree to strongly disagree. The eleven statements were as follows:

1. Violence on television has serious effects on viewers and should therefore be restricted to non-family hours.

2. The use of marijuana by adults should be allowed by law.

3. Adultery is morally acceptable as long as the parties involved will not be emotionally hurt.

4. Married women should have the option of deciding on their own whether to pursue a career or be a housewife.

5. Stealing inexpensive office supplies, such as pens, from your place of employment is morally acceptable.

6. Premarital sex between young adults is morally acceptable.

7. I would rather have a male boss than a female boss.

8. A woman would not make a good President.

9. Homosexuality between consenting adults is morally acceptable.

10. A woman has the right to decide for herself whether or not to have an abortion.

11. More women's magazines should show photos of nude men.

At the conclusion of the interview, subjects were asked whether they were 35 years old. The subjects for both interviewers were composed of 2/3 females and 1/3 males.

Since the eleven statements correlated with each other to a great extent, it was felt that the use of univariate analysis of variance would be inappropriate. Consequently, the data was analyzed via multivariate analysis of variance (MANOVA). The computer program used for the analysis was the Statistical Analysis System (SAS-1972) of the North Carolina State University. The data was analyzed as a 2 x 2 factorial design (2 ages of interviewer by 2 ages of respondent) with eleven dependent variables; i.e., agreement scores to the eleven statements.

It was hypothesized by the authors that interviewer bias would manifest itself and that, in general, the older interviewer would elicit more conservative responses to the eleven statements than would the young interviewer. The effect of age of telephone interviewer on responses could appear either as a significant age of interviewer main effect or a significant age of interviewer by age of respondent interaction.

RESULTS

Table 2 indicates that there was a significant age of interviewer by age of respondent interaction. Whenever an interaction is significant it is not proper to analyze the main effects. The interaction warns the researcher that the effect of one factor is dependent upon the level of the other factor. Thus, one should not delve into any overall main effect differences, although both were significant.

Analysis of the means for the four groups (Table 1) indicated that respondents under 35 years of age were more sensitive to age of the interviewer than respondents who were over 35 years old. Older respondents were not as sensitive (note the similarity of means) to the different interviewers. Significant differences (p $<$.05) in agreement between the two groups of older respondents were only found for three statements (6,7,11). On the other hand, younger respondents were sensitive to the age of the interviewer for eight out of eleven statements (p $<$.05), the only exceptions being statements 1, 5, and 7. Essentially, young respondents voiced significantly more conservative views on marijuana, adultery, the pursuit of a career by a housewife, premarital sex, a female President, and homosexuality when talking to the older interviewer rather than the younger interviewer. This may account for the significant interaction in the MANOVA.

DISCUSSION

The current study demonstrated that the age of the interviewer may affect subjects' responses even in the context of a telephone interview. Subjects 35 and under seemed to be especially sensitive to the age of the telephone interviewer. Apparently, it is not necessary for the subject to see the interviewer in order to be influenced by the interviewer's age. The voice of the interviewer is a sufficient stimulus to affect the responses of the interviewee. Thus, researchers utilizing the telephone as the vehicle for gathering information should consider using interviewers of various ages, and not stack the deck by using interviewers of the same age group.

Further research in this area should utilize more than two interviewers, and use a narrower range of ages. Perhaps, a difference of 51 years (20 and 71 year old interviewers) can affect response whereas a smaller difference might not.

REFERENCES

1. Benney, Mark; David Reisman; and Shirley A. Star, "Age and Sex in the Interview," American Journal of Sociology, 62 (July 1956), 143-152.

2. Ehrlich, June S., and David Reisman, "Age and Authority in the Interview," Public Opinion Quarterly, 25 (Spring 1961), 39-56.

3. Freeman, John, and Edgar W. Butler, "Some Sources of Interviewer Variance in Surveys," Public Opinion Quarterly, 40 (Spring 1976), 79-91.

Table 1

Mean Agreement Scores for the Four Treatment Groups

	Young Interviewer (n=104)		Old Interviewer (n=102)	
Statement #	Young Respondents	Old Respondents	Young Respondents	Old Respondents
1	2.38	2.28	2.54	2.17
2	2.14	3.52	3.35	3.65
3	2.58	3.41	3.46	3.30
4	1.78	2.11	2.39	2.16
5	3.38	3.70	3.65	3.74
6	1.96	3.13	3.04	3.53
7	3.20	2.78	2.96	2.49
8	3.74	2.94	3.23	2.91
9	2.38	3.19	3.23	3.33
10	1.88	2.38	2.58	2.49
11	2.84	3.33	3.42	3.88

Note: 1=Strongly agree,...,5=Strongly disagree

Table 2

Multivariate Analysis of Variance for Eleven Statements

Source	d.f.	F-ratio	Probability
Age of Interviewer (A)	11, 192	3.99	$< .0001$
Age of Respondent (B)	11, 192	6.40	$< .0001$
A x B	11, 192	2.81	$< .01$
Error	202		