

THE IMPACT OF INTERVIEWER CHARACTERISTICS ON RESPONSE IN A NATIONAL SURVEY OF VIOLENCE AGAINST WOMEN

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Introduction

The relationship of interviewer effects to interviewer characteristics has been little studied. Tucker (1983) listed a number of studies that have looked at this topic, and indicates there is some evidence that interviewer effects may be related to interviewer competency and an interviewer's prior expectation of survey results. In addition, there was some evidence that younger interviewers are less susceptible to interviewer effects. The study by Oksenberg et al (1986) also showed a relationship between vocal characteristics and response rates. The study by Singer et al (1983) considered the relationship between interviewer's demographic characteristics and expectations on response rates. Their findings indicated older interviewers and those with higher education had higher response rates although the differences were not large.

In planning the 1993 Canadian Survey on Violence Against Women (VAWS) the issue was raised as to whether or not interviewers should have some training or experience in the substantive area of the survey. An argument for this was that such a background might elicit a better response from women given the sensitive nature of the survey. However it was also argued that well trained interviewers without specialized training or experience might actually do a better job since they might be more objective. In the end specialized background was not used as a criteria in hiring however as might be expected, the topic of the survey attracted many women who had some specialized training or experience in the substantive area. The main purpose of this study is to investigate whether the interviewer's characteristics had any discernable effect on survey outcomes.

Overview of Violence Against Women Survey

The first national survey that attempted to comprehensively measure the extent of violence against women was conducted by Statistics Canada in early 1993. The objectives of the survey were to provide reliable estimates of the nature and extent of violence against women by male partners, acquaintances and strangers and to examine women's fear of violence. The survey measured both adult lifetime violence (since the age of 16) as well as violence during the 12 months preceding the survey date.

The target population for the survey was all women 18 years of age and over in Canada excluding residents of the Territories and full-time residents of institutions. The survey was conducted by telephone using random digit dialling techniques, and therefore households without telephones (approximately 2% of all households) were excluded from the survey. Completed interviews were obtained from 12,300 women. In view of the sensitivity of the subject matter, a great deal of attention was given to planning and conducting all aspects of the survey. More details on these are provided by Johnson (1994). A summary of the survey results is found in Statistics Canada (1994).

Recruitment and Training of Interviewers

The recruitment of most interviewers was done through temporary employment agencies although a small number were recruited from Statistics Canada staff. In view of the survey contents, only women were considered for the positions. Resumes were studied and screened and a first interview was conducted concerning interviewing techniques and suitability. Then prospective interviewers were referred for a second interview with a psychologist, in relation to emotional stability and sensitivity to the survey content. This psychologist was also hired to provide training related to sensitivity and awareness and stress/tension management to both the supervisors and the interviewers, as well as to provide on site counselling and support throughout the survey period.

The initial group of interviewers received 8 days (7 hours per day) of training. Those that were hired later received an abbreviated training of only 5 days; however this proved to be insufficient as these interviewers did not feel as prepared at the beginning of this production work. In addition to this training prior to the survey, there was a monitoring of interviewers, with appropriate feedback throughout the interviewing period.

Methods

In order to investigate the impact of interviewer characteristics on the survey, data on selected characteristics were collected from interviewers during the survey period.

The information collected included previous telephone interviewing experience; and the demographic characteristics of age, marital status, and education. As mentioned earlier, in planning the survey there were discussions about the desirability that interviewers have some education and/or work experience related to the subject matter of the survey (eg. social worker, transition home worker, crisis line worker, etc.). The argument for such experience was that these women would have had some prior training in dealing with sensitive topics that would arise and might themselves be better prepared to discuss such topics with other women. To investigate this, interviewers were asked whether they had any formal training or any prior work experience in a subject matter area related to the survey topic. In both cases the questions were very general and the decisions as to what constituted 'related training' or 'experience' were left to the interviewers' discretion.

The dependant variables of interest for this study were of two types. The first were measures of response to the survey. Three measures of response were considered. The first will be referred to as the 'screening rate'. This was defined as the percentage of households where the screening information on household composition was successfully collected, after it had been determined the phone number was that of a private household. Failure to complete the screening information was generally due to a refusal on the part of the contacted household person to take part in the survey. The second response measure considered will be referred to as the 'completion rate'. This was defined as the percentage of households where contact was made with a selected respondent for which a complete interview was obtained. Failure to complete the interview may have been due to a variety of reasons including a total refusal on the part of the respondent or in other cases the interview was started but for some reason was not completed.

The third measure of response considered was item non-response. Overall, most survey items had very low non-response rates. However, as in most surveys, questions on income elicited the highest non-response (defined here to include both the 'don't know' and 'not stated' responses). Here the non-response to the question on total personal income is considered.

The second type of dependant variable was a measure of the extent to which violence was disclosed by the respondent. The measures used here refer to any violence occurring since the age of 16. Three types of 'disclosure rates' are considered. The first referred to as the total disclosure rate, is defined as the percentage of women who disclosed any type of violence. The second spousal

violence, refers to the percentage of currently married (including common-law) women who reported violence in their current relationship. The final measure, stranger violence, refers to the percentage of women who reported violence by a stranger.

The analysis of the relationship between the dependant variables and the independent variables describing the interviewer's characteristics was conducted using multiple classification analysis. This allows one to look at the average of the dependant variable for each level of an independent variable. Averages are calculated unadjusted as well as adjusted for the effect of all other independent variables included in the model. The analysis was restricted to 40 interviewers who conducted at least 100 completed interviews and for whom the characteristics data were available. Their interviews accounted for 94% of all completed interviews.

A secondary topic of interest was the extent to which response rates and disclosure rates may have varied throughout the survey period. If rates increased during the survey period this might be interpreted as evidence of an interviewing learning effect. On the other hand if rates began to decline at some point during the survey this might be interpreted as an indication of fatigue or interviewer burnout. The data collection period was divided into 10 interviewing waves each representing about a week of data collection. Response rates and disclosure rates were calculated for each wave of interviewing. The analysis of trends was restricted to the interviewers who were working for the entire survey period.

Table 1 summarizes the dependent variables used in this study.

Table 1 Summary of Dependent Variables					
	N	Mean	SD	Min	Max
Response Rates					
Screening	40	74.3	5.6	62.2	87.5
Completion	40	86.7	4.8	73.9	96.2
Income N-Response	40	6.1	3.2	1.7	17.2
Disclosure Rates					
Total	40	53.4	4.5	42.9	61.5
Spousal	40	16	3.6	7.3	22.2
Stranger	40	24.6	3.1	17.6	32.1

Results

Description of Interviewer characteristics

Few specific criteria were used in the recruitment of interviewers although prior interviewing experience was certainly an asset and in fact nearly 90% of the interviewers reported some prior telephoning interviewing experience. Sixty percent of all interviewers were younger than age 30 and 67% had at least 3 years of post secondary education. Approximately half were currently married (including common law). Although prior subject matter experience or education was not explicitly considered in recruitment, the topic of the survey attracted many persons with this background. Three quarters of the interviewers reported some subject matter related formal education while 60% had prior subject matter experience (for example work at a crisis centre).

Thirty of the 40 interviewers were recruited at the start of the survey, four joined midway through the study while an additional 6 interviewers were hired for the last 4 weeks of interviewing to replace interviewers who left for a variety of reasons. On average each of the 40 interviewers completed 287 interviews with a range from 101 to 595.

Response Rates

The overall response rate for the survey was 61%. This is significantly lower than the response rates of approximately 80% that are generally obtained in most Statistics Canada random digit dialling telephone surveys. For example, the 1993 Canadian General Social Survey (GSS) that was conducted at the same time as the VAW survey included a module on criminal victimization and had a response rate of 83%. The reasons for the lower response rate in the VAWS are not clear, although it is thought that much of the difference may be due to the fact that the protocol for the survey was such that interviewers were instructed to insure it was a convenient time to conduct the interview and interviews were not pursued if there was any reluctance on the part of the respondent (for example there were no attempts to convert first refusals as is generally the case in most surveys).

Table 2 shows the results of the analysis of the relationship between the two measures of response and interviewer characteristics. Overall the rate for successful screening was 74.3% with a range from 62 to 88%. The differences across the various interviewer characteristics were relatively small and not significant. The strongest relationship was for age of interviewer. Older (40 +)

interviewers had a screening rate of 79% compared to 72 to 74% for younger interviewers. Interviewers with higher education also had slightly higher screening rates. It is noteworthy that previous interviewing experience had little effect on the screening rate and in fact, those with no previous experience had slightly higher rates compared to those with previous experience, although the number of interviewers with no previous interviewing experience is small.

The second measure of response considered was what is referred to here as the completion rate or the percentage of households where complete interviews were obtained after contact was made with the selected respondent. The overall completion rate was 86.7% with a range of 74 to 94%. Again the results were similar to the screening rates. Interviewers without prior interviewing experience as well as those who are older and higher educated had slightly higher rates.

The average level of non-response on the personal income question was 6.1%. It is interesting to note that in the 1993 Canadian GSS, that was conducted by regular Statistics Canada interviewers, the level of response on the same question was 14%. There was however, a fairly wide variation in item non-response across interviewers. Five interviewers had non-response rates of more than 10% and one had a rate of 17%. Older and less educated interviewers had slightly higher levels of non-response for this item, but the differences were small.

Disclosure Rates

The overall total disclosure rate in the VAWS was 53.4% with a range of 43 to 62%. The variation by interviewer characteristics is shown in Table 3. As with the response rates the differences across characteristics were not large. Previous interviewing experience was associated with slightly higher disclosure rates but the difference was relatively small (53.6% versus 52.2%). However, older interviewers and those with lower education had slightly lower disclosure rates. Of particular interest was the relationship between the subject matter related experience or education and disclosure rates. Both previous work experience and subject matter related formal education had no effect on disclosure rates. The results for spousal and stranger violence were consistent again showing only small non-significant differences.

Trends in Response and Disclosure Rates

The trend in response and disclosure rates throughout the interviewing period is shown in Table 4.

Table 2 Response Rates by Interviewer Characteristics

	Screening			Completion		Income	
	N	Rate		Rate		N-Response	
		Unadj	Adj	Unadj	Adj	Unadj	Adj
	Mean	Mean	Mean	Mean	Mean	Mean	
Total	40	74.3		86.7		6.1	
Age							
Less than 30 Years	24	73.5	73.9	85.7	85.7	6.2	5.9
30-39 Years	9	72.9	72.2	87.6	87.1	4.8	5.9
40+ Years	7	79.1	78.6	88.8	89.5	7.5	7.2
Marital Status							
Married	19	75.9	75.3	86.9	86.5	6.0	5.8
Others	21	72.9	73.5	86.5	86.8	6.2	6.5
Post-Secondary Education*							
1 - 2 Years	11	73.3	72.8	84.1	83.9	8.0	8.1
3 or more years	27	74.5	75.0	87.7	88.0	5.1	5.1
Previous Interviewing Experience							
Yes	34	74.3	74.0	86.6	86.3	6.1	6.2
No	6	74.8	76.3	87.2	88.7	6.3	5.8
Subject-Matter Related Education							
Yes	30	76.3	76.9	86.7	86.1	5.8	6.4
No	10	74.6	74.6	86.6	88.3	7.2	5.3
Subject-Matter Related Work Experience							
Yes	24	74.3	75.4	87.0	87.1	5.2	5.3
No	16	74.5	72.8	86.1	86.1	7.4	7.3
		$R^2 = .26$		$R^2 = .23$		$R^2 = .33$	

* Data are not shown for two interviewers who have no post-secondary education

This analysis is restricted to the 19 interviewers who were interviewing throughout the entire survey period.

The screening rate for the first wave of 550 interviews was substantially lower (63.1%) than the average of 74%. However in subsequent waves the rate fluctuated between 74% and 79%. The final completion rate was also somewhat lower for the first wave of interviews (83%), however it quickly increased and remains fairly constant (86% - 89%) throughout the survey. The lower rates for the final wave of interviews reflect the "clean-up" done at the end of survey. Unlike the response rates, the total disclosure rates were very constant throughout the survey period. The lower response rates at the start of the survey are not too surprising and likely reflect the adjustments interviewers make to the new survey operations and content.

Summary and Discussion

A rigorous process was followed in the recruitment and training of interviewers for the VAWS. The majority of interviews for the VAWS were young and well educated and about half of them were currently married. The results of the analysis indicate that these demographic characteristics were not strongly related to either response rates or the likelihood of the respondents' disclosure of violence. There was a tendency for older and more educated interviewers to have higher response rates and this is consistent with earlier findings in the literature (Singer et al., 1983). These interviewers also had lower disclosure rates although the differences were not great.

Table 3 Disclosure Rates by Interviewer Characteristics

	Total		Stranger		Spousal		Adj Mean
	N	Unadj Mean	Adj Mean	Unadj Mean	Adj Mean	Unadj Mean	
	Total	40	53.4		24.6		
Age							
Less than 30 Years	24	52.9	53.1	24.2	24.1	15.5	15.8
30-39 Years	9	55.0	55.1	25.6	26.0	17.2	16.7
40 + Years	7	52.9	52.1	24.6	24.5	15.8	15.4
Marital Status							
Married	19	53.4	53.4	24.3	24.0	16.0	15.6
Others	21	53.4	53.4	24.9	25.1	15.9	16.3
Post-Secondary Education *							
1 - 2 Years in P-S	11	51.5	51.6	24.0	24.2	14.3	14.1
3 or more years in P-S	27	53.7	53.6	24.8	24.7	16.4	16.5
Previous Interviewing Experience							
Yes	34	53.5	53.6	24.8	24.8	16.1	16.2
No	6	53.0	52.2	23.7	23.4	14.9	14.6
Subject-Matter Related Education							
Yes	30	53.2	53.3	24.6	24.7	15.5	15.1
No	10	53.8	53.6	24.7	24.3	17.2	18.6
Subject-Matter Related Work Experience							
Yes	24	53.6	53.6	24.5	24.2	16.2	16.9
No	16	53.1	53.0	24.8	25.2	15.5	14.6
		R ² = .20		R ² = .12		R ² = .28	

* Data are not shown for two interviewers who have no post-secondary education

The question of whether survey subject matter education or experience would be related to interviewer performance was of particular interest in the study. However the results show that these factors had very little effect on either the response or disclosure rates.

Overall the negative findings here are very consistent with Fowler and Mangione (1990) who concluded: «There have been various efforts to correlate scores on personnel inventory and questionnaires with interview performance. Although individual studies have come up with suggestive relationships, as almost any such study would, our reading of the literature is that there are no well documented relationships between interviewer characteristics as measured by any standard test and their ability to carry out the question and answer process on a general purpose population survey.»

They went on to address the issue of whether or not special training in the substantive area of a research study should be a requirement for interviewers. They concluded "With respect to the quality of data collected during an interview, we know of no basis for saying that a specialized background is an asset to an interview in carrying out an interview".

The brief analysis of response and disclosure rates over time indicated a very consistent survey operation. The only suggestion of an interviewer's learning curve was the lower response rates during the first few weeks of the survey. Disclosure rates showed very little variation throughout the rest of the survey. Further analysis might be done to try to identify the cause of the lower rates at the start of the survey since interviewer training might be able to address this problem.

Table 4 Response Rate and Disclosure Rate by Interview Wave

Interview Wave	Screening		Response		Disclosure	
	N	%	N	%	N	%
1.0	557	63.1	316	83.2	266	53.4
2.0	727	73.7	453	88.7	402	52.5
3.0	2006	76.0	1329	89.1	1184	52.7
4.0	1625	73.9	1007	88.7	893	53.3
5.0	1610	76.2	1031	87.2	891	53.4
6.0	799	74.6	523	89.5	460	57.2
7.0	1451	77.4	986	86.2	850	52.4
8.0	1749	79.4	1235	88.5	1093	52.7
9.0	1573	78.7	1059	87.3	925	53.4
10-11	1457	74.3	965	77.4	747	53.9

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