Interviewers' Tactics for Fighting Survey Nonresponse

Ger Snijkers, ¹ Joop Hox, ² and Edith D. de Leeuw³

Interviewers play an important role in gaining cooperation in surveys. There is empirical evidence for a considerable variation in response rates between interviewers. Despite this, research on the role of the interviewer in nonresponse is relatively scarce. Past research showed that interviewer experience plays a role in gaining respondent cooperation, and recently the importance of the "doorstep" interaction has been emphasized. In this article, we describe the tactics for fighting nonresponse, as reported by experienced interviewers. We also explore the relationship between favored tactics of interviewers and interviewers' individual response rate.

Key words: Doorstep interaction; persuasion; survey participation; interviewers' strategies; response rate; Morton-Williams; concept mapping.

1. Introduction

Survey nonresponse, which is to say the failure to obtain participation of sampled units in a survey, is a serious threat to the quality of survey data. To successfully fight nonresponse, knowledge about causes of survey participation is necessary. In their comprehensive theoretical review on survey participation Groves, Cialdini, and Couper (1992) stress the importance of the interviewer-respondent interaction. During the initial moments of contact on the doorstep, the interviewer is the initiator and dominant actor in this interaction, and much depends on the interviewer's ability to evaluate the situation and persuade the potential respondent. Empirical research shows that there is a considerable variation in response rates between interviewers (Lyberg and Lyberg, 1991; Lyberg and Dean, 1992). Furthermore, there is evidence that experienced interviewers perform better (Couper and Groves, 1992). What makes these experienced interviewers achieve higher response rates?

In her important study, Morton-Williams (1993) analyzed audio-recordings of doorstep interactions between interviewers and respondents. She concludes that successful interviewers tailor their introductions to the respondent and the situation at hand; they also work hard to maintain contact with the respondent. Morton-Williams emphasizes the

¹ Statistics Netherlands, P.O. Box 4481, NL-6401 CZ Heerlen, The Netherlands. E-mail: gsks@cbs.nl

² Faculty of Social Sciences, Utrecht University, The Netherlands. E-mail: j.hox@fss.uu.nl

³ Statistics Netherlands and MethodikA, Plantage Doklaan 40, NL-1018 CN Amsterdam, The Netherlands. E-mail: edithl@educ.uva.nl

Acknowledgments: The authors thank the interviewer staff of Statistics Netherlands for their enthusiastic sharing of their doorstep experiences. We also thank Diane O'Rourke and two anonymous reviewers for their helpful suggestions.

The views expressed in this article are those of the authors. They do not necessarily reflect the policies of Statistics Netherlands. An earlier version of this article was presented at the 1996 International Conference on Social Science Methodology, theme Survey Nonresponse, University of Essex, Colchester, July 1–5, 1996.

importance of social skills to perceive and adapt to individual doorstep situations. Building on these social skills, experienced interviewers develop a repertoire of successful tactics to ensure respondents' cooperation.

In this article, we describe the tactics used by experienced interviewers at Statistics Netherlands. Our approach differs from that of Morton-Williams, who analyzed actual recordings; we used a highly structured interviewer debriefing study to draw upon the knowledge and wealth of experience that interviewers have (cf. Campanelli, Martin, Rothgeb 1991). The knowledge of interviewers and the information they possess about what defines successful strategies is often rather diffuse and unstructured. Therefore, to obtain structured and usable information we used a technique known as "concept mapping." Concept mapping is a qualitative, highly structured method to extract information from a group of people. A comprehensive system for concept mapping has been developed by Trochim (1989). The major advantage of this method is that it quickly proceeds from fuzzy knowledge to an interpretable conceptual framework, in this case a conceptual framework describing successful interviewer tactics to persuade the potential respondent. Furthermore, this framework can be expressed in a graphical representation, which shows all major ideas and their interrelationships.

In the next section, we first give a short description of the group of experienced interviewers who acted as informants and we outline the procedures used in concept mapping. We continue with the major results and end with some general conclusions and recommendations.

2. Method

2.1. Group studied

During the months March to May 1996, a field experiment was carried out at Statistics Netherlands using mixed-mode computer assisted data collection. This experiment was part of a larger implementation study for the redesign of the continuing survey on living conditions (POLS, cf. Akkerboom and DeHue 1997). During this field experiment interviewers had to perform special tasks such as registering of behaviour codes and use of special probes on the understanding of the survey questions asked, similar to "cognitive lab procedures" (cf. Forsyth and Lessler 1991).

Twenty-two very experienced CAPI interviewers were selected for this task. A two-step selection procedure was used. In the first step, interviewers were asked to apply for this special job, for which they had to fill in a short questionnaire. The information in the questionnaires, together with performance figures of the applicants, was rated by two independent raters. Selection criteria were, among others, good social skills, research-minded (e.g., interested in research methods), a high response rate and good interviewer performance as evaluated by their supervisors. Potential candidates were then invited for a second selection. This second selection was a combination of "informed self-selection" and assessment by supervisors. During a special session, groups of on average 15 interviewers were given information about the project. Then they received a short instruction in the special techniques necessary for the experiment, and discussed these with the instructors. Afterwards the candidates were asked whether they wanted

to participate in the project. A final selection was then made by the instructors based on the participation in the discussions (cf. De Leeuw, Snijkers, Hoezen 1997).

The selected interviewers were all female. The average age was 48; the youngest interviewer was 37, the oldest 56. They all were experienced interviewers: on average an experience of more than 11 years; the least experienced interviewer had worked only two and a half years as an interviewer, the most experienced one had worked 19 years. The interviewers varied in average response rate on past surveys; for instance, the individual response rates ranged from 50% to 77% on the Labour Force Survey 1996.

The selected interviewers worked in geographically spread areas, ranging from big inner cities to small rural communities and farmland. The interviewers were specially trained for this project, with the emphasis on cognitive lab procedures. However, no special training in gaining cooperation and doorstep interaction was given.

After completing their tasks, twenty interviewers took part in a special evaluation and debriefing study. One interviewer was disabled by illness; one was on a planned holiday.

2.2. Procedure

Part of the debriefing study was a focus group on successful tactics to attain cooperation in a survey. To obtain structured and usable information, we used the technique of "concept mapping." Concept mapping is a qualitative, but highly structured method to extract information from groups. It is specially designed to elicit an interpretable conceptual framework, in this case for interviewer tactics, from available fuzzy knowledge. This framework can be expressed in a graphical representation or concept map, which shows the major ideas and their interrelationships. For an introduction on concept mapping, see Trochim (1989).

Concept mapping in focus groups consists of five steps: (1) preparation and developing the focus, (2) statement generation by the group, (3) statement structuring and rating by the group, (4) statistical analysis and statement representation, in the form of a cluster tree and concept map, and (5) interpretation of the results by the group.

Step 1 or the preparation phase should result in two separate products: the primary focus or domain of interest for the brainstorming session with the focus group, and the rating scale needed for the structuring of statements in Step 3. We decided on the following focus for the brainstorming session: "What is effective to obtain cooperation in a survey: What can YOU do as an interviewer, Which tactics work, What can we as Bureau do to help you." The rating focus concerned the effectiveness of the tactics, and was stated as follows: "For each tactic mentioned give a rating of its effectiveness. Use the following response categories:

- -1 This tactic could backfire
- **0** This tactic probably has no effect
- +1 This tactic works a little
- +2 This tactic works well
- +3 This tactic works very well
- +4 This tactic works almost always"

Step 2 is statement generation. During a one-hour brainstorming session, statements

were generated with the members of the focus group. The statement described above constituted the focus for the brainstorming. The usual rules for brainstorming applied (e.g., encourage many statements, and emphasize the importance of no criticism or discussion during statement generation). The statements were recorded on a whiteboard by the moderator. The wording was checked with the group members, and if they thought it necessary, the text was adjusted. The final text was entered into a laptop computer by one of the team members, who was seated behind a one-way mirror. Participants knew that this was happening and the moderator openly addressed the "recorder" at certain moments to make sure that the statements were entered correctly.

In *Step 3, the structuring*, the individual participants were instructed to sort cards on which the statements were printed into different piles "the way it makes sense to you." Restrictions are that each statement can only be placed in one pile, and it is not allowed to place all statements in one large single pile, nor in as many piles as there are statements. A small number of piles of one statement are allowed. After this card sort, the individual participants were asked to rate the statements as to effectiveness, using the six-point rating scale described above.

Step 4 is the analysis or "statement representation" phase. The individual sorts were combined into a group similarity matrix. This similarity matrix is the input for a multidimensional scaling and cluster analysis. The two-dimensional plot of points created by the MDS may be viewed as a representation of the "emerging concepts" of group knowledge, hence the name concept mapping. The cluster solution is superimposed on the map of points to facilitate interpretation of the overall structure by the group members. Furthermore, the mean group ratings for each statement are computed. It is possible to overlay the ratings onto the concept map as well.

Step 5 is again a group activity. The participants discussed possible meanings and acceptable names for each cluster of statements. This last step attempts to identify relations between tactics in the form of a group-approved map.

3. Results

3.1. Generated statements

The brainstorming resulted in 40 different statements. Each statement was thought to be an effective tactic by at least one group member. Each statement was individually rated on effectiveness to gain cooperation. Table 1 lists the statements in order of average perceived effectiveness and the standard deviation of the ratings is added in parentheses. For easy identification of the statements in the analyses, we numbered each statement in order of generation (e.g., S1 is the first statement generated and S40 the last). This numbering is for identification in the Figures and does not have any substantive meaning.

When we look at Table 1, we should remember that interviewers were asked to mention successful tactics to gain cooperation. Every statement is therefore an indicator of a successful tactic in the opinion of at least one experienced interviewer. This does not mean that everybody completely agrees on every statement. When we look at the total range of the effectiveness ratings and the standard deviation, we notice that our experienced interviewers strongly disagree on certain statements. Prime examples are

Table 1. Interviewer Tactics Ordered According to Effectiveness

Given is average group rating and in parentheses the standard deviation of the ratings (scale: -1,0,1,2,3,4). This is followed by the text of the generated statement and the statement number

- 3.50 (0.51) grasp the doorstep situation (S9)
- 3.35 (0.88) be honest (e.g., about duration, questions) (S26)
- 3.30 (0.92) mention Statistics Netherlands almost at once (S33)
- 3.25 (0.72) react flexibly to the situation (S17)
- 3.20 (1.11) start by identifying yourself (S32)
- 3.10 (1.02) Statistics Netherlands should pay more attention to public relations and positive image (S23)
- 3.10 (1.07) be friendly (S1)
- 3.10 (1.12) respect the respondent (S18)
- 3.05 (0.89) adapt introduction (S10)
- 3.00 (1.03) raise trust (S14)
- 3.00 (1.17) remain friendly (S2)
- 2.95 (1.00) know what you are talking about (S25)
- 2.95 (1.05) mention advance letter (\$28)
- 2.90 (1.02) be flexible in making appointments for interviews (S15)
- 2.90 (1.07) adapt your introduction (modify to suit social and cultural class) (S11)
- 2.85 (0.81) do not follow set or fixed rules, adapt to situation (S34)
- 2.80 (0.95) reassure hesitating respondents: mention that if they do not want to answer a specific question, this is OK (S27)
- 2.80 (1.01) be likeable (\$38)
- 2.75 (1.16) know a very short introduction by heart (S35)
- 2.70 (1.17) ask if this is the right time (make an appointment if not, do not pressurize) (\$36)
- 2.65 (1.09) project self-confidence (S5)
- 2.55 (1.10) make a relaxed impression (S12)
- 2.40 (0.99) be positive about survey, make clear that YOU believe in the survey (S24)
- 2.35 (1.31) be/remain YOURSELF (S3)
- 2.30 (1.03) have perseverance (S7)
- 2.30 (1.30) Statistics Netherlands should give interviewers more opportunities for flexible appointments (S16)
- 2.15 (0.99) have self-confidence (start every interaction from the perspective that the person you contact will be cooperative) (S4)
- 2.10 (1.17) avoid intrusiveness (S8)
- 2.05 (1.15) dress appropriately for neighbourhood (S31)
- 2.00 (1.03) communicate to the respondents that THEY are important (S21)
- 1.75 (1.16) project that YOU enjoy doing your job (S13)
- 1.75 (1.48)* having made an appointment, leave card with date and time (S40)
- 1.45 (1.36)* sell the survey (S19)
- 1.40 (1.39) use intuition, feeling and humour in approach (S30)
- 1.25 (1.55)* after appointment, note down phone number of respondent (can be used to remind respondent, check date, etc) (S39)
- 1.15 (0.99) refer to topics in the news or in society that are of importance at the moment and can be connected with the topic of the survey (S22)
- 1.10 (1.62)* preponderate (S6)
- 1.00 (1.34)* for first contact leave papers, bag, and laptop in car (S20)
- 0.80 (1.61)* give them a choice (no coercion) (S29)
- 0.70 (1.22)* first contact everyone just for an appointment (between 5 and 7 p.m.) (S37)

^{*}Indicates that some interviewers gave this statement a rating of -1, meaning that they thought this tactic could backfire and increase the chance of a refusal.

Table 2. Statements Grouped by Cluster

Cluster names and cluster effectiveness ratings are based on the interviewers' opinions. Clusters are ordered according to effectiveness. Cluster number, average cluster effectiveness, and cluster reliability are given in parentheses

Tailoring introduction (Cluster 5: Average effectiveness = 3.08; Reliability = 0.80)

- S9: grasp the doorstep situation
- S10: adapt introduction
- S11: adapt your introduction (modify to suit social and cultural class)
- S34: do not follow set of fixed rules, adapt to situation

Competent introduction (Cluster 7: Average effectiveness = 2.97; Reliability = 0.76)

- S33: mention Statistics Netherlands almost at once
- S32: start by identifying yourself
- S28: mention introductory letter
- S15: be flexible in making appointments for interviews
- S35: know a short introduction by heart
- S36: ask if this is the right time (make an appointment if not, do not pressurize)

Respondent centered (Cluster 6: Average effectiveness = 2.94; Reliability = 0.61)

- S26: be honest (e.g., about duration, questions)
- S17: react flexibly to the situation
- S18: respect the respondent
- S31: dress appropriately for neighbourhood

Knowledge (Cluster 3: Average effectiveness = 2.68; Reliability = 0.62)

- S25: know what you are talking about
- S24: be positive about survey, make clear that YOU believe in the survey

Projecting positive image (Cluster 1: Average effectiveness = 2.51; Reliability = 0.71)

- S1: be friendly
- S2: remain friendly
- S14: raise trust
- S38: be likeable
- S5: project self-confidence
- S12: make a relaxed impression
- S3: be/remain YOURSELF
- S13: project that YOU enjoy doing your job
- S30: use intuition, feeling and humour in approach

Public relations (Cluster 4: Average effectiveness = 2.13; Reliability = 0.57)

- S23: Statistics Netherlands should pay more attention to public relations and positive image
- S22: refer to topics in the news or in society that are of importance at the moment and can be connected with the topic of the survey

Personality (Cluster 2: Average effectiveness = 1.85; Reliability = 0.54)

- S7: have perseverance
- S4: have self-confidence (start every interaction from the perspective that the person you contact will be cooperative)
- S6: preponderate

Maintain communication, realize interview after appointment (Cluster 8/d1: Average effectiveness = 1.93; Reliability = 0.64)

- S27: reassure hesitating respondents: mention that if they do not want to answer a specific question that is OK with you
- S40: having made an appointment, leave card with date and time, and your phone number
- S39: after appointment, note down phone number of respondent (can be used to remind respondent, check date, etc)

Table 2. (Continued)

Maintain communication, tactics on first contact (Cluster 8/d2: Average effectiveness = 1.20; Reliability = 0.69)

- S16: Statistics Netherlands should give interviewers more opportunities for flexible appointments
- S20: for first contact leave papers, bag, and laptop in car
- S29: give them a choice (no coercion)
- S37: first contact everyone just for an appointment (between 5 and 7 p.m.)

statements S40 (leave card), S19 (sell survey), S39 (note down phone number), S6 (preponderate), S20 (leave papers etc in car), S29 (give them a choice), and S37 (first contact for appointment only.) Some interviewers even thought that these tactics could backfire, while others rated these as "works almost always."

On the other hand, there were tactics that every interviewer rated as either works well or works very well. Examples are statements S9 (grasping the situation), S33 (mention Statistics Netherlands almost at once), and S7 (react flexibly). According to experienced interviewers, the best thing to do at the doorstep is first of all to identify yourself, mentioning the organization you represent, and secondly try to understand the doorstep situation and react to what you find in a flexible way.

3.2. Interrelationship of statements (map)

For an effective use of doorstep tactics it is important that interviewers know the underlying strategies and social skills, and a successful interviewer training will focus on the understanding and practice of "doorstep skills" and not on the training of isolated tactics or tricks (cf. Morton-Williams 1993, Campanelli 1995).

To discover the underlying principles used by experienced interviewers in persuasion, Steps 3 to 5 of the concept mapping procedure are used. First of all, the generated tactics were sorted by our group of experienced interviewers. This was followed by a statistical analysis, and the resulting MDS solution and cluster tree was then discussed and interpreted by the total group in a focus group session. This procedure ensures that the final conceptual framework of successful doorstep skills is expressed in the language of ordinary interviewers and is therefore easy to communicate at a briefing or training session (cf. Trochim 1989).

Analyses based on the similarity matrix of sortings resulted in eight distinct clusters. Reliability analysis revealed that one cluster (Cluster 8) consisted of two different dimensions; we therefore divided this cluster into two unidimensional clusters. All other clusters were unidimensional. Table 2 lists the statements grouped by named cluster. For each cluster, the average cluster rating on effectiveness, and the reliability (coefficient alpha) of the cluster score, is given in parentheses.

Three statements, S8 (avoid intrusiveness), S19 (sell the survey), and S21 (communicate to respondents that THEY are important), are not included in any of the clusters. These statements were not close to any of the cluster centers. Furthermore, including them in the nearest cluster lowered the reliability of that cluster-score.

A graphical representation of the interrelationship between the statements is given in Figure 1. This figure shows the statement configuration in a two-dimensional MDS

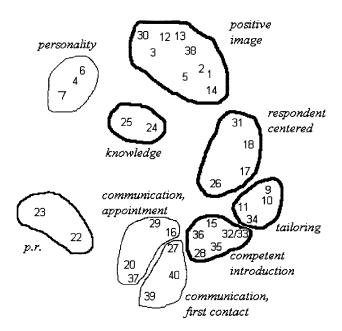


Fig. 1. Numbered point map with cluster border overlay. Large printed numbers correspond with the cluster numbering in Table 2, small numbers with the statement numbers in Table 1. The higher the cluster, the higher the effectiveness rating by the interviewers

solution, with the clusters superimposed. The thickness of the cluster borders indicates the mean effectiveness rating of the statements in the cluster.

If we concentrate on the two most effective clusters, we see that a competent introduction and tailoring during the introduction are perceived as the most effective strategies. Other highly successful strategies are: being attentive to and centered on the respondent, and projecting a positive image. It should be noted that these verbal labels were chosen by the interviewers, not by the investigators.

When we inspect these clusters we see that key concepts of Morton-Williams are also identified independently by experienced Dutch interviewers. Cluster 1 (projecting positive image) clearly identifies the social skills in self-presentation necessary for successful interviewers (Morton-Williams 1993; see also Argyle 1969; Argyle and Trower 1979); Cluster 7 (competent introduction) emphasizes the advised repertoire of behavioural elements during the initial contact (Morton-Williams 1993). The elements from Cluster 1 and Cluster 7 give the tools for a good first impression. However, a successful introduction needs more (cf. Groves and Couper 1998): an interviewer should have knowledge (Cluster 3) and adapt the "spiel" to the situation at hand: they should tailor. Both Cluster 5 and Cluster 6 focus on tailoring: Cluster 5 (tailoring introduction) concerns the adaptation of the first introduction to the doorstep situation (Morton-Williams 1993; Couper and Groves 1996), while Cluster 6 centers around the respondent.

Finally, maintaining communication is important in persuading respondents, and is emphasized both by Morton-Williams (1993) and by Couper and Groves (1996), who state that the techniques of tailoring and maintaining interaction are used in combination by experienced interviewers. This is precisely what our interviewers tell us: maintaining

interaction is an integral part of the competent introduction. Cluster 7 mentions the elements to be used in a successful introduction (e.g., identifying yourself and your organization) in combination with the advice to "step back" when necessary, in order to maintain communication. For instance, offering to make an appointment if it is not the right time now, is a standard part of the basic competent introduction! In addition, the interviewers mentioned several useful tactics for maintaining interaction in Cluster 8. The first dimension of this cluster focuses on tactics that optimize the chance of an interview *after* an appointment is made (e.g., leave a card). The second dimension gives helpful hints for the first contact, emphasizing the importance of being non-intrusive and taking a "step back" when necessary.

4. Effectiveness of Strategies

Forty tactics to improve the response were identified and rated for effectiveness by experienced interviewers. These tactics could be grouped into nine global strategies: tailor introduction, competent introduction, act respondent centered, use knowledge, project positive image, effective public relations, personality, tactics first contact, and maintain communication after appointment. However, interviewers may differ in the way they use and combine these strategies, and perhaps highly successful interviewers emphasize and combine these strategies in a different way than less successful interviewers. Therefore, we wanted to know which strategies are valued the most by the highly successful interviewers.

We were able to add to our data individual response rates for the Dutch Labour Force Survey 1996 (cf. De Leeuw, Hox, Snijkers, De Heer 1998). Although all interviewers in this study were experienced and successful, they still differ in the response rates they attain. The average response rate was 63%, the lowest was 50%, and the highest was 76%. We also calculated for each interviewer the average effectiveness rating for each of the nine strategies (cluster score). A high score indicates that an interviewer values this combination of tactics as very effective. A low score indicates that an interviewer values this strategy as not very effective.

We used logistic regression to investigate how the most successful interviewers differed from less successful interviewers. Response rate on the Labour Force Survey was used as dependent variable and the cluster-scores as predictors. Of course, interviewers in this study are not randomly assigned to respondents. They only work in certain regions. Since different regions have different general response rates (e.g., urban versus rural), we included the district in which the interviewers worked as covariate in the logistic regression.

Three clusters predicted interviewer response rate significantly: project a positive image (Cluster 1), personality (Cluster 2), and competent introduction (Cluster 7). Cluster 7 had a negative relationship with response rate. Two other clusters, effective public relations (Cluster 4), and tailor introduction (Cluster 5), were marginally significant. Those experienced interviewers who emphasize the importance of personality and a positive image are more successful than those who do not. The successful interviewers also think that tailoring and public relations are of some importance. Relatively less successful interviewers emphasize the importance of a competent introduction more.

When we look into this pattern in more detail, we see that the interviewers with a high

response rate rated certain specific strategies as more effective than the interviewers with a somewhat lower response rate. A prime example is statement S4 from the cluster personality: "self-confidence: start every interaction from the perspective that the person you contact will be cooperative." This is also evident in Cluster 1: statements S1 (be friendly) and S5 (project self-confidence) are rated as more effective by the successful interviewers. These interviewers also emphasized the effectiveness of "adapting the introduction" (S10), and especially the "modification to suit social and cultural class" (S11). It comes as no surprise that they also valued the effectiveness of "grasping the doorstep situation." These three statements were all part of Cluster 5, tailoring the introduction. It is interesting to see that the more successful interviewers attach more importance to public relations (Cluster 4). In this cluster, the successful interviewers rated statement S23 as very effective. This statement says that the agency should pay more attention to public relations and a positive image. The fact that the successful interviewers think it is important, in combination with the fact that they also ranked S22 high (refer to topics in the news that can be connected with the topic of the survey), suggests that the call for more PR is not an excuse to accept low response rates. The image of the agency is seen as a tool to work with and attain a better response rate.

Finally, Cluster 7 (competent introduction). Overall, the *less* successful interviewers ranked this cluster as important. Further analysis reveals an interesting pattern. The *successful* interviewers emphasize the effectiveness of statements S32 and S33: "mention the agency almost at once" and "start by identifying yourself." This ties in nicely with the importance they attach to public relations. The *less successful* interviewers do not rate these statements that high, they attach more importance to S36 and S15: "ask if this is the right time," and "be flexible in making appointments." Perhaps these less successful interviewers are trying to be too nice to the respondent, and give the respondents too much room to back out easily.

Of course, we should interpret these results with some caution. We examined a small group of highly experienced interviewers. Still, there is a considerable range in the response rates they attain. When we compare the answers of the more effective and successful interviewers with those who attain a lower response rate, a clear pattern emerges. The effective interviewers emphasize the importance of a combination of basic rules (identify yourself, mention agency almost at once) with more advanced tactics (tailoring, adapting introduction). Above all, they believe in themselves and emphasize the importance of social skills and self-confidence. Those who obtain a lower response rate do not rate the "basic rules" as important, and neither do they attach much importance to efficient tailoring and self-confidence. They are most respondent-oriented and try to please the respondent. They emphasize the effectiveness of being flexible in making appointments, asking respondents whether it is convenient and the right time, and being always strictly honest about the duration of the interview.

5. Conclusion and Discussion

Using a completely different research method, we were able to replicate most of the findings of Morton-Williams (1993): professional competence, tailoring of the introduction and maintaining interaction were all named as central concepts for a successful

survey introduction. The only exception was "appeal to altruism": this is one of the more successful strategies for dealing with reluctance named by Morton-Williams (see also Groves, Cialdini, Couper 1992), but it was never mentioned by our Dutch interviewers. Perhaps the interviewers just forgot to mention it, although they did mention many other strategies. Another possibility is that an explicit appeal to altruism is just not a very good strategy in The Netherlands (see also Hox, De Leeuw, Vorst 1995). To test this hypothesis, we plan to include some questions on altruism as strategy in our next study.

As we stated in the method section, our interviewers were not specially trained in doorstep techniques or persuasion strategies, and neither they nor their direct supervisors knew of the work of Morton-Williams. It should also be noted that Morton-Williams's analysis was based on British interviewers, and the work by Groves et al. on American interviewers, while our analysis was based on Dutch interviewers. Given the different methods used in both approaches, this convergence of results confirms the (cross-cultural) validity of the findings. Professional competence, tailoring of introduction and maintaining the interaction are key concepts for a successful doorstep approach in surveys (see also Groves, Cialdini, and Couper (1992) for a more theoretical discussion on this point). Special interviewer training based on these concepts is therefore strongly recommended.

In addition, several other clusters were found. These center around the personality of the interviewer and especially around the image the interviewer projects to the respondent. Being and remaining friendly, and projecting an image of self-confidence and trust, are main concepts in these clusters. These traits are partly trainable through social skills training; partly they are connected with building and maintaining morale and coping with stress and disappointments. Sophisticated interviewer training should not only incorporate social skills, but also pay attention to strategies for coping with refusals. Furthermore, it is recommended that supervisors should not only be trained in process management and guidance, but also in human relations, supportive conduct, and morale building.

The above is all concerned with the interviewer, but the survey organization and its public image is also extremely important for the response (cf. Maas and De Heer 1995). This is underscored by the interviewers who stressed the importance of the positive image of the organization. Naming the organization almost immediately was seen as a very effective tool to gain cooperation, but they also stressed the importance of public relations and positioning of the organization as one of the major actions of the organization to help them in gaining cooperation (Cluster 4 (Public Relations)).

Groves, Cialdini, and Couper (1992) point to social context and survey-taking climate as factors that affect survey participation, Mass and De Heer (1995) mention the public image of the survey organization, and Hox, De Leeuw, and Vorst (1995) and Schnell (1997) focus on the Aijzen-Fishbein theory of reasoned action and the importance of attitudes and beliefs of respondents for response behaviour, including respondents' ideas about surveys and survey organizations. Large survey organizations are therefore advised to pay more attention to their public image and invest in gaining and keeping a positive image and the trust of the public.

When we add response rates to our data, and compare the answers of the more effective and successful interviewers with those who attain a lower response rate, a clear pattern emerges. The effective interviewers emphasized the importance of a combination of basic rules (identify yourself, mention agency almost at once) with more advanced tactics (tailoring, adapting introduction). Above all, they believe in themselves and emphasize the importance of social skills and self-confidence. Those who obtain a lower response rate regard the "basic rules" as less important, and attach less importance to efficient tailoring and self-confidence. Of course, we should interpret the results with some caution. We examined a small group of highly experienced interviewers, which may cause a "restriction of range" effect in the statistical analyses. Still, there is a considerable range in the response rates the interviewers attain, and we have confidence in the findings. Again, they replicate Morton-Williams (1993, Chapter 7), who also emphasizes the combination of "basic rules" (e.g., identify self and state business) with more advanced strategies for dealing with reluctance (e.g., be responsive to situation, be flexible). In her book, Morton-Williams also gives a detailed training program based on these principles.

This study, like Groves et al. (1992), Morton-Williams (1993), and Campanelli, Sturgis, and Purdon (1997), focuses on face-to-face interviews. Telephone interviews are a serious alternative to face-to-face interviews in many situations (cf. Groves et al. 1988; De Leeuw 1992). It would be interesting to investigate how the strategies identified in this study might apply to nonresponse in telephone interviews. Telephone interviews and their introductions differ on two important points from the face-to-face interview. First, interviewers in face-to-face interviews have more opportunities to collect the information that is necessary for successful tailoring. They can use both visual and auditory channels of communication, and draw inferences about the respondent from contextual information such as the type of housing. In contrast, in telephone introductions the interviewers can only rely on auditory information. Second, telephone interviewers have far less time to convince a reluctant respondent. Therefore, telephone interviewers have less opportunity to keep the interaction going, and to customize their approach. Still, there is some indication that "tailoring" and "maintaining interaction" works in telephone interactions (Maynard, Schaeffer, Cradock 1993; Pondman 1998). Furthermore, social skills and selfconfidence were important factors named by successful face-to-face interviewers, and these are also emphasized in interviewer training. These principles can be translated to the telephone situation and in an adapted form be addressed in training for telephone interviewers. For instance, telephone interviewers cannot use smiles or gestures, they have to sound friendly, enthusiastic, and convincing. A special problem in telephone surveys is the establishment of the legitimacy of the survey. In face-to-face surveys, interviewers have far more means, for instance they can show an official ID or copies of leaflets and letters. Some suggestions for the telephone situations are: state that you are not "selling anything," state explicitly that the information given will be confidential, and mention a toll-free telephone number for information. The above are extrapolations from knowledge about the face-to-face situation and these hypotheses should be tested in empirical research.

In this study, a group of experienced interviewers was asked to name tactics for fighting nonresponse and to rate these tactics as to effectiveness. The results are promising and confirm findings in other countries, using other research methods (for an overview, see Groves and Couper 1998). Still, there is much research remaining to be done. For instance, it would be worthwhile to see if experienced interviewers and novices differ in the importance they attach to certain strategies. Statements based on the strategies found in

this study could be rated by large groups of interviewers who differed in experience and effectiveness. In addition, studies that concentrate on the actual interaction between respondents and interviewers, like the study of Morton-Williams (1993), will help us to understand the process of nonresponding. Finally, it should be noted that the role of an interviewer in maximizing response rates can be divided into two parts: making initial contact with the potential respondent, and actually persuading a potential respondent to cooperate in an interview. This study focussed on the second part: the persuasion of the respondent to cooperate *after* the contact was made. For a discussion of factors that maximize the probability of an initial contact and of the control interviewers have over these factors see Purdon, Campanelli, and Sturgis (1996) and Campanelli, Sturgis, and Purdon (1997).

6. References

- Akkerboom, H. and DeHue, F. (1997). The Dutch Model of Data Collection Development for Official Surveys. International Journal of Public Opinion Research, 9, 2, 126–145.
- Argyle, M. and Trower, P. (1979). Person to Person: Ways of Communicating. London: Harper & Row.
- Argyle, M. (1969). Social Interaction. London: Methuen.
- Campanelli, P. (1995). New Programmes of Nonresponse Research at SCPR, London. Paper presented at the 6th International Workshop on Household Survey Nonresponse, Statistics Finland, Helsinki, October 25–27, 1995.
- Campanelli, P., Sturgis, P., and Purdon, S. (1997). Can You Hear Me Knocking: An Investigation into the Impact of Interviewers on Survey Response Rates. London: SCPR.
- Campanelli, P.C., Martin, E.A., and Rothgeb, J.M. (1991). The Use of Respondent and Interviewer Debriefing Studies as a Way to Study Response Error in Survey Data. The Statistician, 40, 253–264.
- Couper, M.P. and Groves, R.M. (1996). Contact-level Influences on Cooperation in Faceto-face Surveys. Journal of Official Statistics, 12, 63–84.
- Couper, M.P. and Groves, R.M. (1992). The Role of the Interviewer in Survey Participation. Survey Methodology, 18, 263–277.
- De Leeuw, E.D. (1992). Data Quality in Mail, Telephone, and Face-to-face Surveys. Amsterdam: TT-publikaties.
- De Leeuw, E.D., Snijkers, G., and Hoezen, D. (1997). Kwalitatieve Veldproef POLS. Procedures voor Werving, Selectie en Training van Meta-interviewers [Field-experiment POLS; Procedures for recruiting, selecting and training special interviewers]. Heerlen: CBS, BPA# H2287-97-GWM. In Dutch.
- De Leeuw, E.D., Hox, J.J., Snijkers, G., and De Heer, W. (1998). Interviewer Opinions, Attitudes and Strategies Regarding Survey Participation and Their Effect on Non-response. ZUMA Nachrichten Spezial No 4, 239–248.
- Dillman, D.A. (1978). Mail and Telephone Surveys: The Total Design Method. New York: Wiley.
- Forsyth, B.H. and Lessler, J.T. (1991). Cognitive Laboratory Methods: A Taxonomy. In P.P. Biemer, R.M. Groves, L.E. Lyberg, N.A. Mathiowetz, and S. Sudman (eds.). Measurement Errors in Surveys. New York: Wiley.

- Groves, R.M., Biemer, P.P., Lyberg, L.E., Massey, J.T., Nicholls, W.L. II., and Waksberg, J. (eds.), (1988). Telephone Survey Methodology. New York, Wiley.
- Groves, R.M., Cialdini, R.N., and Couper, M.P. (1992). Understanding the Decision to Participate in a Survey. Public Opinion Quarterly, 56, 475–495.
- Groves, R.M. and Couper, M.P. (1998). Nonresponse in Household Interview Surveys. New York: Wiley.
- Hox, J., De Leeuw, E., and Vorst, H. (1995). Survey Participation as Reasoned Action: A Behavioural Paradigm for Survey Nonresponse? In BMS Special Issue on Survey Measurement Error and Nonresponse, BMS, 48, 52–67.
- Lyberg, I. and Lyberg, L. (1991). Nonresponse Research at Statistics Sweden. Invited paper presented at the Annual Meeting of the American Statistical Association, Atlanta, GA, U.S.A.
- Lyberg, I. and Dean, P. (1992). Methods for Reducing Nonresponse Rates: A Review. Paper presented at the Annual Meeting of the American Association for Public Opinion Research. St. Petersburg, FL, U.S.A.
- Maas, C. and De Heer, W. (1995). Response Developments and the Field Work Strategy. In BMS Special Issue on Survey Measurement Error and Nonresponse. BMS, 48, 36–51.
- Maynard, D.W., Schaeffer, N.C., and Cradock, R.M. (1993). Declinations of the Request to Participate in the Survey Interview. Washington, DC: U.S. Bureau of the Census.
- Morton-Williams, J. (1993). Interviewer Approaches. Aldershot: Darthmouth Pub.
- Pondman, L.M. (1998). The Influence of the Interviewer on the Refusal Rate in Telephone Surveys. Ph.D. Thesis, Vrije Universiteit, Amsterdam.
- Purdon, S., Campanelli, P., and Sturgis, P. (1996). Interviewers' Calling Strategies on Face-to-face Interview Surveys. Paper presented at the 1996 International Conference on Social Science Methodology, theme Survey Nonresponse, University of Essex, Colchester, July 1–5, 1996.
- Schnell, R. (1997). Nonresponse in Bevölkerungsumfragen: Ausmaß, Entwicklung und Ursachen. Opladen: Leske + Budrich. In German.
- Trochim, W.K. (1989). An Introduction to Concept Mapping for Planning and Evaluation. Evaluation and Program Planning, 12, 1–16.
- Trochim, W.K. (1993). The Concept System (manual). Ithaca: Concept systems software.

Received May 1997 Revised August 1998