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Topic (iii): Improving the respondent experience

UNDERSTANDING THE RESPONDENT – A KEY TO IMPROVING OUR DATA COLLECTION STRATEGIES?

Working Paper

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I. Introduction

1. To complete the data collection in an interview survey, three crucial steps have to be accomplished: first we need to establish contact, second we need to gain cooperation and third we need to perform the measurement (asking the questions and recording the answers). One could argue that all these steps are a part of the total survey experience for the respondent.

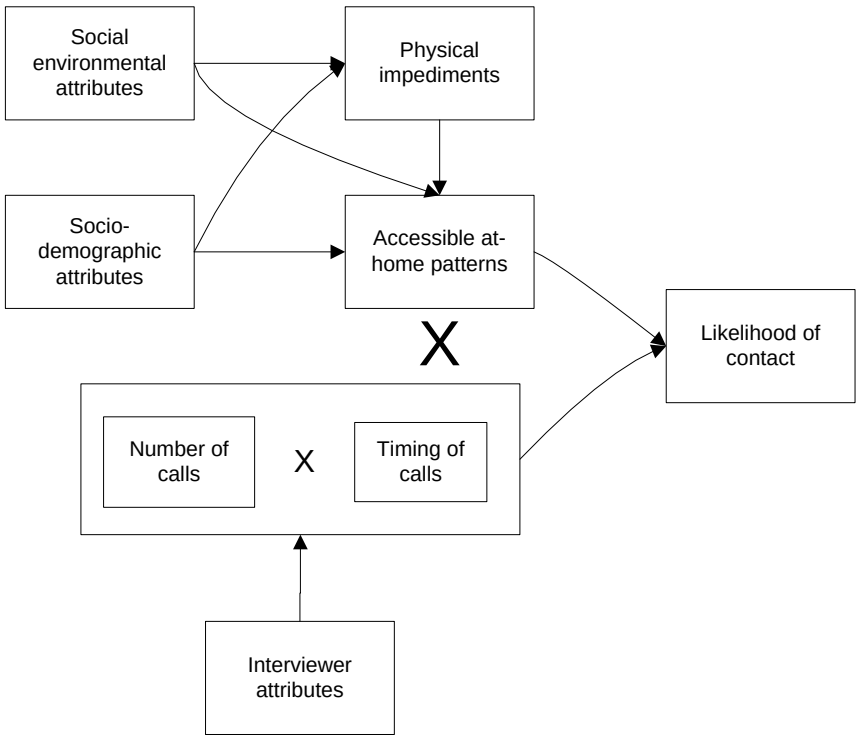
2. This paper focus mainly on how to get in contact with sample units and discuss how this process of establishing contact could have an impact on the overall survey experience. Drawing on some recent work at Statistics Sweden some of these issues are discussed.

3. First a model suggested by Groves and Couper to explain contactability is described. Then some results from an experiment in the Swedish Labour Force Survey is presented and discussed. The paper ends with a discussion about how our contact strategies could have an impact on the survey experience.

II. Contactability and Likelihood of Contact

4. Groves and Couper (1998) describes a model that tries to explain the factors that affect the likelihood of contact. (Se figure 1 below).

Figure 1. A model of contactability. Groves and Couper (1998).



5. The model by Groves and Couper can be used in trying to understand the factors behind for example increasing noncontact rates in surveys (which is experienced in many surveys – both surveys at Statistics Sweden and other).

6. The top part of Figure 1 describes how both societal factors - "social environmental attributes"- (such as for example neighbourhood characteristics) and individual factors concerning the sample unit - "socio-demographic attributes" – (such as for example income, education, family structure) both have an impact on a person's "accessible at-home patterns". Both societal and individual factors might also have an effect on "physical impediments" for establishing contact (for example if a person lives in a gated community or do not have a telephone in their home). In a telephone survey "physical impediments" could also be different ways of blocking incoming calls, for example answering machine, caller-ID.

7. (The "available at-home" part of the model might have to be interpreted a little bit more broadly today. Contacts are no longer made only to landline phones, but also to mobile phone and smart phones. With those devices it is possible to be accessible all time of day, so perhaps one way of thinking about this is to replace "available at-home" with "available to answer".)

8. The bottom part of the model is concerned with survey operations – when do we place our calls to the sample unit and how many times we try to establish contact. These decisions about number of calls and when to place them might also be affected by the "interviewer attributes". This would be especially true when the decisions about timing of calls are made by the interviewer and not by the call scheduling in the CATI-system. In the case where the interviewer makes the decision, interviewer attributes such as "experience" might also affect the likelihood of contact.

9. In large scale survey production the “number of calls” and “timing of calls” also depend on many other factors – such as call scheduling algorithms, staffing, available field work time, assumptions made about contactability in different subgroups of the sample and so forth.

10. In trying to design cost efficient contact strategies, do we sometimes forget the person hidden behind the telephone number? In our survey operations we place calls to many individuals and telephones during the day. But what happens to those calls? And do they have an impact on the survey experience?

A. Our perspective and the respondent’s perspective on contact attempts – do they match?

11. From survey operations point of view, a goal is to design contact strategies and operational routines that maximize contact and response rates, and try to do this at a cost that is as low as possible. How many outgoing contact attempts we place to a single sample unit depend on many factors, for example, fieldwork time, call scheduling algorithms in our CATI-systems, available interviewers and the number of sample cases, assumptions about contactability and so on. It also depends on available ways of contact to the sample case: landline telephone, mobile phones, e-mail, text message (SMS) and so on. Turning to the respondent’s perspective, an outgoing contact from survey operations is just one among many other incoming contacts from different sources (see Figure 2 and Figure 3 respectively).

Figure 2. Outgoing contacts from survey operations

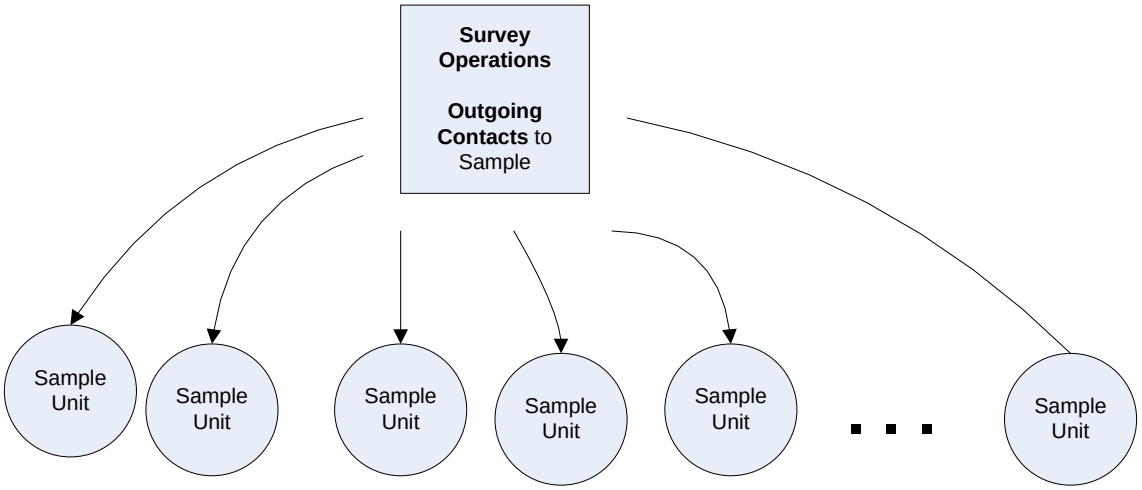
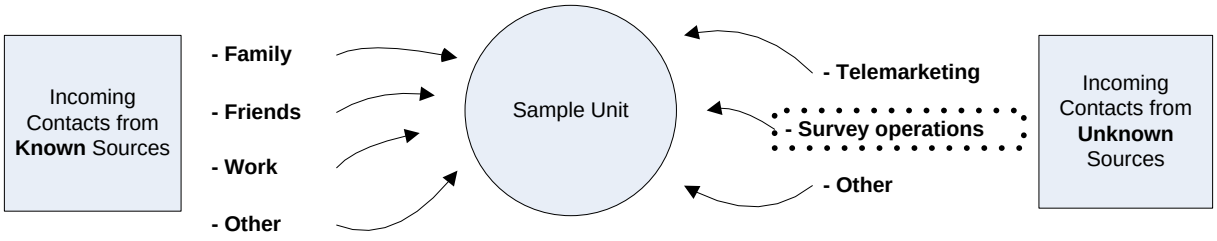


Figure 3. Incoming contacts to sample member



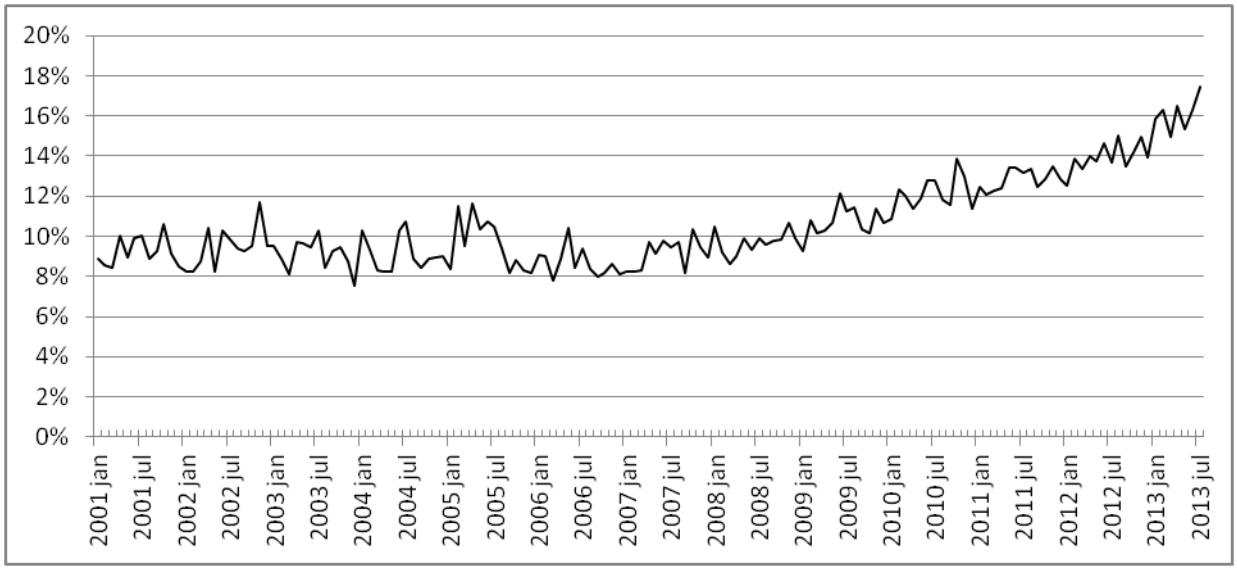
12. Most of the time the incoming contacts from survey operations have to compete with many other incoming contacts. There are incoming contacts that have sources that are known to the sample member (e.g. from family or friends) while the sources of other incoming contacts are unknown to the sample units before they answer the phone. Most of the time survey operations will fall into the category of unknown sources.

13. One could argue that this distinction between known and unknown sources is getting stronger with technical development, for example, with smartphone apps allowing user to automatically block call from numbers not in the contact list. A call from an unknown source might be blocked, or not prioritized by the sample person. Repeated calls from the same unknown source or calls at inconvenient times might be experienced as disturbing – and therefore are not answered.

III. Experiment in LFS – new strategy to contact "hard-to-reach" sample units

14. The noncontact rates have increased rapidly at Statistics Sweden during the past few years (Diagram 1).

Diagram 1. Noncontacts per month in LFS (%). January 2001-July 2013.



15. This increase in noncontact rate precipitates the need for understanding the reasons for noncontact and refining contact strategies. Therefore an experiment was carried out focusing on some of the hard-to-reach cases in the LFS (Statistics Sweden, 2013).

B. Basic Design of the LFS Field Work

16. The Labour Force Survey (LFS) at Statistics Sweden has a panel design where each survey unit is contacted eight times; every third month over two years time. Sample units have an assigned reference week in each month, and the contact attempts starts on Monday the week after. The field work is mainly focused to the two following weeks after the reference week, although contacts are allowed throughout the month. This means that sample units in the first reference weeks of the month have a longer possible field work period to be contacted than the last reference week in the month.

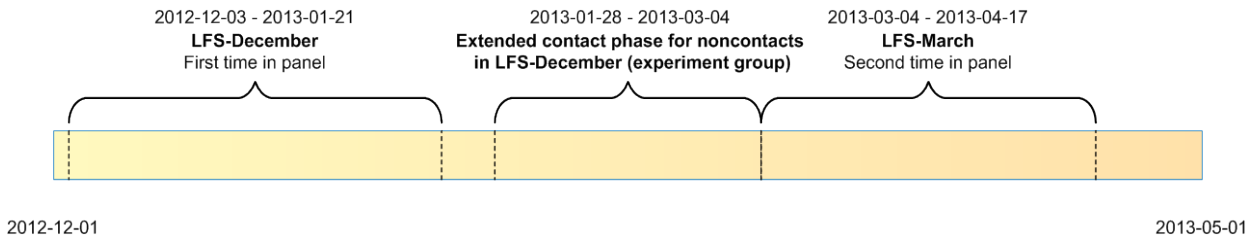
C. About the experiment

17. Since there is a large part of the sample where contact is not established during the field work, an experiment was designed to try a new contact strategy for the "hard-to-reach"-cases. In the experiment, focus was on the sample units who were in their first panel wave. The experiment then focused on the noncontacts in this group. How could we better establish contact with them before the second wave of the survey?

18. After the ordinary field work, 618 out of 3717 sample units were coded as noncontacts (17%). This group was divided into an experiment group and a control group (309 sample units each). The

experiment group were supposed to be given additional contact attempts in the weeks *between* wave 1 and wave 2 (Figure 4 below).

Figure 4. LFS-experiment. Extended field work.



19. By extending the contact phase for the hard-to-reach cases, the hope was to establish contact with them and collect information that in turn would lead to contact and cooperation in LFS-March (the following panel wave). Similar strategies have also been tried by others before - for example McGonagle et al (2011) and McGonagle et al (2013) where postcards were used for collecting contact information between panel waves[1].

20. In this experiment, further contact attempts (telephone calls) were made –and special effort was made to place those calls at times when the presumed "contactability" of the sample unit was as high as possible. The sample units in the experiment group were given to a special group of interviewers who made the contact attempts both during the extended field work and during LFS-March.

21. A strategy to categorize and customize the contact attempts to each individual sample unit was used. In an earlier project at Statistics Sweden experienced field-interviewers were interviewed about their own contact strategies and how they judge appropriate time for contact (Statistics Sweden, 2011). In their way of work this categorization was a natural part, but it was not formalized and the ways of categorizing had some differences from interviewer to interviewer. In the experiment the categorization was made by the involved interviewers together to try to make this categorization more similar between interviewers.

22. The categorization can be seen as part of a tailoring approach. *Tailoring* can be described as a technique where "interviewers adapt their approaches to specific sample units by the characteristics of those sample units" (Biemer and Lyberg, 2003).

D. Results of the Experiment in LFS

23. After the initial categorization most cases could be divided into one of the following categories (number of cases in each category in brackets):

    - Keep calling (too few contact attempts made) [60]
    - Make call to work place [49]
    - Call at a certain time of day [36]
    - Tracing (no working phone numbers) [110]
    - Make call with help from interpreter (language problems implied) [16]
    - Not in Sweden during field work [9]
    - Other [29]

24. 53 cases were deemed not worth contacting at all during the extended field work (individuals that were abroad or where new telephone numbers could not be found). The 256 cases that were left were divided between the interviewers in the experiment.

[1] In their study the time between panel waves where 2 years.

25. In 47 % of the 256 cases, contact was established with the sample unit (44% provided new contact information for the following contact in LFS-March, 3 % were refusals). In 27 % of the cases contact was established with "somebody else", e.g. another household member, current or former workplace (7 % provided new contact information for the contact in LFS-March, 20% provided no new information). In 26 % of the cases no contact at all was established during the extended field work.

26. After the extended field work (when the ordinary data collection i LFS-March began), the new information and "tailoring-efforts" would hopefully result in a higher response in the second panel wave. This was also the case. When compared to the control group the response rate was significantly higher in the experiment group (36 % in the experiment group, 25 % in the control group).

IV. Some thoughts and discussion

E. Why did we get a higher response rate in the experiment group?

27. So "tailoring" contact attempts (both between the waves and in March) seemed to cause higher rates of contact and cooperation. However, an alternative explanation would be that the "additional" field work and collection of better contact information between the two panel waves produced the successful results. Which of the two reasons would we put most faith in? The experiment was not designed to fully answer this question, but it seems very plausible that more thoughtful tailored contact attempts would lead to a higher contact rate that in turn can lead to higher response rates.

28. The tailoring in the experiment required a judgement by the "human eye". Decisions were made by the interviewers based on their own experience and available information about the sample unit. Information that was useful in tailoring the contacts was for example: How old is the sample person? Do we have indications of an occupation? Family? What were the results from earlier contact attempts? At what time of day and week was the earlier contacts made? Had we used all available ways of contact (i.e. calling landline, mobile phone, phone number to work and so forth)?

29. One conclusion (or suspicion) from the experiment is that the tailoring and "care" that was given to these "hard-to-reach"-cases was the most important reason for the higher response rate in the experiment group. Of course this raises questions that are important for the routines for survey operations – but also for the overall design of a contact strategy. How can we maximize the likelihood of contact for hard-to-reach individuals? It is one thing to do this as an experiment – but having the same approach in full-scale monthly production brings many new challenges. As pointed out by McGonagle et al (2011) "it is clear that the use of strategies that are tailored to various subgroups within the sample should include a consideration of the operational costs and benefits of their implementation".

30. From an operational perspective it is not trivial to translate the efforts made in the experiment to the monthly survey production. It is one thing to tailor contact attempts to 256 sample units – and another to do this in a regular LFS-month with 29 000 sample units. Still the results from the experiment show that a new perspective on data collection strategies that focus on the individual respondent could be a way to increase response rates.

F. Contact Strategies as part of the Respondent Experience?

31. Obviously it is a goal in itself to design contact strategies and operational routines to maximize contact and response rates while also trying to do this at a cost that is as low as possible. There is no use in placing calls at times where we do not get an answer. Reducing costs and increasing efficiency is an important goal for any statistical agency with budget restraints. But could these contact strategies also have an impact on the overall experience of the survey itself – or how we as statistical agencies are perceived? As shown in Figure 3, we are only one of the incoming contacts to a respondent. And usually they do not know who we are. What is the experience of the respondents when we make these calls?

32. As an attempt to better understand the respondents' reasons for participating or not, a qualitative study was conducted (Fjelkegård & Wallenborg, 2013). In the study eleven nonrespondents from the Labour Force Survey (LFS) and the Survey on Living Conditions (SLC) were interviewed about their reasons for choosing not to participate.

33. The nonrespondents" in the qualitative study most commonly mentioned "lack of time" and "inappropriate timing of the contact" as reasons for not participating in the survey. Referring to lack of time or being busy when declining to participate might be an effect of increasing (perceived) time pressure in society when concerning both paid work, household chores and family over the last decades (Vercruyssen et al, 2011). The explanations from the "nonrespondents" in the qualitative study might give some perspectives on what their experience of the survey request was.

34. One "nonrespondent" mentioned that it is difficult to distinguish between contacts from different sources and that they do not answer because they do not know who is calling them. Below are two quotes from one of the interviewed nonrespondents in the study (freely translated from Swedish):

    " I get tired of all the people calling that I don't want to talk to. So that might affect your call as well – although it was the ten telemarketers calling before you that I was actually tired off".

    "I think it very much depends on what your situation in life is or what you're doing on the particular day you are calling. For me there is a lot of things going on all the time".

35. How can we react to this in our efforts to design contact strategies that will help us to gain contact and cooperation from our respondents?

36. Particularly interesting here is if there has been a change in behaviour of the sample persons. Are we just another "intruder" trying to make contact and therefore are shut out? Has there been a shift in society, which in turn could lead to that the "physical impediments" are getting more difficult for us to overcome (for example smartphone apps automatically blocking calls from unknown numbers)?

37. In face-to-face surveys a locked gate is a physical impediment for contacting the sample person. But simply "breaking through the gate" to make contact would not be a good idea. Even thought it might lead to a contact, the result of that contact would probably not lead to the subsequent steps of cooperation and conducting the interview.

38. In a telephone survey, to keep placing more and more calls at many different times might have a similar effect. In worst case, "bad" contact attempts or too many calls might decrease the probability of cooperation (if a contact finally would be established). This is why we have to think about how the respondents perceive our outgoing contacts. Understanding how respondents react to incoming calls from unknown sources and trying to place calls at the most suitable times for the individual (or at least not placing them at bad times) is a way of improving respondent experience of the survey process as a whole.

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