

The Effect of Interview Method and Response Rate on Victim Survey Crime Rates

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In a regional crime survey in Southern Spain, 3139 respondents participated in a victimisation survey, a representative sample of the 1.2 million inhabitants of the province. The object was to integrate various sources of information about crime in one region, supplemented by other research where necessary, in order to obtain a coherent picture of crime patterns and trends (Stangeland 1995).

Two methodological questions are addressed in this paper. Firstly, which method is preferable, telephone or face to face interviews? Secondly, what would the non-respondents tell us?

Telephone versus Face to Face Interviews

Population survey agencies appeared to shift away from personal interviews and instead use the telephone in the 1980s. Telephone surveys are faster, cheaper, and give rise to fewer rejections. There are, however, several remaining doubts about the wisdom of this move. Do telephone responses have the same validity? Do people have a better personal contact, and do they reflect more over the questions posed in a face to face situation?

A review of 28 published studies that compare telephone interviews with face to face interviews indicates that the difference between these two methods is small (de Leeuw & van der Zouwen 1988). Both methods show some bias: the

respondent may be more prone to give socially desirable answers in a face to face interview, while telephone interviews may be less successful in obtaining sensitive information. Interviewer skill and training is probably a more decisive factor than the interview medium itself. Körmendi (1988) carried out a methodologically solid comparison between income information given in face to face and telephone interviews. Both samples were drawn from the Danish Central register, and information given in the interview could be checked against declared income. The conclusion of that study was that telephone interviews gave higher levels of non-response on questions on income. However, those who responded gave quite comparable results. Both kinds of interview gave a Spearman's R correlation of .85 with officially recorded net income. Self-employed persons gave information that correlated badly with official data which might indicate that the interview data was more truthful than their tax declaration.

However, none of these methodological studies relates directly to interviews on crime experiences. The ICS surveys use telephone wherever the coverage is high enough, and personal interviews in regions with low phone coverage. This implies that one cannot compare personal interviews with telephone interviews within the ICS data base, since the samples obtained are different. Kury (1993) presents a comparison between interviews by telephone to 5000 households in the former German Federal Republic with personal interviews carried out in the former German Democratic Republic to produce tables with crime rates from the two parts of Germany before and after the Wall came down. The validity of such a comparison depends on whether or not the two methods give comparable results with regard to crime rates.

Pavlovic (1994) organised an ICS survey in Ljubljana, the capital of Slovenia, in 1992. Doubts as to the telephone coverage and adequacy of phone interviews made them decide for a dual (split) sample—700 were interviewed by phone, and 300 by personal interview. The telephone interviewees were chosen from the phone directory, the personal interviewees by area sampling methods. Active refusal rate was, respectively, 3 per cent and 6 per cent.

Refusal rates are quite low, as in many other former Socialist countries, while survey research is still a novel experience. Refusal rates are, however, lower in the telephone sample. Given the moderate size of the two samples, it is difficult to find significant differences in crime rates, or in other response patterns between the two samples.

Who are the Non-Respondents?

The number of rejections and other sample losses vary strongly between different surveys. The undisputed leader in producing a consistent and high response rate is the US Census Bureau. One must, however, take into account that the US surveys sample addresses, not households. If a family has moved from the given address, the Census Bureau makes no attempt to find them. The new arrivals are interviewed instead.

The ICS response rate varies between the 33 per cent obtained in 1989 in Spain, to a high of 95 per cent or more in Poland in 1992 (Van Dijk 1992). Can

one compare the crime rate found in different countries if, in addition to sampling problems mentioned above, the response rate fluctuates that strongly? An overview of the impact of non-response in telephone surveys in general leaves the question open. The answer depends on the extent to which victimisation correlates with the factors that produce sample loss. The part of the population that is most difficult to find in a survey may also be the part of the population that suffers more crime. The same goes for the 10 per cent to 20 per cent of the population that does not have a telephone—they are not included in the sample at all.

Jock Young states that victim surveys have their own dark figures:

The non-response rates in all these surveys are considerable, and in most cases there is a fifth to one quarter of respondents whose victimisation is unknown. It goes without saying that such a large unknown population could easily skew every finding that we victimologists present. At the most obvious level it probably includes a disproportionate number of transients, of lower working class people hostile to officials with clipboards attempting to ask them about their lives, and of those who are most frightened to answer the door because of fear of crime (1988, p. 169).

Van Dijk (1990) discusses this problem in his review of the 1989 surveys, and concludes that they have no clear evidence on the effects of non-response. Two counter-balancing effects are operating. Firstly, as Young maintains, the surveys lose that part of the population which is most difficult to locate, and which may have a lifestyle that makes them more vulnerable to crime. Secondly, people who have been victimised may be more motivated to participate, because they have something to tell. These two effects, which we might call respectively the 'lifestyle' and 'eager to tell' hypotheses, may rule each other out to some extent. That could explain the overall lack of correlation between victimisation rates and response rates in the ICS surveys.

A possible support for the 'eager to tell' hypothesis is found if we compare the two ICS surveys that were carried out in the US. The response rate in these two surveys increased from 37 per cent in 1989 to 50 per cent in 1992. The effect was that rates of personal violence decreased. Robbery went down by 21 per cent, assault by 14 per cent and sexual incidents by 49 per cent. Since it is unlikely that a 'real' decrease in personal violence took place during these three years, the change in victimisation rates is probably due to sampling fluctuations. If respondents who have suffered a violent attack are more motivated to participate in a survey about crime, we would find precisely such an effect by improving the response rate. On the other hand, an improvement in the Finnish sampling technique and response rate between 1989 and 1992 gave increasing counts of violent crime.

Three other research projects throw light on the non-respondents from another angle.

A German study on self-reported crime undertook to interview a representative sample of youngsters. Of a total sample of 1398 persons, they tracked down and interviewed 920 (Willmow & Egon 1983, p. 283). However, they were also able to check police, state attorney and Central Criminal Register

data for all the youngsters, whether they participated in the study or not. They found that police record rates varied between the participating and non-participating group. The group of respondents who refused to participate had the highest crime rate of all. They were closely followed by the youngsters who were difficult to locate. At last, to reassure those who might suspect that surveys tell nothing but lies, Willmow found that those who confess having committed crimes actually are registered with the police more often than those say that they have not.

Victimisation surveys may be different. Respondents who have suffered a crime might be more willing to tell about their experience than delinquents who have been caught in the act of committing a crime. Sparks (1977) interviewed a selected group of persons who had reported a crime to the police, along with a representative sample drawn from the population register in the same area. They experienced severe problems in locating both samples, but more so with the victims than with the population in general.

Whereas 45.6 per cent of the general sample had moved or could not be contacted, the same was the case for 56.8 per cent of the persons who had reported a crime to the police. However, the refusal rate was more or less the same for the two sub-samples: 9.4 per cent for the population sample, and 8.1 per cent for the 'victimised' sample. If we calculate refusals on the basis of persons actually contacted, we find a refusal rate of 18.8 per cent for victims, and 17.3 per cent for non-victims.

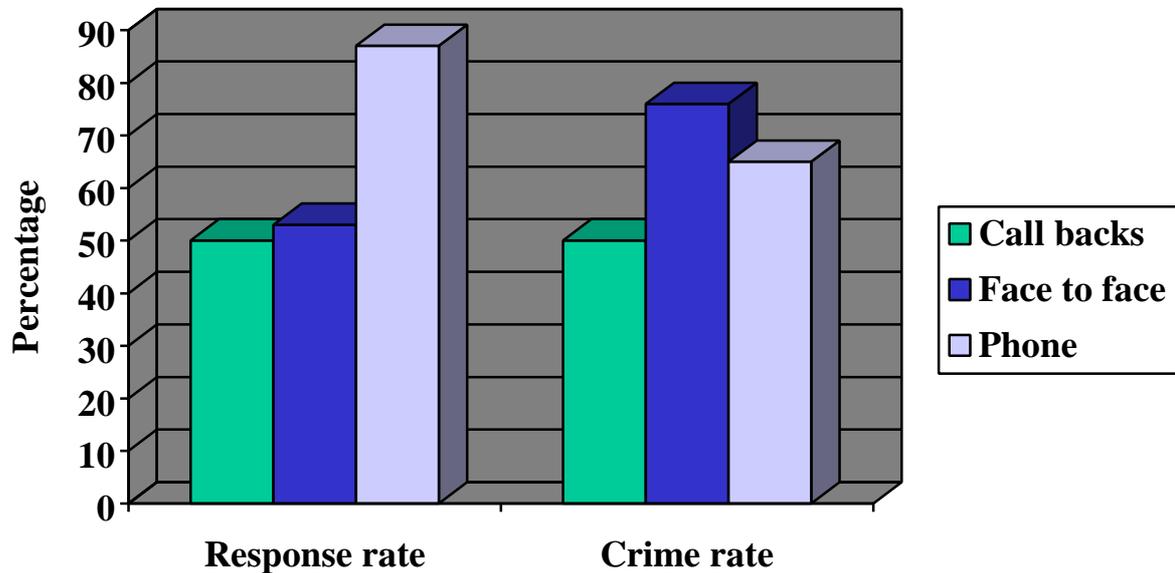
We conclude from this that the refusal rate is not significantly higher among people who have reported a crime to the police. However, they move more frequently, or are difficult to locate in their homes. We have good reasons to suspect that non-respondents are, in fact, different with regard to lifestyle. They may be more delinquent, more accident-prone and more often victimised.

Our Findings

Do personal interviews on crime experience give other responses than telephone interviews? Our split sample design gave an answer to that question. A total of 901 respondents were interviewed by telephone, and 479 by a personal interview.

All results in figure 1 refer to the city of Malaga only. Data from the 1574 interviews outside the capital area are held outside this comparison. The personal interviews and telephone interviews are independent random samples from the same population, drawn in the same way, preceded with the same introductory letter and interviewed with the same questionnaire, with the minor adaptations necessary for the different media employed: face to face versus telephone interview. The telephone interviews were carried out in two sweeps: the first one in 1993, with the purpose of finding out if telephone interviews were preferable to personal interviews. The second sweep was carried out in 1994. Response rates are calculated on the basis of net samples, where only the relevant contacts count.

Figure 1

Response rates and crime rates in comparable samples, Malaga 1993-94

Comparing the personal interviews with the telephone interviews, we find a strong inverse relationship between crime rates and response rates. The personal interviews are more difficult to carry out, and the refusal rate is higher. However, those who concede an interview have more to tell: a total of 76 per cent have experienced one of more crimes during the last five years, compared to 65 per cent of those interviewed by telephone.

We also find that the 'call backs' who refused to participate or were difficult to locate by personal interviews, actually report fewer crimes. We sent a second letter to 370 respondents left over from the personal interviews in 1993, and obtained an interview by phone with 185 of them. These 185 interviews brought the overall response rate for that year up to 73.9 per cent, and can indicate what we gain by making an extra effort with respondents who refused to participate or were difficult to locate.

Discussion

Non-response issues have been under debate since victim surveys started. We identify two hypotheses on how non-respondents skew the sample. The 'lifestyle' hypothesis maintains that the non-respondents have a lifestyle which exposes them to high crime risks. They are more transient, and perhaps of lower social class than the sample interviewed. The other hypothesis, which we called the 'eager to tell' hypothesis, is that victims of crime might be more motivated to participate in a survey of this kind, and that non-respondents report less crime than the respondents.

Our findings lend more credibility to the 'eager to tell' hypothesis. The extra effort spent in locating and interviewing half of all the initial non-respondents actually brought down the crime rates in the final sample. The difference was, however, not very great, and we suspect that these two effects counterbalance each other, so that the net result of increasing the response rate is only marginal. This means that surveys where response rates may vary between 50 per cent and 80 per cent might be comparable, without any corrections for the skewing effects of low response rates.

The half of the population who respond to a personal interview are more motivated to participate. They take more time to think the questions over, and might also feel more of an obligation to tell the interviewer something, since he or she took the time and effort to visit them. Consequently, they report more crime incidents than the sample interviewed by telephone. In the telephone sample, where we reached almost 90 per cent of the respondents, we meet persons who are in a hurry, who are not very motivated to participate, and answer more briefly. They fail to recall minor incidents, and give a lower crime count. The group who had initially refused to participate or were difficult to locate, are the ones with the lowest crime rates of all.

Improving the response rate did not, however, give higher crime counts. We might be able to locate more respondents of the lifestyle which would imply higher crime risks. This is, however, more than counterbalanced by their lower motivation to participate in the survey, and a reduced effort to recall what has happened to them previously.

Telephone interviews yield slightly lower crime counts than personal interviews. Which of the two methods is the more valid one? The personal interviews may have 'telescoped forward' more events, and perhaps also included some thefts that actually happened to their aunt or their cousin. The telephone interviews may have ignored incidents that actually should have been included. We cannot, on basis of these data, draw any firm conclusions on validity, except that comparisons of victimisation rates between surveys which employ different methods must be performed with great caution. Comparisons between surveys which employ the same interview methods, but obtain different response rates may, however, be quite valid.

References

- De Leeuw, E.D. & van der Zouwen, J. 1988, 'Data quality in telephone and face to face surveys: A comparative meta-analysis', in *Telephone Survey Methodology*, eds R. Groves et al., Wiley, New York.
- Kormendi, E. 1988, 'The Quality of Income Information in telephone and face to face surveys: A comparative meta-analysis', in *Telephone Survey Methodology*, eds R. Groves et al., Wiley, New York.
- Kury, H. 1993, 'The influence of the type of data collection method on the results of the victim surveys', Publication 49, UNICRI, Rome, pp. 137-52.
- Pavlovic, Z. 1994, 'International crime survey in Ljubljana Slovenia 1992: Telephone versus face to face method', Manuscript.

- Sparks, R.F. 1977, *Surveying Victims: A study of the measurement of criminal victimisation, perceptions of crime and attitudes to criminal justice*, John Wiley and Sons, Chichester, New York.
- Stangeland, P. 1995, *The Crime Puzzle: Crime Patterns and Crime Displacement in Southern Spain*, Miguel Gomez Publications, Malaga, Spain.
- Van Dijk, J.J.M. 1990, *Experiences of Crime around the World: Key findings from the 1989 international crime survey*, Kluwer Law and Taxation Publishers, Deventer, Netherlands.
- 1992, *Criminal Victimization in the industrialised world: Key findings of the 1989 and 1992 international crime surveys*, Directorate for Crime Prevention, Ministry of Justice, den Haag.
- Willmow, B. & Egon, S. 1983, 'Jugendkriminalität in einer Gemeinde. Eine Analyse erfragter Delinquenz und Viktimisierung sowie amtlicher Registrierung', Max Planck Institut, Band 6 Freiburg.
- Young, J. 1988, 'Risks of crime and fear of crime: A realist critique of survey assumptions', in *Victims of Crime: A New Deal*, eds M. Maguire & J. Pointing, Open University Press, Milton Keynes, England.