THE RESPONSE RATES OF THE NATIONAL READERSHIP SURVEY

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Synopsis

This paper discusses the recent response rate trends of the UK's National Readership Survey with particular reference to the sampling and interviewing changes made in 1992.

It shows that response rates are implied and influenced by the basic methodological approaches of the survey and that they can be improved within the framework of those approaches, but only to a certain degree. It argues that random sampling for audience measurement surveys must be preferable to quota sampling, even if response rates are a problem.

Introduction

In a paper entitled "Response Rate Trends in Britain"[1] given at the Hong Kong Symposium of 1989, I described the falling trends of the UK National Readership Survey over a 30 year period, examined their reasons and reported the measures which had been tried to overcome the increasing problems.

Since then two important changes have occurred which were in the main technical improvements but had seemingly negative impacts on the NRS response rates. These were the change from the Electoral Registers as the NRS sampling frame to that of the Postcode Address File (PAF) in January 1992, and the introduction of Computer Assisted Interviewing (CAPI) half a year later in July 1992.

In the aftermath of the changes, much work had been done to understand their impact on the response rates, and of finding ways to reverse the trend. There was even an "inspection" by OPCS (Office of Population Censuses and Surveys), the organisation responsible for carrying out the UK Census and for regular and ad-hoc large-scale Government surveys.[2] Its findings showed that the NRS sampling and fieldwork standards are in parts more stringent than those set for most high quality Government surveys, and that there was little, in the context of the current NRS specifications, which could be suggested which would improve response rates in a major way.

In Hong Kong in 1989, we also had a paper from the late Richard Lysaker. It was called "Using Multiple Media to Maximise Response Rates".[3] He showed that the use of mail contacts followed by telephone contacts followed by personal contacts produced exceptionally high response rates in surveys designed as verification checks on behalf of the Audits Bureau of Circulations. The objectives of these surveys do not compare with those of the NRS, but I believe it is now the time for us to consider the use of multiple data collection methods on the NRS, if response rates are to be improved substantially.

This paper though does not offer a speculation of how multiple data collection would work on the NRS. It is a description of the current situation and an up-date on my Hong Kong response rate paper. It has the following underlying themes:

• response rates are important indicators of the quality of a readership survey

• response rate calculations tend to differ from survey to survey and country to country and their "absolute" figures are difficult to compare

• response rates can be improved by a variety of methods, though a "basic" response rate is inherent in the way a survey's sampling and fieldwork tasks are designed

• in principle, readership surveys with measurable and controllable response rates are preferable to quota surveys.

An additional thought accompanies these themes. This is that it seems a commonplace thing to say that response rates are falling or at least more difficult to maintain. Yet there are now only very few commercial market research surveys conducted in the UK and elsewhere which employ statistical random methods of sampling, as the national audience measurement surveys tend to do. Hence we are among the very few who are trying to hold up the standards of response rates but have very little contemporary non-media work around with which to compare our own work and efforts. Being in the commercial environment, we are also

aware of the economic constraints on our survey methodologies and wonder whether it is always fair to compare what is undoubtedly influenced by disproportionate amounts of money spent on it.

NRS Response Rate Trends 1956 - 1994

From an historical perspective, response rates have always been a problem on the NRS - the trend was nearly always falling. Even in the golden days of the 50's and 60's, response rates were an issue for concern. They fell from a reported 87.5% in 1956 to 79.5% in 1964. (These figures relate to response rates amongst "electors" only).[4]

For the following table which shows the NRS response rate trends from 1965 to 1994, I have indicated the main procedures which describe the basic methods of the NRS at the time: (The response rates shown are based on all eligible persons.)

NRS Response Rates

Electoral Register Sampling.
"Booklet" method with about 100 titles.

1965	78.1%
1970	78.1%
1975	74.2%
1980	75.4%

Electoral Register Sampling.
"EML" Method with about 300 titles.

1985	69.0%
1990	62.6%
1991	66.4%

PAF and disproportional sampling from January 1992.
CAPI (and EML) method) with about 300 titles from July 1992.

1992	56.5%
1993	60.0%
1994	60.9%

These figures seem to say the following:

• There is a falling trend in response rates, irrespective of the basic method used for the survey.

• Response rates can be improved (note 1980 over 1975, 1991 over 1990, and 1993/4 over 1992).

• The basic methods used do influence response rates, irrespective of other factors.

The five main factors which we may look at as possible causes for response rate problems are:

> Greater resistance by the public
> Greater complexity and length of interview
> Changing effort by the fieldforce
> Changes in sampling method
> Changes in method of conducting the interview

In the following, I should like to investigate each in turn with respect to the National Readership Survey.

Greater Resistance by the Public?

There seems very little evidence that there are major attitude shifts to research amongst the population in general - but we observe that falling NRS response rates go hand in hand with increases in refusal rates.

From observation and from the occasional analysis of "reasons for refusals" as provided by interviewers, we have come to the conclusion that there is probably only a very small proportion of the population which are refusers on principle. For most others, the often unspoken reason for their refusal is "lack of time" or "inconvenience".

And in turn, the reasons why it is increasingly inconvenient to potential informants to grant our interviewers the desired interview are embedded in social factors. Growing urbanisation, the growth in multi-ethnic communities, mobility, changing work patterns etc all contribute to the fact that it is more and more difficult or inconvenient for people to give up their time for the media research interviewer at the time of call. These factors are probably more important than negative attitudes.

Greater Complexity and Length of Interview?

There is certainly greater complexity of the interview now than it was in the past. As an illustration, the number of printed pages occupied by the NRS questionnaire were only four in 1965 but a massive 29 in 1990 (before CAPI). However, the length of interview was kept within limits by the introduction of the EML method in 1984. In spite of a three-fold increase in the number of titles, the length of interview was barely affected. We achieved this by means of the EML "grouped titles" method which allows informants to reject all titles on a card simultaneously without the time-consuming procedure of saying "yes" or "no" to each of them separately. Thus the average length of an NRS interview was recorded to be 32 minutes in 1983 (pen and paper, 100 titles), 37 minutes in 1987 (pen and paper, EML with 300 titles) and 35 minutes in 1994 (CAPI). Interview length therefore does not seem to be the major problem which would explain the NRS response rate trends, except that nowadays a 15 minute interview would undoubtedly be seen as less intrusive and less "inconvenient" than a 30 or 35 minute interview. In the past, a 30 minute interview seemed less a problem.

Changing Effort by the Fieldforce?

One hypothesis sometimes advanced is that of the possibly diminishing quality of interviewers. While it is true that many fieldforces are not any more trained to do the highly complex sampling and contacting procedures equivalent to those required for surveys such as the National Readership Survey, we do not accept the suggestion that the quality of the NRS fieldforce has declined; in many respects we may say that the quality has increased to match the tasks and the conditions under which they need to be performed, both of which have become tougher.

One statistic of the ever increasing efforts needed to maintain adequate response rate levels are the number of calls made per issued address. The minimum number of calls prescribed before an attempt to obtain an interview can be abandoned are five. Many interviewers do more than the statutory number of five. Of course, for many addresses only one, two or three calls are needed. The total average number of calls per issued address, whether productive and unproductive, was 2.4 in 1983, 3.0 in 1987 and 4.5 in 1994, showing that calls had nearly doubled within ten years to obtain a final result.

These days we allow interviewers more time to make these calls than we did in the past, but one important constraint on the timing of an NRS fieldwork assignment are the monthly reporting deadlines. No interviewing can be carried out in the following month. Thus re-calls are very much confined to a relatively short time period.

There are financial incentives for interviewers to obtain above average response rates. They seem, however, more effective in morale building than in substantially raising response rates under the current conditions. The step of introducing financial or other incentives for informants has not yet been dared; apart from the cost implications, there is fear that the survey's results could be biased through such a step, and that the fieldforce would be somewhat "corrupted" if such an incentive scheme would not be administered as a universal one but only put into operation with the difficult parts of the sample.

Changes in Sampling Method?

In January 1992 the NRS' sampling frame was changed to the Postcode Address File (PAF). Previously it was the Electoral Registers (ER). PAF is a more comprehensive list of addresses than the Electoral Registers are, which had been eroded in their coverage of all eligible electors when the government introduced the Poll Tax. Part of the reason was that potential Poll Tax evaders believed that the Electoral Registers could be used for checking the Poll Tax register and that they therefore did not register in either.

With the advantage of PAF being the better sampling frame, there are also disadvantages which affect response rates:

- While the coverage of addresses of ethnic minorities and foreign residents as well as second homes is greater in PAF than in ER, these addresses are also the more difficult ones for obtaining productive response.

- PAF sampling implies a formalised two stage contacting procedure for the interviewer; first there is a contact interview with a responsible adult at the issued address to establish the number and ages of potentially eligible household members, together with the random selection of one (or sometimes two) for the main interview; and then there is the main interview with the selected person. Refusals and other non-productive contacts can occur sequentially at either stage. With the ER sampling method, the person to be interviewed is in most cases the one selected from the Register.

- About 10% of PAF addresses issued to interviewers are found to be non-residential. With ER this proportion is very small.

- PAF sampling means that addresses cannot be selected with probability proportional to household size. Individuals in single person households are over-represented and individuals in large households are under-represented. For this reason, that is to keep weights as low as possible, interviewers were initially asked to reject every second identified single-person household. With ER no such procedures are necessary.

In addition to the change to PAF, the NRS sampling specifications for 1992 included a disproportional sampling requirement with the objective of raising the number of informants in social grade categories ABC1. To achieve this to the degree specified, in certain predetermined addresses, interviewers were required to establish the social grade of the given household in the contact interview and then reject it for the main interview if it was found to be of social grade C2DE.

The result of all this was a drop of response rates from 66% in the period of July to December 1991 (immediately before the change) to 59% in January to June 1992 (immediately after the change but <u>before</u> the introduction of CAPI).

The procedures which required interviewers to reject every second single-person household and large proportions of C2DE households were both discontinued during the second half of 1992, in the interest of raising response rates. This increased however the weights according to household size; and it reduced the over-sampling of ABC1s. There is still some over-sampling of ABC1s at present on the NRS but purely through over-representation of sampling points in geo-demographically identified up-market areas; this is however less effective than the "rejection" method of C2DE households.

Further measures intended to remove obstacles to improved response rates were the tidying up of the definition of a household, particularly with respect to multi-household addresses, and new instructions on how to classify and deal with empty properties, second homes and institutions. The former instructions were identified as even more rigid than those which OPCS applies to the Government surveys .[2] The new measures contributed to improved response rates. For the year 1994 the response rate results, shown below for each stage, represent an improvement by six and a half percentage points over the July-December 1992 results, using both PAF and CAPI:

		NRS Jan–June 1992	NRS July-Dec 1992	NRS 1994
A	Contact Response Rate	84.7%	85.7%	86.8%
B	Selected Person Response Rate	69.1%	63.5%	70.2%
	Overall Response Rate (A x B)	58.5%	54.4%	60.9%

Changes in Method of Conducting the NRS Interview?

In January 1984, the NRS "booklet" method, containing mastheads of about 100 titles, was changed to the EML (Extended Media List) method for which "grouped titles cards" with about 300 titles were used. This method is still in use today. When the response rates dropped from 73% in 1983 (before the change) to 71% in 1984 (after the change), the clear implication was that the new EML method caused this effect. The explanation was not the possibly extended length of interview (this had stayed materially the same) but the new complexity of the task: the new interview needed to be performed in a setting which made sorting of cards possible; with the booklet method the setting could be less formal.

Similarly when CAPI (Computer Assisted Personal Interviewing) was introduced in July 1992, half a year after the introduction of PAF, the response rates dropped. They were 59% in January-June 1992 (with PAF before the change to CAPI) and 54% in July-December 1992 (with PAF and CAPI), as may be seen in the table above.

While we have no suggestion that CAPI is creating greater respondent resistance generally, we did find that the novelty of coping with CAPI in addition to the recently introduced PAF contacting method made interviewers less efficient, at least in the initial period after its introduction. A further factor was, again as with EML in 1984, that with CAPI there is lesser opportunity for casual "doorstep" interviewing in cases where this might be the only way to obtain an interview rather than lose it.

How to Overcome Non-Response and Convert Refusals?

In 1994, about 50% of all non-productive NRS interviews were refusals; the others were "no reply" (31%), "out" or "away" (13%), or "sick" and "other reason for no interview" (6%). These figures relate to the first and second stages of contacting combined.

The following is a catalogue of methods or suggestions made recently which might help in improving the NRS response rates together with brief comments of mine:

- More and better spaced repeat calls. My comment is "yes", but the timing constraint posed by the monthly reporting cycle is a real hindrance in this respect.

- Improve the call pattern. Again a "yes", but implementation and control are costly.

- Give substantial incentives to informants. This is not considered at present for fear of bias and other reasons (see above), but it would make a difference!

- Advance letters or phone calls. This has been shown to be very unpromising in readership surveys. Both our own experiments in 1990[1] and those conducted by MRI[5] showed no improvement with advance letters. The proportions of potential informants who prepare themselves as refusals as a result of the advance letter seem the same or even greater than those who become converted, according to these studies.

- Change the name of the survey. This is not a too promising suggestion. Interviewers say that the name National Readership Survey seems to open doors rather than close them, in their experience.

- Change the interview content and format. If the length of interview were halved, this would possibly improve response rates substantially.

- Interview the "contact" person in addition to the "selected" person. This would possibly improve response rates as the selected person becomes an "additional" interview, from the interviewer's perspective. Experience says that interviews with other household members become more easily obtainable if another person has already been interviewed in full.

- Use mixed method of data collection. If it can be shown that the various media of data collection (personal, postal, telephone) can produce comparable, or usable, results, this would be a promising way of improving response rates worth testing again (taking the "sobering" conclusions of the MRI tests reported in San Francisco into account).[5]

Main Concerns

The main concern about low response rates is the difference between respondents and non-respondents. How representative is our achieved sample? And where on the response rate scale must we draw the line where it becomes unacceptable? From previous work we have indications that the profile of non-respondents to the National Readership Survey are not much different to respondents in broad demographic terms, but they tend to be slightly lesser consumers of newspapers and magazines, and their attitudes to market research tend to be less favourable.[1]

We also know, from analysis which shows the sample profile and readership results by the call numbers at which the interviews were achieved, that, naturally, the samples achieved at the higher numbers of calls are different to the samples achieved at the lower numbers. But it would be dangerous to conclude that the samples achieved at the high number of calls may resemble that large part of the potential sample which has not been interviewed to a greater degree than the achieved total sample including early and late calls together.

It is thinkable that the survey with its relatively low response rates compared to previous years nevertheless produced a fairly respectable representative sample of the population. There are weighting procedures which correct for the imbalances of the achieved sample profiles due to disproportionate response rates by broad demographic groups (sex and age within region) and these contribute to achieving final sample profiles which stand up well to scrutiny.

For instance, the following table shows that the NRS profile of "major occupation groups" is closer in 1994 to the profile of the 1991 Census than it was in 1991, the year before the changes to PAF and CAPI and before the NRS sample stratification was able to take account of the latest Census results:

Major Occupational Groups
(Based on those in Employment)

	NRS 1991 %	NRS 1992 %	NRS 1993 %	NRS 1994 %	Census 1991 %
Managers and Proprietors	11.9	12.3	13.5	13.9	15.9
Professionals	9.0	9.4	9.5	11.2	8.9
Associate Professionals	8.1	8.3	9.2	9.1	8.7
Clerical and Secretarial	17.1	16.5	15.9	16.0	16.1
	46.1	46.5	48.1	50.2	49.4
Skilled Trades	17.5	17.9	16.6	16.1	14.5
Protective and Personal Service	9.8	10.0	10.0	9.8	9.1
Sales	7.0	6.7	6.7	6.7	7.2
Machine Operators	10.4	10.2	10.4	9.3	10.3
Agriculture and Other Elementary	9.3	9.0	8.4	7.9	8.6

The occupations of NRS informants are coded to the same standards as used for the Census. They are not directly controlled by either sampling or weighting - except in the sense that the NRS sample is a rigorously executed random sample.

We believe that a random sample is the method we must prefer for audience research because even with relatively low response rates, random sampling methods are bound to be the better methods for avoiding biases than quota sampling. I hope that the above table can help to demonstrate this. However, much more work is needed on this particular subject as well as on the subject of the non-response bias.

Conclusion

In conclusion, we feel that the current sampling and interviewing approaches and the structure in which they are implemented are a hindrance to significant further improvement of the NRS response rates. More radical solutions may be needed. Despite relatively low response rates the sample profiles of the NRS tend to stand up well to examination. However, more work needs to be done to understand the biases created through non-response.

References

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