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Response Rates in Telephone Surveys: Managing Contactability

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Abstract

Telephone interviewing is the major data collection method for the market research industry. Although social trends such as mobile phones and call screening make it harder to contact people, better technology and contact regimes can assist companies to ameliorate the situation. A study of fieldwork managers responsible for over 75% of all phone interviews in Australia revealed limited use of contact enhancing strategies such as longer survey periods and more callbacks. Commercial imperatives for timely surveys and a lack of end-user concern for response rate issues, along with costs concerns, were believed to be responsible.

Key words: Telephone survey, contactability, response rates

Introduction

In a typical commercial market research study, around fifteen contact attempts are needed to obtain one telephone interview (Bednall and Shaw, 2003). The evidence suggests that response rates are already low and declining further (CMOR, 2000). This should concern all social researchers on the basis of both cost and representativeness. Response rates may be seen as a function of two factors – the ability to contact people and the willingness of people to cooperate. This study focuses on how market research companies manage contactability.

Research companies appear to be hampered by several features of modern life in Western societies like Australia. The most immediate problem is mobility – people may be less often at home than in the past. Although penetration of fixed phones into Australia homes remains high, there is evidence of substitution by mobile phones (ABS, 2004). Some households may not have any fixed line at all. When there is a fixed phone, there are a variety of impediments to contact being made. The first is call screening – people may either actively block or choose not to answer callers they do not recognise. Finally, there are silent numbers where the White Pages does not list the number. Despite these obstacles, market research companies can influence contact outcomes. The main way they do this is their calling regime. Companies can choose when they ring people and how often. Ringing consumer homes during a weekday is typically not productive unless you call areas where there are large numbers of retired, unemployed or work from home individuals. Similarly business survey calls made outside working hours are most unlikely to be answered.

The next major influence is the number and scheduling of callbacks. With more single person households and more meals bought outside the home, the chances of finding people at home on any one occasion is limited. Thus around half the initial calls in a typical consumer survey go unanswered. Callbacks – especially those spread across different times and days of the week – are likely to produce a higher response. Dunkeld and Day (1973) estimated that callbacks beyond three in personal surveys made little difference to representativeness for most variables estimated. However, their study was based on very high response rates.
Clearly, there is a law of diminishing returns; Bennett and Steele (2000) have estimated that callbacks beyond 4 have limited effect on response rates. Callbacks are costly – both in terms of employing people to conduct them and more insidiously, in terms of the time available to conduct them. Often clients have rather strict timetables and the ability of research companies to extend the callback period may be limited. This study hypothesises that contactability would be a recognised major issue for market research companies and that they would be implementing proactive strategies to hold or lift contact rates.

**Method**

The research consisted a qualitative and quantitative phase. In-depth interviews were carried out with 10 respondents from eight companies in Melbourne and Sydney that provided field services for their own company or as sub-contractors to the industry. The respondents were highly experienced in telephone research and held management positions in their firms. Some had been involved in developing relevant software systems used widely in the industry.

A mail survey was then conducted. The target population was Australian suppliers of telephone interviewing services. A census was attempted. Three sources were used to construct a list of target respondents. The first was a list of all market research companies accredited by the industry quality system (MRQA, 2004) for telephone interviewing. This list was supplemented by companies shown in the MRSA Directory (MRSA 2003) as conducting telephone interviews. Market research companies not in either list but shown in the electronic *Yellow Pages* were added to the list, resulting in over 300 new entries. These new companies were contacted by phone where possible to see if they conducted telephone interviewing. In total, 347 companies were in the final census frame. The survey was addressed to the fieldwork manager of the firm, by name if known. A follow-up mailing was used.

Altogether, 54 completed questionnaires, 51 replies indicating ineligibility, and 25 unopened envelopes marked “Return to sender”, were received. Use Kviz’s (1977) measure, the response rate in this study ranged from 18 to 20 percent; depending on the calculated eligibility of uncontacted respondents. However, a simple calculation shows the resulting sample was a far better representation of interviewing activity than the Kviz figure would indicate. The total number of interviews conducted last financial year, as estimated by the respondents, was 2,283,279. According to the ABS (2003) in the 2001-02 financial year telephone interviewing generated an income of $135 million. If it is assumed that each interview was charged at between $45 and $55, it can be estimated that in the total between 2.45 and 3.00 million telephone interviews were conducted by the industry in 2001-02. Using these figures, it can be estimated that the current research captured between 76% and 93% of all telephone research activity in Australian market research. In analysing the results of the survey, the 5% significance level was used.

**Results**

The sampling frame is the basis for telephone survey contact management. The main frame used in consumer surveys was DtMS (2004) (37% of interviews). DtMS was a database product containing all listed residential and business telephone numbers in Australia. Other popular sampling frames were random digit dialling from known ranges (29%), customer lists (18%) and the *White Pages* – in either hard or electronic format (12%). In business surveys
the majority of sampling was conducted by selection from customer lists (56%) and random selections from listed phone numbers (40%). All of these sampling methods have implications for contactability. For example, if lists provided by the client are old or inaccurate, higher levels of non-contactability will result. Furthermore, as the universe of respondents is limited to the list, more callbacks to each number may be needed to gain the required sample size. Only 14% of companies indicated that they used predictive dialling for phone interviews with Australian respondents. Not surprisingly all were large companies conducting at least 15,000 telephone interviews a year. Some companies kept a database that recorded the outcome of dialling attempts to numbers, facilitating the choice of which numbers to call or avoid in future surveys. Most major companies used Computer Assisted Telephone Interviewing (CATI) systems.

Callbacks were the primary method of controlling contacts. Table 1 shows the reported practices of firms. Modal responses were three callbacks for both consumer and business surveys. This figure matches previous research (Wiseman and McDonald, 1979; Bennett and Steele, 2000) showing that up to three or four callbacks provide the best response rates, relative to effort. Hence it would appear that experience has taught field managers what works best for them. Of course their reports of what is typically prescribed do not necessarily describe what happens at the end of a survey period. Experience suggests that once the required number of interviews has been obtained, the survey will stop irrespective of the number of callbacks remaining to be completed.

... nowadays ... research has to be turned around so quickly that you don't have time to maximise your callbacks as you would wish to.

<table>
<thead>
<tr>
<th>Table 1: Summary of Callbacks in Consumer and Business Surveys</th>
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<tr>
<td><strong>Consumer Surveys</strong></td>
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<tr>
<td>No. of contacts</td>
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<tr>
<td>Consumer, (n=48)</td>
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<tr>
<td>Business, (n=52)</td>
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<tr>
<td>Soft appointments</td>
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<tr>
<td>Consumer, (n=44)</td>
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<td>Business, (n=49)</td>
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<td></td>
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<tr>
<td>Hard appointments</td>
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<tr>
<td>Consumer, (n=43)</td>
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<tr>
<td>Business, (n=47)</td>
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Soft appointments are those where the initial person contacted agrees to further contact, but no specific time to call is agreed. Hard appointments involve specific times and people. As expected, more effort to follow up both types of appointments was apparent than with cold
calling. Given a typical response rate of one interview per 15 consumer contacts, following up appointments should be cost effective. The six measures shown in Table 1 (consumer vs. business * 3 follow-up measures) were shown to form a scale among the 39 companies who reported on all six (Cronbach $\alpha = 0.85$), indicating a consistent company policy across surveys and types of respondent.

The next issue was the timing of contact attempts. Most respondents (90%) said they were very or somewhat likely to encourage clients to run their projects during the times that the number of contacts will be maximised and similarly 79% said they encouraged their clients to run the project over a longer time period to maximise the number of call-backs.

*We always suggest to a client: it would be much more effective from a point of view of your response rate to have your project in for five days and follow up on the callbacks than rush it through in two or three days and not get the advantage of the follow-ups.*

Concern was more common when finite client lists were used. The issue was whether sufficient people would be left to run further surveys. Many clients, according to the field managers, have little concern in general about response rates or the sub-issue of contactability. As one fieldwork house which sub-contracts field services to other companies noted:

*Recently I have had a few clients wanting to know about response rates because their clients have also been concerned and they have been asking questions about the validity of research and things like that, but it’s very unusual.*

Fieldwork managers are acutely aware of the increasing difficulty in contacting people:

[Our contact rates are] a lot less. Answering machines, screening devices – even when they are home people screen their calls so it is a lot harder to get onto people. I think a lot of younger people don’t even have phones anymore, they have mobile phones... I think people are basically out more often than what they were five years ago. Certainly answering machines compared to five years [ago] are higher.

According to the respondents, increased call screening and greater social mobility are the most detrimental issues for contactability – over 60% labelling them as very or somewhat harmful. More engaged signals due to increased Internet usage do not concern respondents as much; they are split almost evenly between those that perceive it as harmful and those who cannot comment or believe there was no effect. These results echo the observations made in the qualitative interviews – all managers expressed concern over higher respondent mobility and increased call screening, whereas rising Internet penetration was perceived as less serious.

A statistically significant association was found between organisation size (in terms of conducted interviews) and the belief that “respondents getting out more” is harmful to contactability, $\chi^2 (1) = 9.74$ with respondents from large organisations more likely to think so. Similarly, a statistically significant association was found between organisation size and the perception that “increased Internet usage” is detrimental for contactability, $\chi^2 (1) = 5.13$. However no significant relationship was found between organisation size and the trend of increased call screening being harmful to contactability. As larger companies are more likely to work with larger samples, the trends of “increased Internet usage” and “respondents getting out more” may have a more pronounced effect on contactability.

Not surprisingly then, 62% believed contactability was in a slow decline, while a further 10% saw it dropping rapidly. The findings are consistent with previous studies (e.g. Tuckel and
O’Neill, 2002; Bednall and Shaw, 2003). No significant statistical association was found between organisation size (in terms of the number telephone survey conducted) and beliefs about contactability trends, suggesting that non-contactability is a problem for large and small organisations alike. Given this, it would be expected that research companies would seek to change their practices. Some 39% reported changing the times for attempting contact, with weekdays as opposed to weekends becoming more popular. A statistically significant association was found between company size and the alteration of the calling schedule – larger companies being more likely to do so, \(_{(1)} = 4.327\). Similarly, 31% reported increasing callbacks to “no answer”, “engaged” or “answering machine/message bank” numbers. Only 19% said they had increased the number of callbacks to soft appointments.

Discussion

Contactability in telephone surveys is a serious and apparently deteriorating problem, with growing call screening and mobile phone use particularly limiting access to respondents. Clearly technology has been used to minimise interviewer time, the major component of survey costs. With CATI systems, interviewers can manage the recruitment process easily, call-backs can be scheduled into the system and random digit dialling can overcome the problem of silent numbers – at least in terms of contactability. Predictive diallers allow a computer to ring numbers and hand calls over to the next available interviewer when the call is answered. A net result of these technologies is that it is relatively easy to try to contact more and more numbers. Thus if the focus is more on the number of interviews rather than their representativeness, the technology may make surveys affordable but not necessarily reliable. From the reports of the field managers, the end-users of surveys (the clients in marketing companies) do not appear to be greatly concerned or knowledgeable about the response rate issues. Timeliness and cost appear more important than representativeness. Evidence from political polling comparing election forecasts with actual results (Panagakis, 1999) shows that representativeness can be achieved even with low contact rates. But the risk remains that major decisions will be made on the basis of untrustworthy results.

In surveys with high response rates, call-backs may not greatly add to representativeness if appropriate weighting is applied (Gendall and Davis, 1993). However when one in 15 contact attempts results in an interview, call-backs are much more likely to be required. Apart from more efficient contact systems, fieldwork companies appear to be taking action to enhance contactability by rescheduling contact attempts and making more callbacks. Some attempts were made to seek a longer survey period from their client (or client’s client) to improve the chance of contact. However, the practicalities of commercial pressures to get surveys completed in a short time often made extending the period impractical. It is little wonder, in the face of increasing barriers to contact that the field managers see a slow, but inexorable deterioration in the situation. There may come a time when ad hoc telephone surveys will no longer be viable. Panels (Bednall and Shaw, 2003), surveys using pre-notified respondents or customer contact lists may become more the norm. Some may see the Internet as the next solution to the contactability problem. However once more response rates are a likely issue (Adam and McDonald, 2003). Future research needs to look at the issues of the willingness of people to be contacted and the conditions under which they are likely to be available and to give their permission to participate. Telephone research is likely to be a mainstay of the commercial research for some time. Industry best practice guidelines, for procedures such as callbacks, are clearly required. They would help clients minimise the risk of poor decision
making based on unrepresentative surveys. They would give them leverage within their firms to argue for the funding and the timing needed to do their surveys properly.

References


