

CAN RESPONSE RATES TO MAIL SURVEYS BE IMPROVED OVER TIME AND, IF SO, HOW?

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Introduction

Previous symposia papers explored, in great depth, the fact that the majority of readership surveys have employed probability sampling, in the interests of accurate representativeness, despite its greater cost relative to other alternatives. Michael Brown in "Dear Reader" talks of defining "response rate" as the "proportion of the sought after individuals who are finally interviewed, conventional wisdom would be certain to look askance at a figure below 60% and to aim, maybe, for 70%, although such a figure is increasingly difficult to achieve under current conditions of mobility, privacy protection and co-operation, at least in Europe". In Salzburg, John Chaplin underlined that, in relation to the Canadian experience, "in rural areas it did not take many calls to achieve a response rate as high as 88%, whilst in cities as many as twelve calls might be needed even to hit 60%".

However, it is important to appreciate that there is a major difference in calculation of response rates when one is comparing probability sampling with mail-back questionnaires placed at the end of an omnibus survey, whether the omnibus survey be face-to-face (as per TGI) or a telephone omnibus (as per Premier). As Michael Brown went on to say in Dear Reader "The question of response rate takes on a quite different colour in relation to postal surveys. However the symposia speakers just did not provide sufficient non-specialised contributions to make discussion helpful". This is one point that I hope this paper will attempt to progress in terms of knowledge and understanding.

It should be stated that a number of papers outside the symposia have attempted to synthesize the body of research dealing with response rate in mail surveys and the overriding consensus is that repeated contact, inclusion of a return envelope, postage paid and inclusion of incentives are all instrumental in increasing the response rate but that response rates above 65% are extremely rare. In this paper I am trying to encapsulate the various elements of research that BMRB have conducted, over time, in their attempt to assess what can positively influence response rates. As such I will be discussing the movement from the payment of a mystery gift on completion of the TGI to a financial incentive placed up front with the respondent. We will also look at what impact increasing the financial incentive has, whether a prize draw offered in addition to the financial incentive can increase response rates and whether an improvement in the overall response rate can be gained via the demonstration of the professionalism of market research to the respondent. The paper will then go on to address how repeated contact with respondents can improve response rates, as can the relevance and interest of the questionnaire to the respondent, and, perhaps most importantly, whether improving the role of the interviewer in the process (be it in involvement/understanding of their job and a company's objectives) can influence response rate levels. Finally the paper draws on work outside Great Britain to identify at least one other significant factor that influences overall response rates.

Background

The reliability and validity of the data are affected, amongst other things, by the survey response rate, since non-respondents may differ in significant ways from respondents (Erdos and Morgan 1970). Thus researchers have expended considerable effort in developing methods for achieving high response rates in mail surveys.

One method of increasing survey response rates is to use some form of incentive, and one of the most extensively researched forms is the monetary incentive. Numerous studies have discussed and demonstrated the effectiveness of monetary incentives supporting Kanuk and Berenson (1975) who concluded that "money seems to be the most effective and least biasing incentive, the easiest to obtain and mail, and the most useful to respondents".

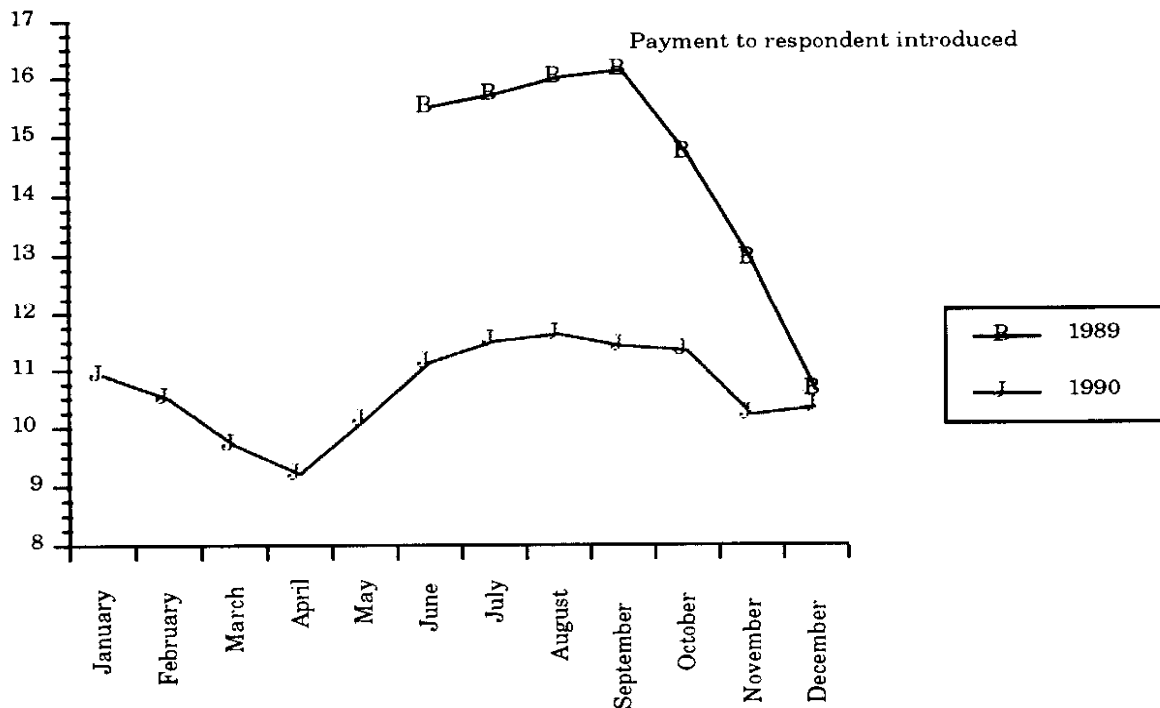
There are, however, different types of monetary incentives and different ways in which they can be used. For instance, incentives can vary in value, be prepaid or promised, take the form of prize draws or gifts (thank yous) or offered in the initial mailing (at placement).

Impact of the monetary incentive in improving response rates

The value of the monetary incentive can be demonstrated by assessing the experience of TGI. For many years respondents to the TGI were rewarded with a mystery prize that was despatched to them on receipt of their completed questionnaire. This appeared to be a very successful route with overall response rates (i.e. the proportion of questionnaires that the interviewer attempts to place with the respondent when compared to the number of completed and returned questionnaires processed) above 60%.

Toward the end of the 1980's we started to see the response rate fall, and fall rapidly. We do not know whether respondents were tiring of research, fed up with direct mail (which increased dramatically during the 1980's) or felt the payment of a 'mystery gift' to be insufficient. Within a period of twelve months the response rate fell from 60% to 54% and, on analysis, the primary cause was the refusal to accept the questionnaire at placement. In fact, the percentage of those who, having accepted the questionnaire, returned it hardly changed. The effect of the introduction of the payment at placement was to make the interviewers' job more acceptable to them and a plus for the respondents. Chart 1 shows how the introduction of the payment to the respondent in September 1989 improved the refusal rate from its peak of 16% in that month to just over 10% by the end of 1990.

Table 1: Refusal to accept TGI Questionnaire. Three month moving average



What level of incentive should be provided?

Our experience on TGI with the placement of the financial incentive is clearly consistent with most previous research done in this area. As I have previously commented incentives can vary in value and the next stage which we wished to test was what impact on response rates could be achieved by increasing the financial incentive. We tested this approach on two surveys; firstly our Premier TGI survey where we tested a £4 incentive against the controlled sample of £3 and, secondly, on our TGI Gold survey where we tested £5 against the £3 control.

Before discussing the results of these tests in more detail it is worth reviewing other work done in this area.

Brennan et al (1991) tested three levels of payment to respondents (using 20 cents, 50 cents and one dollar) expecting all three of the pre-paid incentives to increase dissonance and thereby lead to higher response rates, given the relatively small differences in their values. Instead, the result appeared to suggest that both the 20 cents and one dollar failed to invoke any greater dissonance than the control payment of 50 cents. It is feasible that the perceived value of the 20 cent incentive was so low that it failed to create sufficient dissonance to induce the respondent either to return the incentive or complete and return the questionnaire. However, the 50 cent incentive was of sufficient value to achieve this objective so a different explanation is required for the one dollar incentive.

Dillman (1978) suggests that "the closer a monetary incentive comes to the value of the service performed, the more the transaction tends to move into the realm of economic exchanges and the easier it becomes for people to refuse".

One would expect that, once an incentive is perceived as a payment, any payment that is lower than the perceived value of the service would be very easy to refuse. In such a situation cognitive dissonance is more likely to increase if the respondent complied than if they refused, since they would have to accept being paid less than the job is worth. Thus "it is possible that the 20 cents was an insufficient token of appreciation to arouse dissonance, while the one dollar incentive was perceived as payment, and being insufficient to compensate for the magnitude of task requested, generated dissonance that was most satisfactorily resolved by returning both the incentive and the uncompleted questionnaire". Thus the control incentive of 50 cents achieved the highest response rate.

Given the £3 incentive on Premier generated a response rate above 60% we hypothesised that it was unlikely that the higher incentive on Premier (£4) and the still higher incentive on TGI Gold (£5) would stimulate an increased response rate.

Was this actually the case?

The Premier TGI is placed with all adults who fit the AB social class criteria. This is a questionnaire that is complementary to the TGI - covering products, services, media and lifestyle that are more relevant to this type of consumer than can be covered in TGI. The screening for Premier is achieved using the BMRB Telephone Omnibus.

Response rates on Premier have, historically, achieved around 60%. We tested the increased incentive on eight weeks of fieldwork and the results, as shown in Table 1, demonstrate that, as per Brennan, we found the increased incentive had little benefit on response rate. This was further backed up by our later test of the £3 versus £5 incentive on TGI Gold (Table 2). Again, there was very little discernable difference in response rates between the two incentive levels but, if anything, the £3 incentive performed slightly better.

Table 2: Test of Increased Incentive Versus Control Incentive

	Control Test		Increased Incentive	
Total placed	4531		801	
Usables	3075	(68%)	563	(70%)
Not Usable	635	(14%)	100	(13%)
Not Returned	821	(18%)	138	(17%)

Table 3: Test of £3 vs £5 incentive on TGI Gold

	Total		£3		£5	
Usable	4169	(95%)	418	(96%)	3751	(95%)
Unusables	216	(5%)	19	(4%)	197	(5%)
Total	4385		437		3948	

Can prize draws influence response rates?

Prize draws have been found to be effective in some studies (Tan) but not others (McDaniel and Rao) and appear to be less effective than pre-paid incentives (Hubbard and Little). We decided to test the prize draw, again using Premier, but alongside the incentive rather than a replacement. For this purpose the incentive was £3 and a letter was despatched to the respondent, with the questionnaire, which included a paragraph

informing the respondent of the prize draw. The results were disappointing but, perhaps, not surprising. These are shown in Table 3 and again demonstrate that the financial incentive is the primary motivator and the impact of offering a prize draw alongside the financial incentives does not appear to improve the overall response rate.

Table 4: Test of Prize Draw *In Addition TO* Control Incentive

	Control Test		Prize Draw	
Total placed	4531		864	
Usables	3075	(68%)	586	(68%)
Not Usable	635	(14%)	110	(13%)
Not Returned	821	(18%)	168	(19%)

Does the demonstration of “professional market research” to the respondent improve response rates?

Daryl Mckee suggested that “the rate of response to a mail survey, that includes coded respondent identification explicitly related to plans for follow-up, will be greater than that to an anonymous control”. Following this paper BMRB decided to run an experiment on TGI to assess whether this could improve response rates.

The only option available was to include some indication of follow up in the introductory letter. It was not possible to add anything on the questionnaire itself as the full quarter’s questionnaires had already been printed in advance. As a result the sentence “the serial number on the envelope is there to make it easy for us to check that you have returned the questionnaire” was added to the last paragraph of the letter. The results are shown in Table 4 and they are, again, a little disappointing as they show no change overall. If anything they show a slight decline in the returns from women. There was a slight increase in returns from men but this resulted in a lower number of usables i.e. they were returned incomplete. The table shows comparison within sex of the control and experiment period. We also looked at the results for the period after the experiment and we looked at the results for the same period the previous year, but these showed no change.

Table 5: Test of Identification for follow-up

	CONTROL August 1992 Weeks 3 + 4			EXPERIMENT September 1992 Weeks 1 + 2		
	Placed	Returned %	Usuable %	Placed	Returned %	Usable %
All	1794	83.7	69.3	1763	83.3	68.5
Men	844	79.6	69.7	804	80.7	68.3
Women	950	87.3	68.9	959	85.5	68.6

What impact does recontacting previous participants have on response rates?

BMRB conduct two annual surveys where we recontact respondents who have previously been interviewed by BMRB (via our omnibus sample) and who have possibly completed a TGI. The first of these is Youth TGI. This survey is carried out amongst respondents aged 7 to 19 with three questionnaires (7-10, 11-14 and 15-19) tailored to each age group. Telephone contact is made, firstly with the parent, to gain their permission to request the involvement of the child in the survey. We attempted to place over 8,000 questionnaires. However 1158 were refused, and in nearly all of these cases the refusal was by parents on behalf of children in a number of different age groups. Thus, just over 7,000 questionnaires were accepted by the individuals and some 6,374 were returned providing a response rate of just over 90% on those that were accepted. 560 questionnaires were accepted but not returned, whilst only 135 were returned and rejected at the edit stage and in nearly every case that rejection was because the age stated in the questionnaire was different from that expected, suggesting that a child other than the one recruited had completed it. The rate of return, by age and sex is detailed in Table 5 and shows enormous consistency across all groups and at a much higher rate than one would normally expect. We believe this high response rate is due to three factors:-

1. The payment of an incentive at the time of placement .
2. The fact that the household had previously agreed to participate in research undertaken by BMRB and therefore know us.
3. The questionnaires are interesting and relevant to the respondent.

Table 6: Youth TGI 1994, Analysis of Response

		Total 90.2%			
		Male 88.6%		Female 91.8%	
Age 7-10 92%		Age 11-14 92.1%		Age 15-19 86.4%	
Male	Female	Male	Female	Male	Female
91.8%	92.3%	90.2%	94%	83.8%	89%

This latter point can be demonstrated further by analysing the responses that are made by the respondents themselves to their experience of completing the questionnaire. This is done by leaving the last page of the questionnaire blank and allowing them to make any comments that they wish. Table 6 provides some of these verbatim comments. The second example turns to TGI Gold.

Table 7: Verbatim Comments on Youth TGI

"I think it was excellent achely (sic) I though it was the best fact pack I've ever completed in my life."
 "It took an hour and I wished I could do it over and over again."
 "I thought it was brilliant and if it was a sport I would of gave it (sic) a Gold medal."
 "It was very very very very very fun."
 "Wicked!"
 "I enjoyed filling in my fact pack. I am pleased to know my opinion is valued."

TGI Gold placement is similar to Youth TGI, in so far that it is recontacting previous BMRB respondents. Unlike Youth TGI where, predominantly, we are contacting children of previous respondents, TGI Gold is actually requesting additional information from the respondents themselves. Perhaps of even greater interest is the fact that the TGI Gold respondents have already completed the TGI itself. It should be noted that TGI Gold is a questionnaire targeted at the "third age" or "gold" market, i.e. those aged 50 - 74. The questionnaire itself is therefore more directly relevant to the respondent than the full TGI may be. Table 7 highlights the results that of the 5,488 we attempted to place, some 20% refused. Of those who accepted, i.e. the 80% the great majority (95%!) completed and returned the TGI Gold survey. Only 216 did not return or provided an unusable questionnaire. Thus it would appear that there is a significant benefit in precontacting and building up a rapport with respondents prior to the placement of a self-completion questionnaire. The more relevant the questionnaire can be to the respondent, and the placement of a financial incentive will all build on the success of the response rate.

Table 8: TGI Gold Response Rate

Total attempted	5488	
Refused	1103	(20%)
Total accepted	4385	(80%)
Not returned/Unusable	216	(4%)
Total usable	4169	(76%)

Does the involvement of the interviewer in the interviewing process influence response rate levels?

BMRB introduced CAPI on its face-to-face omnibus survey in October 1993. Not only did this have significant benefits on the speed of data reporting and the quality of the final product but it also appeared to have a beneficial effect on the TGI response rate.

The introduction of CAPI had resulted in substantial investment by BMRB, not only in the hardware and software required to run CAPI, but also in the training, development and support of the interviewers and field management. What we had not appreciated was the significant benefit CAPI would provide to the interviewers. At the same time as building on the training we also introduced field seminars where there was an opportunity for us to explain to the interviewers what we were trying to do as a company, and for them to provide us with feedback on their experiences. This has now been added to by a regular newsletter that informs them of forthcoming jobs, etc.

It became apparent from the feedback we received from interviewers that the introduction of CAPI had led to a significant benefit for them.

All the comments from the interviewers have been extremely favourable with regard to the CAPI equipment and the favourable impression that it creates for the respondents. Without doubt, the most frequent comments made by interviewers, has been the greater professionalism it creates for them, and the perception of this professionalism when they first knock on the respondent's door.

Without doubt this growth in stature has been important in helping interviewers secure the cooperation of the respondent. The feeling of being a "professional" has become all the more important with the change in our interviewer workforce. Approximately 50% of our interviewing force is now male, a completely different situation to that of only six or seven years ago when the interviewer fieldforce was predominantly middle-aged women. This positive effect (the use of CAPI and the improvement in speed of completion of the questionnaire) has not only helped the interviewer and respondent but also, somewhat surprisingly to us, benefitted the TGI response rate. Table 8 highlights the positive effect the introduction of CAPI has had in raising the TGI response rate from 60% to 63%. The improvement has been a consistent one since the introduction of CAPI, but a word of warning must be sounded that the length of the face-to-face interview can, and will, impact on the response rate to a self completion questionnaire that is placed at the end of it. That is, the longer the face-to-face interview especially if it exceeds 30 minutes, it will detrimentally effect the response rate.

Table 9: Impact of CAPI on TGI Response Rates

	Pre-CAPI 1993	Post-CAPI 1995	Difference
All Adults	59.9%	63.0%	+ 3.1%
All Men	58.5%	62.1%	+ 3.6%
All Women	61.1%	63.8%	+ 2.7%

What other factors may impact upon response rates?

In this section I would like to turn to work that we have undertaken in Ireland, which has demonstrated that there is at least one other significant factor which will impact upon response rates.

BMRB commenced the TGI in Northern Ireland in 1992. Many people are aware of the political problems that exist in Ireland, namely the catholic and protestant divide. Analysis of the readership patterns of catholic and protestant, as shown in Table 9 highlight the loyalty of the protestants to the Newsletter papers and the catholic community to the Irish News.

Table 10: Religion and Newspapers - Northern Ireland

	Protestant %	Catholic %
Population	57	37
Readers of:		
Ulster Newsletter	84	12
Belfast Newsletter	75	16
Belfast Telegraph	65	29
Irish News	5	89
Sun	70	25
Daily Mirror	34	62

Therefore, it was and is, vitally important that the sampling for the TGI reflects the proportion of the population by religion. What we had not expected was the difference in response rates that would occur between protestants and catholics. This is shown in Table 10 and reveals that protestants (attributable to the "protestant work ethic"?) provide a much higher response rate than do catholics. It is the degree of difference between the two religions that is so surprising, and I suspect that this could have far reaching consequences in other countries.

Table 11: Analysis of Response Rates by Religion

	Total	Roman Catholic	Other
Attempted placement	100.0	100.0	100.0
Refusal	0.3	0.2	0.3
Total returned	73.9	65.1	79.9
Rejected after edits	9.6	9.4	9.7
Total accepted	64.3	55.7	70.2

Conclusion

In this paper I have tried to summarise the positive factors that can benefit response rates. There appears to be little doubt that, once a respondent has completed a mail-back survey, they will do so again providing they find the questionnaire relevant and interesting.

In all cases the payment of an upfront monetary incentive is required although substantial work should be done to assess the most effective level of payment. In our experience the monetary incentive is preferable to a gift or prize draw.

Response rates can benefit from a well-trained, motivated fieldforce who understand the importance of the role they play. The introduction of CAPI has added, significantly, to this but there is a trade-off between the length of the placement interview and the response rates achieved on the self-completion questionnaire.

Finally, one should bear in mind the religious aspects of the country. Our experience suggests that Catholics will provide a lower response rate than other religions.

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