Ipsos MORI

UNDERSTANDING RESEARCH METHODS

Ipsos MORI Research Methods Centre Newsletter

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EDITOR'S INTRODUCTION

Welcome to the first edition of Research Methods Centre Newsletter. We shall use this to update the UK research community on the methodological work we are undertaking at Ipsos MORI. In it we shall present material relevant to those with an interest in survey methods. Our orientation will generally be applied rather than theoretical because the problems we usually encounter in our everyday work are about making real-life surveys work in practice. For us theory should be the handmaiden of practice, and for this reason we shall not always present academic style papers. Our criteria for reporting work relate solely to whether there is something useful for the practitioner to learn about his/her craft, and with this in mind we think it better to disseminate first and then polish later.

In this issue you will find results of meta-analysis of primacy effects found in our Omnibus data, suggestions for improving the quality of online panels, two experiments on postal surveys, and a thought piece from the editor.

Please also see our website for past papers on topics as varied as costs and benefits of cluster sampling, public opinion about fictitious issues and using Bayesian methods in small area estimations. And look out for our future works on difference between happiness and satisfaction with life (presented at AAPOR Annual conference) and analysis of focused enumeration (presented at RSS April seminar).

Patten Smith
Director of Research Methods

ABOUT RESEARCH METHODS CENTRE

The Ipsos MORI Research Methods Centre (RMC) was launched in July last year and replaces the Research Methods Unit. The RMC is an integrated research unit which provides expertise in advanced data analysis, sampling and survey methodology generally. Our mission is to ensure that all of our quantitative research – whether using traditional or cutting-edge methods - is conducted to the highest possible standards.

Ultimately, of course, our major concern is to ensure that Ipsos MORI delivers research which gets to the heart of client needs. In doing this, we acknowledge that resources are at a premium, and that sometimes classic text-book research designs can come at a price which may not be justifiable to clients on cost effectiveness grounds. But we passionately believe that whatever a client's budget there is always a best approach, an approach which minimises error; and we see our role as being that of ensuring that in everything we do in Ipsos MORI we find and use that best approach.

The RMC comprises a core team of statistical and methodological experts, led by Dr Patten Smith and Dr Andrew Zelin, who have published many methodological reports and papers in academic journals and presented award-winning papers at conferences.

In the past 6 months the RMC has also made major methodological contributions to a number of current / recent complex Ipsos MORI projects, including **The Civil and Social Justice Panel Survey (CSJPS)** for the Legal Services Commission, the **National Adult Learning Survey (NALS)** for DCSF, the **Community Payback Study** for OCJR and the Home Office, **Small Area Estimation** work for the Audit Commission, and the **Citizenship Survey** for CLG.

PRIMACY EFFECTS: An investigation of the frequency and correlates of primacy effects in questions using show-cards in face-to-face interviews

Patten Smith

Ipsos MORI Working Paper

Background: A commonly used question form in social surveys requires respondents to choose one or more answers from a list of categorical response options presented either visually (on a show-card or self-completion questionnaire) or orally by an interviewer. It has been known for many years that such questions are susceptible to response order effects. Two types of response order effects are generally recognised: primacy effects where respondents are more inclined to pick items near the top of the list, and recency effects where respondents are more inclined to pick items near the bottom of the list.

Ipsos MORI has previously researched this matter, see, for example, R. Duffy's article on response order effects in the International Journal of Market Research (2003). Literature on the subject has tended to focus on developing theoretical explanations for observed effects, rather then on documenting their overall scale. It is, however, apparent that such response order effects often do occur, that sometimes they are substantial, but also that often they do not occur. This presents the survey practitioner with a question: how worried should (s)he be that response order effects will occur when writing questions?

Methodology: We conducted retrospective analyses of showcard questions in a 12-survey series of Ipsos MORI face-to-face Omnibus surveys conducted between July and December 2006, covering around 24,000 responses. First, we investigated the extent to which primacy effects were observed in questions, which visually presented response options in Ipsos MORI omnibus surveys. Second, we investigated the extent to which the frequency of primacy effects varies by response coding instructions. Third, we used the limited data available to test a number of predictions about response order effects taken from theoretical literature.

Results/conclusions: There are two main conclusions which the survey practitioner can draw from these analyses.

First, primacy effects frequently occurred in the Ipsos MORI questions examined, although on average, they were small in magnitude.

Second, although evidence of primacy effects was found for the three question types examined, they were considerably more frequent and greater in magnitude for 'code n answers' questions – questions where respondents were asked to select a set number, or maximum number, of items where this number was greater than one (for example to select three items from a list). Of course, this finding should be interpreted with caution. This was not an experimental study, and the observed differences may have been caused by other differences in content or format between 'code n answers' questions and other types of questions. That said, examination of the individual questions did not throw up any obvious candidates for confounding variables, and we feel that it is advisable for the survey practitioner to be cautious in their use of 'code n answers' questions.

Read the full text of our working paper here.

IMPROVING QUALITY OF ONLINE SURVEYS: A structured approach for reducing bias in surveys using Online Access Panels

Yehuda Dayan, Neil Farrer

Paper presented at Worldwide Readership Research Symposia (WRRS) Valencia 2009.

Background: Over recent years, the use of online survey methods has increased considerably, largely because they have significant cost advantages over the alternatives.

Although online surveys can be run successfully using probability samples, the majority of online surveys are carried out with respondents sampled using non-probability selection methods. Specifically, most commercial online surveys are run through Online Access Panels – panels of self-selected respondents. The representativeness of such panels is highly questionable - there has been a debate on the quality of results from such surveys and evidence of estimation bias has been presented. However, access panels have sometimes performed well, usually when there has been careful purposive sample selection and/or heavy post-survey weighting.

We believe that to improve the quality of Online Access Panel-based survey inference, a structured, theoretically sound and transparent approach needs to be taken. This paper reports initial results from a series of analyses being undertaken by Ipsos MORI, which attempt to understand the nature of Online Access Panels and how to compensate for the known bias in estimates.

Methodology: We put forward a new approach which puts survey adjustments in a theoretically informed structured framework. It involves decomposing conflicting errors of panel surveys and making corrections incrementally rather than simultaneously. The result is a model that takes account of the main errors of representation in an access panel survey:

1. Coverage error – not everyone is connected to the Internet so cannot be online;
2. Self-selection error – not everyone on the Internet will want to join an online panel and complete surveys regularly;
3. Non-response error – not everyone who joins a panel and is invited to take part in a survey will choose to do so.

We then apply the error correction model to an experimental dataset, focussing on the specification of a Panel Assembly propensity model that includes two phases: a) Internet Connectivity and b) Panel Self-Selection.

For the estimation of the proposed model we used three sets of data with overlapping auxiliary data: (1) a large representative sample of the population that does not access the Internet, (2) a large representative sample of the online segment of the target population and (3) an Online Access panel. Using the Ipsos Online Access panel and the British National Readership Survey (NRS) we constructed a panel assembly propensity model. We then tested its effectiveness by applying the necessary weighting in stages on an online survey with a sample recruited from the Online Access Panel.

Results/conclusions: The results have supported our initial hypothesis that the coverage and self-selection biases are often different and may work in opposite directions. Our work has shown that it is possible to identify the scale of these errors and that, over most of the attributes measured, coverage bias is of higher magnitude than self-selection bias. We have also presented our initial attempts to reduce the total bias by applying a phased propensity score weighting that looks to offer some improvement compared to more conventional approaches.

The coverage error is relatively well understood, and a focus in future work will be to improve the theoretical model, the model specification and consequently methods used to reduce this error further. Self-selection error proved harder to correct, and future work will need to broaden the set of variables used to model it.

Read the full text here.

POSTAL SURVEY RESPONSE RATES: The effect of placing a logo, sensitive questions and question positioning

Jamie Burnett

Ipsos MORI Working Paper

Background: This work set out to examine whether response rates for a Local Authority mail survey would be affected by the sponsoring organisation logo, inclusion of a sensitive question and question positioning. Although the work was conducted with a view to informing the design of a specific survey, some of its findings may prove to have more general application.

Methodology: An experimental postal survey was conducted in four local authorities (LAs) in England using a Place Based Survey questionnaire. The impact of the following factors was examined:

1. logo of sponsoring organisation (three conditions: LA v. Local Strategic Partnership v. Ipsos MORI);
2. inclusion or exclusion of potentially sensitive questions[1] (two conditions: sensitive questions v. no sensitive questions);
3. where in the questionnaire additional LA-specific questions were asked (two conditions: at the end in a block v. distributed through the questionnaire).

Within each local authority 2,000 addresses were drawn at random with equal probability of selection. A factorial design was adopted such that in each LA an equal number of addresses was randomly allocated to each of the 12 conditions, produced by combining the above three factors (3 × 2 × 2). Response rates were then compared across conditions.

Results/conclusions: Overall, residents who received letters headed with the council logo were significantly more likely to respond to the survey than were those who received letters with the Local Strategic Partnership (LSP) or Ipsos MORI logos. However, this was not consistently found within the individual LAs. There was also evidence that placing the extra LA-specific questions at the end of the questionnaire yielded a significantly higher response rate than did distributing them through the questionnaire. There was no evidence that the inclusion of sensitive questions lowered (or increased) response rates.

1 Questions asking respondents their sexual orientation and what religion they practised.

POSTAL SURVEY RESPONSE RATES: The impact of postage class

Hayk Gyuzalyan, Patten Smith

Ipsos MORI Working Paper

Background: Response rates are often seen as the Achilles heel of postal surveys. Use of stamps v. business reply and postage class of outgoing and return envelopes is sometimes thought to influence postal survey response rates. Using 1st class or stamped envelopes may increase the response rates and is often offered to clients wishing to maximise these.

Methodology: To test whether or not postage class would affect response rate on a patient experience survey, an experimental postal survey was conducted in Summer 2008. 4,000 questionnaires were mailed out to named members of general public. Named individuals from the edited version of September 2007 Electoral Registers were used for sampling. The questionnaires were split into the 8 groups produced by combining outgoing postage class (1st and 2nd class Royal Mail franked, 1st class stamped envelopes and TNT downstream mail) with return envelope postage class (1st or 2nd class Royal Mail franked). Sample members were then randomly assigned to each of the resulting 8 groups.

Reminder letters with questionnaires were mailed out four and seven weeks after the initial mail-out, with the cut-off date set at 10 weeks after the initial mail-out. A two-page questionnaire asked respondents' views about their GP and included standard demographics. "Deadwood" addresses were excluded from analysis. The adjusted overall response rate for the survey was 45.2%.

The overall response rates were then analysed by outgoing postage class (1,000 mailed questionnaires in each group) and return postage class (2,000 mailed questionnaires in each group).

Results/conclusions: No significant differences were found between response rates by outgoing or return mail type. This suggests that, at least for current health related postal surveys, there is little point in incurring the extra costs which would result from the use of first class mail or stamps.

THOUGHT PIECE

SURVEY RESEARCH: Two types of knowledge

Patten Smith

(Reprinted from International Journal of Market Research (2009) pp 721-723)

I shall argue here that in the UK there is a major divide in the kinds of knowledge held by survey experts in research agencies and in academia, and that this works to the detriment of survey research. As befits a Viewpoint article, I shall perhaps portray this divide over-starkly, but I think it is right to do this – there is a serious point to be made.

To my mind, those of us working in agencies who claim survey expertise are strong on practice and weak in theory, while academic survey experts show exactly the opposite qualities. To borrow Gilbert Ryle's terminology, agency practitioners are strong on knowing how while academics are strong on knowing that. In the agencies we know how to write questionnaires, design samples, collect data and report results efficiently and quickly. But we are often hazy in knowing that the accuracy of our results should be assessed in such and such a way according to advanced statistical theory. Furthermore, most of us know very little about the latest theories and findings relating to how questions are (mis-)answered – those concerning response order and question order effects, for example. On the other hand, survey specialist academics have vices and virtues that are the mirror images of ours. They know the theory and the published findings, they have a rigorous framework for assessing survey error, and can point to many weaknesses in the surveys we run. But, in my experience at least, many survey expert academics would be hard put to write a useable 45 minute interview questionnaire in two days flat, let alone swiftly set up and implement a survey that delivers acceptable results to a reasonable timescale. And with this practical exiguity sometimes comes a raft of unrealistic expectations about the sorts of data a survey can reasonably be expected to collect.

In the above I have, perhaps, portrayed the relationship between agency practitioners and academics as akin to that between novelist, and critic. However, we should not let this metaphor tempt us into complacently thinking that we in the agencies are the only ones who actually produce something useful, and that academics are somehow parasitic on our endeavours. Such an attitude is surprisingly common in agencies and usually involves the supposition that we practitioners base our surveys on 'pragmatic' decisions that somehow magically produce 'fit for purpose' data, whereas captious academics, working in their ivory towers, produce vast amounts of information of little relevance to a posited 'real' world. Such complacency has, of course, no grounding in logic (although it does have one in self-interest). In reality we can only judge whether our data are accurate or not by judging them, or their means of generation, against one of two sorts of criteria:

1. a priori criteria based upon statistical theory and logic – for example, we can make defensible statements about likely levels of sampling and non-response error for a random probability survey with a good response rate;

2. a posteriori ones showing us that when we have done similar surveys in the past they have delivered data that align with trusted external data.

Often we in the agencies cannot put our hands on our hearts and say that the results of our latest survey are vouchsafed by criteria of either sort. Instead, if pushed, we tend say that we are confident in the results of our current survey because it uses methods that have 'worked' in the past, where by 'working' we mean that when the survey was done before, respondents answered our questions and we came up with results which were not obviously implausible. Unfortunately however, it is perfectly possible for a survey which "works" in this way to produce wildly inaccurate data, and, given this, any belief we have in the accuracy of our data often requires from us a good measure of faith. If we want, as we should, to do better than this we have to take these criteria seriously, and this is where academics come in with their sophisticated understanding of how the criteria can be applied.

In short, we need guidance from academics as much as they need our craft skills to generate data. Unfortunately, however, in the world of surveys in the UK the two kinds of survey expert live in a kind of semi-detached symbiosis with one another, and this leads to significant problems:

1. practitioners make needless mistakes because they lack depth in their understanding of how survey errors work;
2. the bulk of surveys in the UK (those not using random probability samples for a start) receive almost no serious academic methodological attention and suffer as a result;
3. academic commentary and expectations can be very unrealistic.

Clearly it would be better if we in the agencies knew some of what the academics know, and if academics knew some of what we know. Academics' critiques and commentaries will be enriched by a deeper understanding of the practical exigencies of survey research and, perhaps more importantly, as we became more critical of the veracity of the results we produce, we would be motivated to improve our methods.

How might we learn from each other? A few obvious ideas would include:

- having academics take secondments in agencies and agency staff take academic secondments
- establishing formal links between agencies and academic departments with resource sharing – giving academics access to new data and practitioners access to electronic libraries
- encouraging academics and agency practitioners to co-author papers
- improving the quality of formal survey training for both academics and practitioners.

Will this be achieved? I rather doubt it. So long as clients are happy not to interrogate the veracity of the data supplied by agencies and so long as academics can make a career out of analysing survey data without having to get their hands dirty collecting it, where will be the motive for real change?

The RMC newsletter aims at regularly keeping you up-to-date on our methodological activities. In the future, we plan to continue to share our most recent methodological work with you twice a year – please contact us on hayk.gyuzalyan@ipsos.com with any feedback on the newsletter or presented articles.

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