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Content

The Difficult but Essential Challenge of Designing Mixed-Mode Surveys

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Survey research seems caught between telephone surveys that work less well than in the past, and internet surveys that do not yet work well enough to replace them. The solution proposed by many is to use more than one survey mode to conduct specific surveys. When a second or third mode of data collection is used to achieve certain objectives, such as improvements in coverage or the reduction of non response error, a potential consequence is to introduce measurement differences between modes. These differences may negate the improvements in coverage and response. In addition, although protocols are well developed for the administration of single mode surveys, much remains to be learned on how to link the use of different data collection modes in order to improve survey quality. In this presentation Dr. Dillman will discuss challenges of combining survey modes, using recent research he has done on the use of multiple modes in the same survey. He will also discuss his research that shows offering respondents a choice of survey mode tends to reduce overall response. Directions for future research will also be discussed regarding these difficult but essential challenges facing survey methodologists throughout the world.

Mixed Modes and Measurement Error: Comparing face-to-face, telephone and web modes

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There is a need for practical advice to inform decisions about when to mix modes and how, since survey designers are making these decisions in an ad hoc manner, driven by considerations of costs and response rates, but often ignoring the potential impact on data comparability. Some aspects of mixed modes are well researched, but others have not been examined. What is needed is a theoretical framework, based on existing and new complementary findings, about the causes and consequences of mixing modes.

A three-year project to address this issue was launched in Great Britain in October 2007, as part of the ESRC Survey Design and Measurement Initiative.

This project consists of three sub-projects:
(1) a review of the literature and development of a theoretical framework,
(2) quantitative analysis of existing datasets and new experimental data, and
(3) qualitative research using cognitive interviewing to identify causes of mode effects.

This paper will present some initial results from sub-project (2), including some findings from a mixed modes experiment carried out in March-May 2009.

A sample of NatCen Omnibus respondents with access to the internet were randomly assigned to one of three modes: face-to-face, telephone and web. The questionnaire included about 60 questions that had been designed to test a set of hypotheses about the causes and consequences of mixed mode effects. The questions were classified according to type of question (e.g. attitude, behaviour, other factual), question format (e.g. closed/open, scale, # response categories), task difficulty and sensitivity of the question. The mode comparisons were dissected according to interviewer presence (face-to-face, telephone, none), delivery of question (visual, aural), response list (visual, aural) and recording of responses (oral, written).
We will present the initial results of the experiment and highlight those research questions which will be taken forward in sub-project (3).

Accessibility of individuals for mobile phone surveys

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The number of households solely equipped with fixed line phones has decreased in Germany since 2003. Simultaneously the number of people using mobile phones exclusively has increased; especially among young males living in single households and households with low income. Latest estimations indicate that 4 million households have mobile telephones only, that are about 9 percent (Federal Statistical Office 2009). Experiences from other countries show even higher rates and, in addition, show that the speed at which fixed phone lines are replaced with mobile phones will increase in the future. This change in telephone coverage cannot be ignored in survey practice, since current frames for the selection of households include fixed line phones only.

To shed light on this issue the German Research Foundation was funding a joint research project of the University of Kassel and GESIS in the framework of the Priority Program on Survey Methodology. The project aimed - amongst others - to exercise the characteristics of mobile-only households and to find out more about the methodological background of mobile phone surveys.

In the paper we will focus on the accessibility of individuals for mobile phone surveys. For this, we describe the situation in which people agree to participate in a mobile phone survey. We found that in our survey nearly a half of the interviews were conducted in settings not in the home of the interviewee. We try to find out in which situations people are likely to respond when they are at home and when they are not at home. Besides, the time of the interview will be analysed. From this we hope to learn optimal strategies for contacting people for mobile phone surveys.

Using Mobile Phones to Administer a Working Memory Updating Task in a Survey - Cognitive Performance “in the Wild”

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The use of mobile telephones in experience sampling studies makes it possible to measure psychological constructs in the lives of study participants outside of experimental laboratories. Up to now, the method of experience sampling, and especially mobile phones as survey instruments, have been used mainly to measure self-reported variables and movement data (Kwok, R., Nature 458 (2009), 959-961). We show that cognitive performance can also be measured using mobile telephones during participants’ everyday activities. To this end, we developed a mobile phone version of a working memory updating task that has been proven to be a reliable and valid indicator of working memory capacity in experimental and psychometric studies. In this task, participants have to commit several single-digit numbers to memory and then carry out simple arithmetic operations using the various numbers.

Our survey data on 378 adults aged 14-86 who carried out this task by mobile phone during their everyday activities on 9 days at a total of 54 different points in time show that this task allows for efficient and reliable measurement of working memory performance. A comparison with data from a laboratory study in which young and older adults completed the same task by computer on 100 days in a controlled laboratory environment shows evidence of stronger fluctuations in performance in an everyday context than under standardized laboratory conditions. This underscores the importance of studying psychological constructs more outside laboratory conditions, in the everyday lives of study participants.

Methodological Research for Longitudinal Surveys

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Longitudinal surveys face a number of unique methodological challenges in addition to having to deal with all the issues faced by other surveys. This presentation will focus on those aspects of methodology that are unique to longitudinal surveys or that have rather distinct properties in the case of longitudinal surveys. I will outline those aspects and, for each, will present a brief overview of methodological research in the area, focussing particularly on recent and current research and outlining a desirable future research agenda. Topics discussed will include sample design, between-wave intervals, keeping track of sample members and maintaining co-operation, adjusting for panel attrition, panel conditioning, and instrument design to minimise measurement error in measures of change.

Behavioral Experiments: Enrichment or Threat to General Population Surveys?

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For a long time, experimentally and survey-oriented scholars of behavioral sciences disagree vehemently about the most appropriate empirical approach. While proponents of experimental research claim to analyze actual behavior instead of unreliable reports of behavioral intentions, proponents of survey-based research doubt the generalization of experimental findings that often result from highly selective convenience samples. In an attempt to reconcile both schools of thought, general population surveys, such as the German Socio-Economic Panel Study (SOEP), add behavioral experiments to their existing repertoire of survey instruments. This paper poses the question of the downside of including behavioral experiments in surveys by unintentionally affecting the response behavior of individuals. More specially, the paper analyzes the effects of the well-known trust game conducted in a sub-sample of the SOEP in 2003, 2004, and 2005 on unit non-response in later waves. Using propensity score matching/weighting techniques, we consider the general effect of participating in the experiment on attrition. Moreover, we consider the specific outcomes of the game (payoffs up to 300 Euro were possible) as a form of variable incentives in a longitudinal perspective. The paper therefore contributes to the literature on unit non-response in general and the effects of modes of data collection and (monetary) incentives in particular.

Tracing Life Courses with Prospective Panel Surveys - Lessons from the German FamilyPanelStudy

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Collecting valid information on the occurrence, timing and spacing of event during the life course is a crucial issue for life course researchers. A prospective panel design can help to improve data quality, because only short periods of time between panel waves have to be recalled. At the "seam=of the two panel waves, however, misstated episodes are a common problem (seameffect). In this presentation we argue that the seam effect can be reduced considerably by combining life history calendar and dependent interviewing techniques. Drawing on pretest data from the recently started German Family Panel Study, we provide evidence on the power of this approach in reducing the seam effect.

In wave two of our pretest study we administered a paper-and-pencil retrospective life history calendar from the age of 14 up until the date of the interview, covering relationship biography, fertility history, and residential mobility. In wave three, we asked for the events that occurred in between interviews. Using a split-ballot design we either presented a blank calendar or we presented a calendar, where the status at wave two was filled in (dependent interviewing). Differences between the two groups reveal how dependent interviewing helps to reduce the seam effect and thus can improve data quality.

Recall Error in the „Panel für Arbeitsmarkt und Soziale Sicherung“

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Background:

Surveys usually rely on respondents' reports based on their autobiographical memory. Therefore, the collected data may suffer from measurement errors due to memory failure. Ignoring such error, as often happens in practical research, is a dangerous practice, since it will affect the parameter estimation and the model-fit.
The German survey "Panel für Arbeitsmarkt und Soziale Sicherheit (PASS)" collects information on labour market histories using repeated interviews and retrospective reporting. This may generate potential bias in the data due to random measurement error or systematic recall error.

Methods/Data:

The project cooperates with the Institute for Employment Research (IAB) in Nuremberg. Anonymised data from the PASS are linked to administrative data from the German employment agency via record linkage. Administrative data include employment information provided by employers and data from the local employment centres regarding job-seeking and the receipt of welfare.
In order to measure the potential autobiographical error, employment histories reported in PASS are compared to the respective administrative data. Differences between the two data sources will be analysed regarding the spell type, duration and dating. The amount of misclassification of employment and the diverse unemployment episodes will be investigated. The focus of our research lies on the comparison of spell duration and dating. Particularly the episodes of receipt of social welfare benefits (ALGII) will be analysed concerning four different types of errors in dates: Omission, joining, forward and backward telescoping.

Discussion/Results:

First investigations showed differences in the number and duration of unemployment spells with more and shorter spells in the administrative data. An explanation for this finding may be that the administrative data reflects the legal entitlement to receive social welfare benefits whereas the welfare beneficiary reports his or her subjective perception. Short interruptions of the receipt may be caused by illness and might not be noticed by the recipient because welfare is then provided by statutory pension insurances. Further research is currently done to eliminate this issue.

Nonresponse Analysis using Social Security Administration Records

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The 2006 started yearly Panel Study "PASS" (Labour Market and Social Security) analyses living conditions and transistion out and in receiving german social security benefits (for example "Arbeitslosengeld II – ALGII") after the reform of the social security systems in Germany. Therefor two independent samples were drawn -- one of households receiving social security benefits, drawn from the receivers registry ("BA-Sample"), and a second one of general population households with low income households (and a higher risk of receiving social security benefits in the future) oversampled, drawn from a commercial database of all adresses with at least one private household. This database contains low aggregate (street level and below -- on average 8 households) additional information for example on housing and street typology, family type, age structure, social status and purchasing power. This Information from the sampling frame is available for both samples and is used for analysis of Household Unit Nonresponse in both samples, for example showing differences in housing and family types for respondenst and nonresponsdents in general and for different types of nonrespondents. Furthermore, for the BA-Sample individual information from the receivers registry is available for respondents and nonrespondents (covering for example information on household composition, employment status, education, unemployment) allowing for detailed analysis of Nonresponse in the BA-Sample, for example, showing that there are differences in leaving the receive of social security benefits for respondents and nonrespondenst in general, and for different types of nonrespondents introducing possible biases if the resulting sample with nonresponse is not adjusted adequately. Three types of data -- data from the sampling frame, contact history ("paradata") and -- for the sample of receivers of social security benefits -- information from the receivers registry -- are used to describe characteristics of respondents and nonrespondents, predict and adjust for Household Unit Nonresponse in the first wave of the PASS survey.

Survey cooperation: response to initial and follow-up requests - Recent experiences from the recruitment of members for a mixed-mode access panel using random telephone samples

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Since access panels have found a remarkable spread in the last years, a well-founded assessment of this approach is needed to resolve its suitability for survey research on general populations. Do sample surveys drawn from access panel frames make valid inferences possible?

There are two major threats to the validity of such inferences, self-selection processes and mode/response effects. Self-selection is likely to lead to biased sample estimates, while mode effects and mode-specific response effects preclude any generalisation of outcomes produced by one survey mode to another.

To study both types of effects, we built up an access panel for the adult population of Germany using probability sampling for the recruitment of people by phone (landline and cell phones). Much effort went in the collection of auxiliary data to assess if and in which ways the recruitment samples suffer themselves from unit non-response. In particular a rich set of paradata was collected to predict response propensities. The set of variables includes detailed information about the contact course, the number of contact attempts and an interviewer's rating of respondent's degree of reluctance. Also included is a detailed coding scheme of interviewers convincing efforts. The survey design is flexible in terms of questionnaire length (full, core, just one "exit" question) and interviewer tailoring. Responses to initial survey requests are analyzed using this set of paradata.

The analysis of initial survey cooperation is completed with an analysis of succeeding selection steps. These steps involve internet access/usage, the expression of general readiness to join the access panel for repeated survey participations, the expression of readiness to accept a specific survey mode (landline phone, cell phone, internet) by provision of corresponding valid access information (telephone numbers and email address), the actual entry into the panel when re-contacted afterwards, and finally the actual participation in access-panel based surveys. Except for the last step, a brief description of the probabilities associated with the sequence of selection steps will be given and completed with a detailed analysis of determinants of follow-up cooperation. This analysis of expressed readiness can draw on various sociological and psychological measures of the recruitment interview. The recruitment interviews include also a survey attitude scale which in a couple of preparatory studies proved promising in explaining follow-up survey cooperation. In addition the analysis can lean on a set of metadata collected to let the respondents evaluate various aspects of both the interview and the questionnaire. The underlying project "Access Panel and Mixed-Mode Internet Survey" is part of the Priority Programme on Survey Methodology (PPSM) of the German Research Foundation (DFG).

Non-response bias in surveys of school children: The case of the English PISA sample

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Recent years have seen a number of different large scale international achievement surveys that repeatedly monitor children's educational outcomes across countries. The best known survey is probably the Programme for International Student Assessment (PISA) which examines achievement of 15 year olds; other surveys are the Trends in Maths and Science Study and the Progress in Reading Literacy Study.

These surveys have a two stage sample design, with schools being sampled first and students within schools second. Survey organisers' decision whether data of a country can assumed to be unbiased and hence can be included into the reports depends on whether countries meet non-response thresholds set at the school and pupil level. However, low response is neither sufficient for bias to arise nor is high response a guarantee against bias. There is a lack of research examining non-response bias in surveys of school children that can give guidance on the direction and extent of bias to be expected, at which level bias appears and whether used non-response thresholds protect against bias.

This paper fills this gap using the English PISA data for the years 2000 and 2003. England is a rare country having national tests of children's learning at several ages. As a consequence, the paper uses an unusually rich data set since we first have administrative measures of cognitive achievement for the entire population of 15 year old children and second can identify sampled, responding and non-responding PISA schools and students within these population data. Administrative achievement measures have a high correlation with PISA test scores for responding pupils. We focus on biases in estimates of three parameters: average achievement, inequalities in achievement and the percentage of children below a given threshold (all three being commonly reported figures of educational achievement reports). Non-response bias is examined at both, the school and the pupil level.

The analysis is conducted in three steps: First, administrative achievement measures are compared between responding and non-responding schools and pupils. Results are benchmarked with population values. Results indicate that the main problem of non-response bias appears at the pupil level. As a consequence, we examine pupil non-response in more detail using logistic regression models. We use the results to construct inverse probability weights for respondents. Third, we apply these weights for respondents to estimate the extent of bias in estimates based on PISA scores.

Results show that relative to the impact of sampling variation, the biases are large. In terms of country ranking however, England would move only by a small number of places. Non-response bias results are very similar for 2000 and 2003. This questions survey organisers' practice of using non-response thresholds for judging on bias: England met these thresholds in 2000 but not in 2003.

Improving Response Rates in Online Business Surveys by Using CATI

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Reaching acceptable response rates in non-mandatory business surveys is a big challenge, especially in the case of self-administered questionnaires (Dillman 2007: 323f). With online-surveys this problem is even more accentuated – low response rates are a salient drawback of many online-surveys (Lozear Manfreda, Bosnjak, Berzelak et al. 2008). Strategies to overcome this obstacle are highly relevant as online-surveys bear many advantages over other survey modes. Among the most important figure the lower surveying costs, the possibility of implementing sophisticated questionnaire designs (graphics, complex filters, interactive fields etc.) and of extensively tailoring questionnaires to individual respondents.

We present a form of survey implementation which was specifically designed to make an online-questionnaire suitable for a representative establishment survey which fulfilled high standards concerning response rate and data quality. For the “Swiss Organization Survey on Job Training” we employed a sort of a mixed-mode survey-design, where we carefully combined CATI and online-questionnaire. Establishments were contacted through CATI by our interviewers, an appropriate respondent was selected, initial questions were posed and towards the end of the phone conversation an email with a login-link to a personalized online-questionnaire was sent. Respondents then were dismissed and had to “switch” from the phone to the online-questionnaire.

We present results obtained with our survey-design, discuss problems that arose and how we’ve solved them. In order to do that we analyze response rates and take a detailed look at why people refused and especially at what stage we “lost” respondents. The forced switch from CATI to online-questionnaire turned out to be highly critical concerning this.

In addition we take a look at response-rates of a subsequent survey, where we addressed respondents directly via email and without a prior CATI-contact but instead used a snowball sampling strategy. We sent a similar questionnaire to respondents whose email address was provided by respondents from the first survey.

Finally we point out some critical points with our survey-design and draw conclusions on how online-questionnaires in combination with CATI can be used for future establishment surveys.

Using field process data to predict best times of contact conditioning on household and interviewer influences

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Establishing contact is an important part of the response process and effective interviewer calling behaviours are critical in achieving contact and subsequent cooperation. This paper investigates best times of contact for different types of households and the influence of the interviewer on establishing contact. Recent developments in the survey data collection process have led to the collection of so-called field process or paradata, which greatly extend the basic information on interviewer calls. We use data from the UK Census Link Study which provides a unique opportunity to analyse the effectiveness of interviewer calls to establish contact and to gain cooperation, conditioning on individual, household and interviewer characteristics, in several face-toface household surveys. The data include process data, such as records of calls,
interviewer observations about the household and information about the interviewerhousehold
interaction, which is linked to census information on individuals, households and areas as well as to rich information about the interviewer. The data have a multilevel structure with individuals nested within households, which are nested within a crossclassification of interviewers and areas. This paper develops a multilevel discrete time event history model based on interviewer call record data to predict the likelihood of contact at each call, allowing for the hierarchical structure of the data.. The results have implications for survey practice and inform the design of effective interviewer calling times including responsive survey designs to reduce nonresponse bias and to increase response rates. The project is part of a 3-year research programme funded by the UK Economic and Social Research Council (ESRC), UK, titled 'Hierarchical analysis of unit nonresponse in sample surveys', grant number: RES-062-23-0458.

New developments in survey methodology for official statistics

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National statistical institutes have to satisfy an ever growing demand for statistical information. At the same time, they face new challenges like increasing nonresponse rates, decreasing budgets, and demands for reducing the response burden. This may lead to new ways of conducting surveys. Some of these new developments are discussed in this paper.

Increasing nonresponse affects the representativity of survey data, and therefore the quality of survey outcomes. A new indicator (the R-indicator) is described that measures the representativity of survey response. Such an indicator can be a useful additional indicator for survey quality. It may be applied during the fieldwork of the survey to focus data collection efforts. It may also be useful to compare a survey over time, or to compare surveys in different countries.

National statistical offices have to produce reliable and accurate statistics. This is often done with face-to-face or telephone surveys to collect the data that form the basis for these statistics. This is an expensive way of survey data collection, but experience has shown that it is necessary in order to obtain high quality data. Now that many these offices are faces with reduced budgets, web surveys may offer a less costly alternative. This type of survey becomes increasingly popular, but also has its methodological drawbacks. The question is addressed whether web surveys can be used effectively in official statistics, whether as a single mode survey, or as one of the modes in a mixed-mode surveys.

A mixed-mode survey may also be a means to reduce nonresponse rates. Response behaviour may depend on the data collection mode. By approaching people with the mode most fit for them, they may be more inclined to respond. Responsive survey designs aim at altering the data collection procedures during the fieldwork. These could mean focusing fieldwork on a specific group with a specific mode. Such an approaching requires information on the progress of the fieldwork. Paradata are required for this. This stresses the increasingly important role of paradata.

The Access Panel of the German Official Statistics. An Analysis of Recruitment, Panel Attrition and Survey Non-response 2005-2006

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In 2004 the German Office of Official Statistics started the recruitment of households leaving the German micro-census (MC) for an access panel (AP) intended to serve as a sampling frame for conducting probability samples in a cost- and time-efficient fashion. The German sub-samples of two European-wide surveys, the European Union Statistics on Income and Living Conditions (EU-SILC) and the Statistics on Information and Communications Technologies (ICT) are presently drawn from this AP. While the participation in the MC is mandatory all further cooperation with the Official Statistics is voluntary, the entry in the AP requiring the consent of all adult household's members. This results in approx. 15 per cent recruitment rate and together with the attrition within the AP can affect the quality of the panel's coverage. Furthermore, the response rates for EU-SILC and ICT range from 72 to 78 per cent implying a possible non-response bias. In this paper we summarise an analysis of the three stages of self-selection: recruitment, panel attrition and survey non-response. Logistic regression modelling of the recruitment stage reveals a strong field institute effect also present in both the survey non-response and attrition processes. Income, marital and social status as well as nationality also appear to influence the decisions to remain in the panel and to participate in the surveys.

Accuracy of Estimates in Access Panel based Surveys

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In Official Statistics, household and personal surveys gain increasingly in importance. A survey of great significance is for example EU-SILC, a study about poverty, social exclusion and living conditions in Europe. The sampling frame in Germany for this survey is the Official Statistics' Access Panel - called the "Dauerstichprobe" (DSP) - that is conducted by the German Federal Statistical Office (DESTATIS). One problem in sampling from the AP is the voluntary participation and the resulting self-selection in the recruitment process. Thus, certain groups in the population (such as entrepreneurs, pensioner, etc.) are less willing to participate.

As a result of possibly low response propensities, one would expect biased and inefficient point and variance estimates. For that reason, it is important to take these propensities into consideration and investigate the influence of the response rate (i.e. the rate itself as well as the response pattern) on the given estimates.

The present paper will therefore address point and variance estimation of means and total values (e.g. of income) in different access panel participation scenarios using different estimation strategies. Based on the latest estimation results from the partner's response propensity estimates (cf. Rendtel/Amarov, FU Berlin) and on earlier work of the DACSEIS project (cf. http://www.dacseis.de), several scenarios will be implemented and examined within a Monte-Carlo simulation study.

Making Use of “Benford’s Law” for the Randomized Response Technique

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In this presentation, “Benford’s law” is applied to the “randomized response technique” (RRT) to increase the validity of answers to sensitive questions. Using the Benford distribution as a randomizing device has several advantages. It is easy to explain and follow the procedure as no physical device such as a coin or a dice is necessary and the method guarantees full anonymity. Because of the overestimation of certain numbers (“Benford illusion”), the conflict between the variance of the estimates and the degree of anonymity is less pronounced compared to other methods. Further, the Benford method is flexible, allowing researchers to choose proper probabilities for the question of interest.

Asking Sensitive Questions Using the Crosswise Model: Some Experimental Results

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Yu, Tian, and Tang (2008, Metrika 67: 251-263) proposed two new techniques for asking questions on sensitive topics in population surveys: the triangular model and the crosswise model. The two new models can be used as alternatives to the well known randomized response technique (RRT) and are meant to overcome some of the drawbacks of the RRT. Although Yu et al. provide a promising analysis of the theoretical properties of the proposed models, it remains unclear how the procedures will perform in empirical practice. Apparently, Yu et al. did not test their proposals in any real applications. We will therefore provide results from an experimental survey in which one of the techniques, the crosswise model, was implemented and compared to direct questioning. To our knowledge, this is the first empirical study in which the crosswise technique was employed. We focus on the crosswise model in this study because it seems better suited to overcome the "self-protective no" bias known from the RRT than the triangular model. Our survey was conducted in class-room settings with Swiss and German university students as subjects, using a pen-and-pencil questionnaire on plagiarism in student papers.

A new approach to separating interviewer from area variability in face-to-face interview surveys

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That idiosyncrasies of interviewer behaviour can reduce the precision of survey estimates is now well established (Groves, 1989; Groves et al., 2004; Groves & Couper, 1998; O'Muircheartaigh & Campanelli, 1998). In multi-stage, face-to-face interview surveys, these 'interviewer effects' are included in conventional estimates of design effects due to clustering. However, because in the hierarchical structure of standard face-to-face sample designs interviewers are coterminous with sample points, the effects of interviewers and areas are generally confounded. Separation of interviewer and area variance components is possible with the use of an interpenetrated sample design (Mehalanobis (1946)), in which households are randomly assigned to interviewers and the correlations between respondents from the same interviewer used as an estimate of interviewer variability (Groves & Magilavy, 1986). However, the interpenetrated design has typically been complex and costly to incorporate within face-to-face interview surveys, and has thus been seldom implemented in practice. In this paper we adopt a new approach to separating these competing sources of variance by applying cross-classified multilevel models to the recently expanded sample design of the British Crime Survey, in conjunction with a newly introduced census output geography in the UK. Our results suggest that interviewers account for the majority of the total design effect in the majority of the variables examined. We also explore the extent to which observed interviewer characteristics such as age, gender, and experience influence the variability of different survey estimates.

Interviewer Effects on Consenting to Data Linkage on a Longitudinal Survey of a General Population

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Linking survey data to administrative data is becoming a common practice in the UK. Data linkage enhances research opportunities as it can provide more data at lower (survey and respondent) costs while, in principle, providing information that could also be used to detect measurement error (i.e., by carrying out validation studies) and therefore improve methods of data collection. In the UK, informed consent must be asked and obtained from respondents in order to link administrative data at the individual level to survey data.

Much of the research on this topic has addressed issues regarding consent rates and consent bias connected to respondent socio-economic characteristics (Dunn et al., 2004; Jenkins et al., 2006; Tate et al., 2006). However, very little is known on other issues regarding data linkage, such as the role played by interviewers in obtaining consent from the respondents. Our experience from the British Household Panel Survey (BHPS) Wave 18 shows a high degree of variation in interviewer's success in obtaining consent: The average consent rate across interviewers is 42 percent (standard deviation: 22), the 10 percent least successful interviewer (p10) achieved a consent rate of 12 percent while the 10 percent most successful interviewer (p90) obtained a rate of 70 percent. What are the drivers of these differences, and can they be controlled?

In this paper we explore the interviewers' role in obtaining consent to health data linkage on the 18th wave of BHPS. Using a logistic regression model we estimate the effect on consenting of interviewer socio-demographic characteristics, their personality trait ("Big Five"), their job motivation and their attitude to persuading survey respondents (Lehtonen, 1995), controlling for respondent characteristics and interviewer-respondent match. For instance, interviewers who think that they shouldn't try to persuade a reluctant respondent or who are sensitive to possible privacy concerns may be less likely to obtain consent or be less convincing when they try to. Results of this analysis will contribute to clarify issues that are not well researched as well as providing more practical implications for survey designers such as help on briefing interviewers or selecting interviewers who will be asking for consent.

We use a unique matched dataset for this analysis which has never been used before: (i) the BHPS Wave 18 individual interviews, (ii) an interviewer survey which was administered during Wave 18 interviewer briefings and (iii) a unique dataset on all interviewers who ever worked on the BHPS provided by the survey agency.

Constructing an revised CATI sampling frame

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In Germany, the Model of „Häder-Gabler“ to design a landline RDD frame is known to be “Best Practice”. But in the last three years, significant change in the market of fixed line telephones has been taken place. The market share of DT “Deutsche Telekom” has been reduced from 90% in 2006 to 75% in 2008. This fact is directly related to the quantity of registered telephone numbers, which constituted the basis of any German RDD-Sampling frame. Therefore, the ADM (the ADM Arbeitskreis Deutscher Markt- und Sozialforschungsinstitute e.V. is the representation of private market and social research agencies in Germany) has developed an enlarged sampling design, which takes also supplementary information from the Federal network agency about the changed numbering space into account, because about 90% of these users are not listed in any phonebook. The next challenge was the assign of these not-listed numbers to Zip-Code-Areas or communities. This information is needed for any layer of a sample. In Practice, the new sampling frame, which is now constructed for the third time, shows, that just 20% of all interviews are recruited from these “not-listed”-private households, and reflected a different view of market shares and consumer behaviours.

Are people sharing their mobile phones? Selection probabilities in cellular telephone surveys

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In recent years, the dual sampling frame approach has become a standard methodology to compensate for the declining coverage of traditional landline telephone surveys. This dual frame approach allows the combination of fixed-line phone samples and mobile phone samples on basis of the combined selection probabilities of each individual respondent in the landline frame and in the mobile phone frame. In the landline frame the number of people in the household is considered in order to determine the selection probability in addition to the number of telephone lines in that household. By contrast, in the mobile phone sampling frame each telephone number is assumed to reach one particular respondent only - mobile phones are considered personal devices. So far, this assumption was justified based on the available findings suggesting that in fact each mobile phone was used by one individual only. However, when taking into account that other persons - like a spouse or partner - could also answer incoming calls on the respondent's mobile phone a correctional factor for selection probability within the mobile phone frame would be needed.

In this paper we will question the basis assumption of the dual traditional frame approach according to which mobile telephones are individual devices only (and not household devices). US researchers already indicated that shared mobile phones could turn out to be common for certain household types when asking for it in an adequate way. Also, in one of the pretests to our Experimental Mobile Phone Panel we found supporting evidence. Based on these preliminary findings we developed a questionnaire module concerning mobile phone sharing. We asked for active sharing (the person surveyed answers calls on another person's mobile phone) as well as for passive sharing (other people answer calls on the respondent's cell phone). If sharing would become a frequent behavioral pattern in households or among other groups of people, it would have serious implications for the selection probabilities of mobile phone surveys. In our paper we will estimate the extent of this behavior among mobile phone telephone users based on data from our 2009 Experimental Mobile Phone Panel. Further on, we will identify social-demographic characteristics of people who are especially prone to sharing.