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Advice in Surveying the General Public Over the Internet

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As a member of the editorial board and editors of the International Journal of Internet Science we believe it is our responsibility to draw a resumee of the difficulties that exist in surveying the general public over the Internet (and via other media), and to offer advice as to where research may flow and what can be done during the shift of paradigm that is now underway.

The first decade of this century in Web surveying is likely to be recalled as a time of much uncertainty on whether random samples of the general public could be surveyed effectively over the Internet. A significant proportion of households in most countries are not connected to the Internet, and within households some members lack the Internet skills or frequency of use needed for responding to survey requests. In addition, households without Internet access differ sharply from those with it. Non-Internet households are older, have less education, and lower incomes. Their inclusion in surveys is critical for producing acceptable population estimates, especially for public policy purposes.

Web survey response rates in general public surveys are often dismal. In addition, given a choice of responding by mail, a mode not held in high regard by many surveyors, most respondents choose mail (de Leeuw, 2005; Shih & Fan, 2007; Smyth, Dillman, Christian, & O'Neill, 2010). In the United States, surveyors are not allowed to contact people with survey requests, unless a previous relationship existed, for example, student, employee or customer. Promises of cash payments to those who responded to Web surveys became standard practice for some surveyors in hopes of improving response rates. However, that procedure has been shown not to be particularly effective, especially in comparison to token cash incentives accompanying the request (for a review of incentives in online panels see Göritz, 2006).

Attempts to overcome these problems have included the creation of volunteer panels in which people without access to the Web or unwilling to use it were ignored and weighting procedures were used to make results appear to represent the general public. Probability samples for panels were also created, using random digit dialing (RDD) for recruitment. Households without Internet access have been offered Internet access in order to be a respondent, and it was assumed that this would eliminate coverage problems. However, evidence of its effectiveness in this regard has not been persuasive. In addition, random digit dialing used for creating the initial sample frame has itself experienced low response rates and increased coverage problems. The latter results from steady replacement of landlines with cellular telephones that are likely to be personal rather than household-based, and confound the problem of achieving representation (also see Fuchs & Busse, 2009).

The last decade has also produced research which suggests that the Internet can be more effective, than originally thought, for surveying random samples of the general public. These developments may help restore

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the potential for cross-sectional surveys of households to which we became accustomed in the era of RDD telephone surveys. To do this requires different survey designs and implementation methods than those commonly used. Among the features that have been shown capable of moving us towards higher response rates and better sample representation are these.

Use of a mixed-mode approach, whereby mail contact methods are used to request responses over the Internet, and non-responding households are asked later to respond by mail.

Initial tests of asking people to respond over the Internet are promising. Sample households are requested in the first contacts to respond over the Internet. They are also informed that those who do not respond in this way will receive a mail questionnaire in 2–3 weeks, a procedure developed by Smyth et al. (2010) using the U.S. Postal Service Delivery Sequence File of residential households, the most comprehensive sample frame for household addresses that now exists in the U.S. Results from this study show that as many as 41% of all households will respond over the Internet. That response rate by itself is much higher than can usually be obtained by RDD telephone.

Use the initial mail contact to deliver a token cash incentive with the request.

Inclusion of $5 with the request contributes to greater response over the Internet. Messer and Dillman (2010) have found that this incentive is even more effective than such advance incentives are in mail surveys, where their use is both common and effective. In one household address experiment Web response rates more than doubled, from 13 to 35%, compared to an improvement of only 13 percentage points from use of the same $5 incentive for a mail-only comparison group.

Use a mail follow-up to improve response rates and obtain better representation of the general public than can be obtained by Web alone.

Sending a mail questionnaire about three weeks after people were asked to respond over the Web improved increased response by 14 percentage points, from 41 to 55% of all households, in the experiment by Smyth et al. (2010). The mail respondents to this and later surveys were found to be quite different than Web respondents. Together, the Web and mail respondents provided a more accurate representation of the general public than did either the Web respondents or those who waited for the mail option to be delivered.

Refrain from offering people a choice of whether to respond by Web or mail in initial contacts.

Offering a choice of modes tends to lower response, compared to that which can be achieved by only offering a mail questionnaire response possibility (de Leeuw, 2005). In addition, offering a Web possibility three weeks after people have received a request to respond only by mail has only a trivial effect on overall response rates. Thus, while offering mail after a Web request is useful, doing the opposite will only have a minimal effect on response rates.

Consider using an experimental approach, in order to generate estimates for the meaning and sizes of various effects on response rates and non-response.

For example, send invitations to several samples and sources that differ in well-defined ways, and optionally do so via different modes (*multiple site entry technique*, Reips, 2002). The resulting differences can be used in weighting, or it may turn out several factors do not need weighting as the results are the same in all samples, modes and sources.

These research findings need further testing in other situations. Meantime, the pessimism that has prevailed among many on getting general public samples to respond to Web surveys may be a thing of the past. It remains true that about a third of U.S. households either lack Internet access or use their access infrequently (every two weeks or less). Adding mail procedures to overcome the inability to use email contacts with the general public also raises survey costs. More effective designs seem likely to emerge as research efforts continue.

The advancements reported here come not from *trying to fit the general public to the Internet (e.g. volunteer samples, email contacts only and payments afterwards) but instead trying to fit survey requests to people's normal lives*. This approach includes adopting a mixed-mode data collection strategy that relies on mail contact to deliver incentives and an orchestrated approach to encouraging people to respond to those modes in sequence. The development of new ways of thinking about data collection practices was needed when telephone RDD methods began to replace personal interviewing in the 1970's, just as new thinking is now needed for encouraging Internet surveying in the 2010's. As a result, widespread use of the Internet for surveys of the general public now seems feasible, and we are eagerly looking forward to the invention of methodologies that will reduce the many difficulties in doing surveys.

The present issue

The present issue of the International Journal of Internet Science is the one that marks the beginning of more frequent appearance, twice a year in at least 2010 and 2011. We are happy to report the signing of a cooperation with *GESIS Leibniz-Institute for Psychology Information* that in the future will allow us to more easily handle the growing waves of submitted manuscripts. Readers and authors visiting our Web site http://ijis.net in the coming months will notice many changes in functionality (and – less so – in appearance) that will result from a switch to the Open Journal System. In further news, EBSCO will be adding the International Journal of Internet Science to its databases.

Articles

Sex sells, and so it happens the first article in the present issue is about online dating. Using methods from Social Psychology and Personality research, Monica T. Whitty and Tom Buchanan investigate *What's in a Screen Name? Attractiveness of Different Types of Screen Names Used by Online Daters*. Their findings show that indeed the decision to use a particular nickname in online dating (and possibly in other behaviors on the Internet) can have a large effect on the prospects of love.

An important development with the Internet has been the advent and spread of Web services, i.e., software and associated services that can be used over the Internet and do not depend on particular operating systems and other software. In the behavioral and social sciences there are a few such services for researchers (see e.g. the portal at http://iscience.eu). However, one was missing for the elementary and frequently needed task of calculating intercoder reliability. Deen G. Freelon fills the gap and presents his tool along with convincing evidence of its quality and usefulness in his article *ReCal: Intercoder Reliability Calculation as a Web Service*. We are convinced the article and tool will be helpful to all researchers and students who use content analysis in their research and would like to calculate a variety of different reliability indicators.

In their article *News Platform Preference: Advancing the Effects of Age and Media Consumption on Political Participation* Ingrid Bachman, Kelly Kaufhold, Seth C. Lewis, and Homero Gil de Zúñiga analyze whether the consumption of online news has differential effects on political participation for young versus old adults. Conducting multivariate analysis of data provided by the Pew Internet and American Life Project, the authors find out that online news consumption has significantly stronger effects on voting as well as on some online forms of political participation for younger adults. They conclude that a preference for consuming news on the Internet may diminish the generation gap between the young and old in political participation.

Elad Segev studies to what extent online news sites all around the world devote attention to different countries, whether news sites of countries show varying levels of self-occupation, and how the network structure between countries looks like from the point of view of twelve Western, Asian, and Middle Eastern countries. Using data-mining tools in combination with techniques of social network analysis, he draws a number of conclusions in his article *Mapping the International: Global and Local Salience and News-Links Between Countries in Popular News Sites Worldwide*. Contrary to claims in the literature, but in line with Wallerstein's (1974) world system theory he finds that salience in the online news is strongly associated with a country's economic power. When compared to their salience in newspapers, many European countries appeared less salient, but not the U.S. that maintained their high salience. Countries that show higher political instability tend to be more self-occupied in their online news sites. In addition, the author found three different structures in the networks of news-links, as portrayed by the different countries. Online news of different countries portray the world either as characterized by a centralized network, a two-hub network, or a distributed network.

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