AAPOR Standard Definitions & Academic Journals

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Research Question

An important issue in survey research is how to report response rates. Over the years researchers have reported a wide variety of figures. The 1982 CASRO special report was an early attempt to standardize the reporting of response rates. Since 1997 the American Association for Public Opinion Research (AAPOR) has offered standard definitions for reporting response rates. If reported, these rates make it easier for readers to determine and compare response rates in surveys. How often are these standard definitions actually reported in four major areas of academic research?

Sampling Procedures

To measure the frequency with which AAPOR or other response rates were reported, all research articles in *Public Opinion Quarterly* were reviewed for 2004, 2005, and 2006 through the Spring 2006 issue – a total of 51 articles. A research article was included if it presented survey data from individuals based on any common polling technique, including experiments.[i] No comments, rejoinders, presidential addresses, review essays, brief research notes, or articles from "The Polls" were counted, and no articles (here or for political science, sociology, or health and medical journals, below) were included if based upon samples of non-persons, such as units of government, businesses, documents, or events.

This report examines only response rates (AAPOR 2006); cooperation rates or refusal rates were seldom reported in these journal articles. Response rate figures were counted if included anywhere within the article itself. It is possible that response rates are available elsewhere for some articles, such as on author web sites, or reported elsewhere for the original data sets used in secondary survey research; this paper did not attempt to track down references elsewhere.

As a comparison, a random sample of 112 research articles was taken from five leading political science journals that regularly report polls, surveys, and experiments, including the *American Political Science Review*, *American Journal of Political Science*, *Journal of Politics*, *Political Research Quarterly*, and *Social Science Quarterly*, also from 2004 through spring 2006. From four leading health and medical journals 103 research articles were surveyed for the same period, including the *Journal of the American Medical Association*, *The New England Journal of Medicine*, *American Journal of Public Health*, and *Lancet*. From three leading sociology journals 66 articles were sampled for the same period, including the *American Journal of Sociology*, *American Sociological Review*, and *Social Forces*. These samples represent 112 of an estimated 226 political science articles, 103 of an estimated 1710 medical articles, and 66 of an estimated 210 sociology articles, or a total of 332 research articles reported below.

To examine variations in reporting response rates, several variables were examined, including the number of authors, the number of survey respondents, and the number of surveys or experiments reported. Also examined was the manner in which the data were collected (telephone, mail, in-person, web site or email, or a combination thereof); whether the survey research was primary (originally collected by the authors themselves) or secondary (collected by other researchers); whether the research was conducted in the U.S., elsewhere, or both; and any special topics in the research (voting studies, methodological studies, or sexual or criminal behavior). The survey's timing was noted as the year of the last poll, and whether the surveys were entirely before the 1997 AAPOR standards, entirely thereafter, or both. As the dependent variable, articles were coded as to whether they reported an AAPOR response rate; a non-AAPOR response rate, whether brief or (sometimes for clinical trials in medical journals) in elaborate form; or no mention of response rates at all.

As a hypothesis, more reporting of AAPOR rates was expected for recent surveys, methodologically oriented articles, surveys with more respondents, articles based on a single survey, surveys conducted by multiple authors, surveys conducted in the U.S., articles based on primary survey research, and articles in *Public Opinion Quarterly*.

Data Results

Whether journals report AAPOR response rates or any other response rates varies widely. Predictably, *Public Opinion Quarterly* leads the pack; two thirds (67%) of its research articles reported an AAPOR response rate. Another 12% of *POQ* articles reported another response rate figure, not in AAPOR format. A fifth (22%) reported no rates at all.

Leading political science journals seldom reported response rates. Only 6% reported AAPOR rates, while 29% reported some other response rate, and two thirds (65%) reported no rates at all.

No articles in leading health and medical journals reported AAPOR response rates. However, most (60%) of health and medical research articles reported some response rate information, sometimes briefly, sometimes with complete tables and charts; the remaining 40% reported no response rates at all. Leading sociology journals were similar to health and medical journals. None reported AAPOR rates; half (50%) reported some other response rate information; half (50%) reported nothing at all.

Variations in Reporting Response Rates

Some types of articles are much more likely to report response rates than are others. In *Public Opinion Quarterly*, articles based on a single survey, or else on 2 to 5 surveys, more often reported AAPOR response rates than did those reporting more than five surveys (78%, 100%, and 31%, respectively). AAPOR response rates were more often reported in articles based on small samples of under 1,000 respondents, or those based on medium-sized samples of one to five thousand respondents (100% and 78% did); articles based on surveys conducted after 1998 (77% did); articles based on primary research or experiments, rather than secondary survey research (77%, 94%, and 38% did, respectively); articles based on mail, web-site or email surveys, or telephone surveys, rather than in-person interviewing (80%, 78%, 65%, and 50% did, respectively); and articles focusing on voters or methodological concerns (100% and 82% did). No difference appeared in single, versus multiple authored articles (65% versus 68% did, respectively).

Almost all (88%) of *POQ* articles reported AAPOR rates that were from recent years (after 1998), based on one survey conducted by the authors, or on methodological experiments after 1998. By comparison, only half (47%) of other articles did. There is probably an upper bound on reporting AAPOR response rates. Reporting AAPOR standards, even in *Public Opinion Quarterly*, is influenced by the mix of a journal's published articles. Articles based on older surveys, secondary survey research, or multiple surveys seldom report AAPOR rates.

Few (only 6%) survey-based articles in leading political science journals reported AAPOR rates. Most likely to report an AAPOR response rate were multiple authored articles (9% did), articles based on medium-sized samples of 1,000 to 5,000 respondents (21% did), articles based on 2 to 5 surveys (18% did), articles based on primary survey research or experimental research (14% did), articles based on telephone surveys (14% did), and articles based on surveys conducted after 1998 (12% did).

No health and medical articles reported AAPOR rates. This may be surprising, since half these articles were based on clinical trials, but half were based on telephone, mail, in-person, web-site, or email-based surveys long familiar in public opinion. Apparently, AAPOR reporting rates are as yet unknown in leading health journals. However, three fifths (60%) of these articles reported some form of response rates, while the remaining 40% reported nothing at all. Most of these reported rates were only briefly and vaguely noted in passing; in a few cases (usually involving clinical trials) elaborate tables were reported. Possibly, some of these figures might be AAPOR response rates, but none were described in those terms. Some type of response rate information was most often reported for surveys involving clinical trials (80% did), articles based on a single survey (64% did), research based on medium-sized samples of one to five thousand respondents (78% did), articles not based on sexual or private or illegal behaviors (69% did), and, perhaps surprisingly, articles based on older, pre-1998 surveys (71% did).

Although no sociology articles reported AAPOR response rates, half (50%) reported some response rate information. Some type of response rate information was more often reported for multiple-authored articles (56% did), for articles based on 2 to 5 surveys (88% did), primary survey research (58% did), non-U.S. surveys (67% did), and telephone, mail, or electronic surveys (100% did). Again, just as for health and medical journals, some response rate was more often reported for older, pre-1998 surveys (52% did).

Summary

Although response rates provide useful information, this information is now unevenly reported in academic journals. *Public Opinion Quarterly* most often reports such information. Four-fifths (79%) of recent *POQ* articles report some response rate information, and two thirds (67%) use AAPOR format. For recently-completed primary or methodological research, AAPOR rates are almost always (88%) reported.

However, other journals seldom, if ever report AAPOR rates. Only 6% of political science articles, and no health, medicine, or sociology articles reported AAPOR response rates. This is especially disappointing because AAPOR response rates have been available for several years, and require only a few words to describe. Indeed, only 35%, 60% and 50% of recent articles in top political science, health, medicine, and sociology journals report any response rate information at all.

As a practical matter, there is probably an upper bound to the number of articles that will any time soon report AAPOR response rates. Three conclusions stand out. First, secondary survey research based on a large number of polls is unlikely to report response rates. When researchers use multiple polls as dependent or independent variables, or when multiple samples are pooled together to form a large data base, they seldom report any response rate information. When these surveys span many years, or go back to earlier time periods, the problem is even more serious, since calculating response rates is probably seldom possible.

Second, AAPOR rates now specify only four types of surveys: RDD telephone surveys, in-person household surveys, mail surveys of specifically named persons; and internet surveys of specifically named persons. However, journal articles often use a form of sampling not clearly covered by AAPOR response rates – including snowball samples, ethnographic samples, and interviews or experiments conducted outside the household, including exit polls, elite samples, stakeholder surveys, convenience or venue samples, clinical trials, and ethnographic samples. To be sure, some of these might be considered as lower quality, non-random surveys, perhaps even as "junk" surveys, for which it is not important to report response rates. However, if some type of AAPOR response rate computation were available for these surveys, more articles might eventually include that rate.

Third, editors and reviewers may simply be unfamiliar with AAPOR response rates, or may not see these rates as important. Even excluding types of surveys that do not clearly fit into AAPOR response rates, many articles might still report AAPOR rates, but do not now do so. For articles that clearly meet one of the four AAPOR rates, the percentage reporting AAPOR rates, other rates, or no rate at all, would be: 10%, 36%, and 54%, respectively, in political science journals; 0%, 71%, and 29% for health and medicine journals; and 0%, 66%, and 34% in sociology journals. In short, aside from *Public Opinion Quarterly*, editors and reviewers at major journals do not now appear to either understand that AAPOR response rates exist, or do not value the importance of reporting these rates. Unfortunately, the passage of time alone will not necessarily increase the reporting of AAPOR or other response rates. In health, medicine and sociology journals, response rate information is actually more common for older, rather than recent surveys, contrary to the pattern in *Public Opinion Quarterly* and political science journals.

Simply concluded, readers of leading academic journals can seldom find accurate, comparable response rate information. Nor are AAPOR response rates apparently becoming more widely available (Smith 2002). AAPOR response rate information is probably reaching an upper bound in *Public Opinion Quarterly*, but not in other journals. In part, this is due to older and secondary survey data, the practice of combining surveys, and the wide variety of survey data reported. Yet, in part, this is also due to the apparent indifference toward AAPOR standards in many important fields where survey data frequently appears.

Citations

American Association for Public Opinion Research. 2006. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. 4th edition. Lenexa, Kansas.

Smith, Tom W. 2002. "Reporting Survey Nonresponse in Academic Journals". *International Journal of Public Opinion Research* 4: 469-474.

[i] A survey was counted as an "experiment" if the authors so described it. Typically, this included articles using two or more different treatment effects or comparing responses from two or more data collection techniques, such as telephone versus in-person interviews. All the experiments here involved primary survey research conducted by the authors themselves.