Developing Nonresponse Standards

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Introduction

For over a half century scholars have been studying survey nonresponse and survey researchers have been discussing standards for their field. This paper examines the nexus of these two efforts: the development of nonresponse standards. It considers 1) the formulation of definitions and standards concerning nonresponse among a) scholarly research, b) professional, trade, and academic organizations, and c) the federal government; 2) the current nonresponse definitions and standards of professional, trade, and academic organizations; 3) how survey nonresponse is actually reported by newspapers, scholarly research, survey organizations, and government agencies; and 4) how professionalization has influenced the development of nonresponse standards.

The Formulation of Definitions and Standards Concerning Nonresponse

Scholarly Research

Nonresponse has been a major topic of interest in the survey methods literature. Early research extends back to the emergence of polling in the 1930s and has been a regular feature in statistical and social science journals since the 1940s.[1] The index of Public Opinion Quarterly lists 125 articles on this topic; a full-text search of journals covered in **JSTOR** found the following number of articles including the word "nonresponse": Political Science - 62, Economics - 87, Sociology - 146, and Statistics - 431; and Sociological Abstracts listed 219 articles using the phrase "nonresponse". The vast majority of these articles (plus the large number of books and conference papers dealing with the topic) do not directly address the issue of developing nonresponse standards. Most focus on the main issues in the field: how to reduce nonresponse, how to measure nonresponse bias, and how to compensate for nonresponse by imputation and/or weighting. Of course, they all contribute to the development of standards by refining understanding of the topic and creating a body of scholarly literature in which various practices and terminology evolve from the voluntary conforming of researchers to conventions used in previous publications.

Some scholarly publications have however focused on the matter of developing standards for surveys in general and nonresponse in particular. One line has directly argued for the establishment of

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[1]An analysis of **JSTOR** statistical journals dates the first nonresponse article from 1945 and the Public Opinion Quarterly index's earliest reference is from 1948.

standards for survey research. Probably the earliest call for survey standards was Stuart Dodd's (American University, Beruit) 1947 outline (Dodd, 1947). While covering a wide range of ethical, technical, performance, and disclosure standards, it included no direct statement on nonresponse. It did stipulate that "In addition to any popular reporting [of survey results] full technical details should be published routinely in professional publications (p. 126-127)." From the statisticians' side an early effort was W. Edward Deming's (New York University) "Principles of Professional Statistical Practice" (Deming, 1965, p. 1892-1993). He proposed that:

> 9. The statistician's report or testimony will deal with statistical reliability of the results. The usual content will cover the following points:
>
> g. nonresponse and illegible or missing units

Similarly, in market research there have been calls for nonresponse standards as in George S. Day's (University of Toronto) (1975, p.466) urging:

> (T)op priority should be assigned to documenting the seriousness of the problem in terms of accepted and reasonably standardized industry-wide measures of the components of non-response rates.

Another line of research tried to bring order to the babel of terms used in descriptions of survey nonresponse. Frederick J. Kviz (University of Illinois)(1977, p. 265) observed that recent research in both statistics and market research had noted "a high degree of variability in the definition of response rates currently employed by survey researchers" and he proposed definitions for response and completion rates. The situation remained much the same 15 years later when Judith T. Lessler (Research Triangle Institute) and William D. Kalsbeek (University of North Carolina) (1992) noted more than a dozen overlapping and contradictory definitions of such terms as completion and response rates (see also, Groves, 1989).

The individual, research efforts of scholars have continually advanced understanding of the causes of nonresponse, the nature and magnitude of nonresponse bias, and statistical procedures to compensate for nonresponse. Moreover, this basic research as well as both proposals for standard definitions and calculations of nonresponse and calls for professional and research standards have helped to advance the cause of nonresponse standards. However, these individual efforts have not succeeded through the power of good and persuasive example in establishing, generally accepted and commonly utilized definitions and standards for nonresponse.

Organized Efforts by Professional, Trade, and Academic Organizations and the Federal Government

Many organizations have struggled with the challenge of developing standards for survey research in general and for nonresponse in particular. First, the efforts of the American Association for Public Opinion Research (AAPOR) will be examined in some detail from the 1940s to the present. Secondly, the intertwined, major initiatives of AAPOR, other organizations, and the federal government from the 1970s on will be considered.

AAPOR, 1946-1999

AAPOR originated from the Central City (Colorado) conference organized by Harry Field of the National Opinion Research Center (NORC) in 1946. It was formally organized the next year at the follow-up conference at Williamstown, Massachusetts. Standards were on the agenda of the Central City conference. George Gallup (Gallup Organization), Julian Woodward (Roper), Clyde Hart (US Office of Price Administration), and Field (NORC) led a panel on Technical and Ethical Standards in Public Opinion Research. The conference passed a resolution indicating that the participants were "dedicated to the improvement of research standards and to the wider employment of opinion research techniques" and a Committee of Standards with Morris H. Hansen (Bureau of the Census), Henry David (Queens College), and Elmo L. Wilson (CBS) as members was appointed. At the Williamstown conference the proposed AAPOR constitution listed as one of the organization's five purposes encouraging "the development of the highest professional standards in public opinion research" and called for the establishment of a "Standards Board" to "be concerned with fulfilling the declared purpose of the Association to contribute to the elevation of professional standards."

This proposal triggered an extended debate and one that would echo on for decades to come. As Hart and Cahalan (1957, p. 169-170) characterized the topic, it was "the rock on which the AAPOR craft almost foundered before it was well out of the ways." Opposition to the standards provisions centered around the concerns of some, mostly in the commercial sector, that they would lead to the foistering of onerous requirements and the restriction of research freedom. Claude Robinson of Opinion Research Corporation argued that professional standards should emerge from open debate in the field and characterized the Standard Board proposal as "authoritarian." In part this dispute centered around a debate then current over probability sampling, mostly advocated by academics and government employees, and quota sampling, favored by those in the private sector. Several attempts to eliminate the standards provisions were voted down, but as part of a general renaming, several proposed "boards" were changed to being "committees" which had a less authoritarian ring (Cahalan, 1992; Converse, 1987; Elinson, 1992; Hart and Cahalan, 1957; Lee, 1949-50; Sheatsley, 1992; and Hollander, 1992).

At the 1948 conference the Standards Committee chair Philip Hauser (Bureau of the Census) proposed that AAPOR "commend", but not adopt, a proposed "Code of Professional Practice" and "Standards of Practice to be Used in Reporting Survey Results" which had been prepared by a committee of leaders from the commercial sector (Hollander, 1992, p. 67). These "codes" did not refer to nonresponse.[2] The former stipulated that market research organizations would "strive at all times to maintain the highest research standards," "fully and truthfully describe to the client the methods and techniques used...," and would not "knowingly deviate from established research standards..." The later indicated about 15 facts about a survey and its methods that should be included in every survey report, but nonresponse was not mentioned. The proposal further indicated that by commending the codes "the way will be paved for the development and adopting [of] a code of detailed standards of performance in the various aspect of public opinion research ("Standards," 1948-49, p. 813 and Hollander, 1992, p. 67)." AAPOR adopted the proposal. However, this step marked the end of AAPOR's initial attempt to establish standards rather than a beginning and no significant progress was made over the next decade. As Standards chair Steven Stock (Opinion Research Corporation) noted in 1950, one area of interest was to adopt "specification standards...setting down in some rigid rules what constitutes good and bad research..." However, "Since previous committees have had considerable trouble in getting agreement in this area, I shall not push this as an activity..."

Movement finally occurred in 1959 when Standards chair Leo Bogart (Revlon) proposed a code to members. The Code of Professional Ethics and Practices that was finally adopted in 1960 ("Code...," 1960) listed some general principles of ethical research, contained no performance standards, and only some broad rules on the disclosure of methods (I. Principles of Professional Practice in the Conduct of Our Work C. We shall describe our findings and methods accurately and in appropriate detail in all research reports. [and] II. Principles of Professional Responsibility in Our Dealings with People C.2. We recognize our responsibility to contribute to the science of public opinion research and to disseminate as freely as possible the ideas and

[2]One reason that nonresponse was not addressed was because there was a on-going debate between the advocates of probability vs. quota designs and nonresponse was seen as relevant only in the former case which represented the minority practice.

findings which emerge from our research.). However, nonresponse was not explicitly mentioned in the code.

AAPOR then took steps to allow it to enforce its code. It incorporated in 1964 largely to provide individual members with legal protection from suits arising out of standards cases and in 1975 adopted a set of procedures for formally considering standards cases.

In addition, AAPOR in 1967 adopted standards for the disclosure of survey findings (a descendant of the 1948 "Standards of Practice to be Used in the Reporting of Survey Results"), but they were only Council-endorsed statements of desirable practice and not membership-ratified, mandatory rules.[3] It was not until 1986 that they became the third article of the AAPOR code as "Standards for Minimal Disclosure"). Minimal Disclosure required that when survey results are released a number of pieces of information had to be provided. Along with such matters as question wording, date of data collection, and study population, the code required the disclosure of information on "completion rates." This was the first time AAPOR directly addressed the issue of nonresponse as part of its general deliberation over standards (Bogart, 1999; Gollin, 1992).

After a failed attempt to gather data on response rates in the late 1980s (Bradburn, 1992), the next major AAPOR initiative involving standards was taken in 1995-97 under Standards chair Richard A. Kulka (Research Triangle Institute) when the Council decided to formulate a statement of "Best Practices for Survey and Public Opinion Research and Survey Practices AAPOR Condemns (AAPOR, 1997)." Expanding on the AAPOR Code's Standards of Minimal Disclosure, "Best Practices" indicated that a series of outcome rates should be reported for surveys.

At about the same time (1996-98), Councilor-at-Large Tom W. Smith (NORC) proposed that AAPOR develop standard definitions for the final disposition of case codes and of various outcome rates (e.g. response rates and cooperation rates) based on these codes. He was particularly concerned that uniform procedures for calculating response rates did not exist and that existing standards such as those in the Council of American Survey Research Organizations (CASRO) report were not specific and detailed enough to insure uniformity. Smith chaired a committee including Barbara Bailar (NORC), Mick Couper (University of Michigan), Donald Dillman (Washington State University), Robert M. Groves (Universities of Michigan and Maryland), William D. Kalsbeek (University of North

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[3]Also, in 1968 the National Committee on Published Polls (renamed the National Council on Public Polls in 1969) was formed. This trade organization also adopted standards of disclosure.

Carolina), Jack Ludwig (Gallup), Peter V. Miller (Northwestern University), Harry O'Neill (Roper Starch), and Stanley Presser (University of Maryland). After Council adopted the report in 1998 (AAPOR, 1998), a new committee was formed consisting of Rob Daves (Star Tribune), Paul Lavrakas (Ohio State), Smith, and the Associate Standards and Publications chairs as ex-officio members with the responsibility to update and revise "Standard Definitions" as needed (in 1999 it developed a section on mail surveys), to disseminate the report, and to encourage its adoption by associations, journals, and CATI software and telephone sampling firms. At their urging AAPOR's official journal, Public Opinion Quarterly, adopted the new standards (Price, 1999, p. i-ii and "Notice," 1999, p. 160).

On October 12, 1998 Investor's Business Daily published a column by Arianna Huffington titled, "Do Polls Mean What They Say?" In line with her well-established, anti-polling position,[4] Huffington attacked polls as unscientific and biased. She said that the "key question" regarding polling is "who is talking to pollsters and who isn't?" She asserted that polls are facing a "soaring refuse-to-answer rate" and that the credibility of polls have been undermined by these refusals. To ascertain the extent of the problem she took "a sampling of a nonscientific poll of pollsters" and asked for the response and refusal rates of each organization's most recent national poll. As reported by her, none supplied her with the requested information.[5] Of the six organizations that she mentioned she indicated that two refused to supply the information saying it was proprietary, one said it was not available, one replied that it was a "complicated issue", one sent "realms of data right away--on everything except response rates," and only one supplied rates (but not for its most recent poll). She quoted former pollster Patrick Cadell as saying, "The dodging of such basic questions is alarming. When the polling industry is talking to itself, they express their worries about the progressive decline in response rates. But when they talk to the public, they clam up." Huffington concluded that "It's time to ask polling companies to make their response rates public for every poll. And if they refuse, perhaps it's time for the media to stop just quoting and start investigating the polling industry to get to the truth behind all the smoke it's been blowing."

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[4]Along with satirist Harry Shearer, Arianna On-Line has launched the Partnership for a Poll-Free America.

[5]Huffington's reporting was selective. She contacted other organizations, such as the National Opinion Research Center, which did supply her with the requested information, but she did not report this.

Warren Mitofsky (Mitofsky International) (10/12/98)[6] brought Huffington's column to AAPOR's attention and this triggered one of the most extensive exchanges ever to occur on AAPORNET (AAPOR's internet newsgroup). There were a total of 65 emails, involving 43 different participants. Messages averaged 10 a day early in the discussion and then tapered off by the end of the month (with one last posting in December).[7] 36% of the messages were from the commercial sector, 54% from academia, 7% from the media (excluding polling operations associated with the media), and 3% were from the government or non-profit sector.

The most common response was that surveys should reveal their response rates. Howard Schuman (University of Michigan)(10/13/98) urged AAPOR to take "a strong stand on the need for polls to make information on response rates regularly available including separation of refusals from other forms of nonresponse." Peter Miller (Northwestern University) (10/13/98), among many others, endorsed this stance noting, "If Huffington's account is accurate (I haven't seen any evidence to the contrary thus far)[8], the most disturbing thing about it is that she was asking for information that should be available to ANYONE who inquires, **according to the AAPOR code [emphasis added]**, and she was apparently put off..." He went on to characterize the failure to report response rates as "a straight-forward standards violation" and argued "the disclosure principle is an essential underpinning of our profession. The recent AAPOR effort to standardize reporting of response rates further underscores the importance of being able to provide this fundamental methodological information routinely..." Lance Pollack (University of California, San Francisco) (10/15/98) added "Our methods must hold up to scientific scrutiny. If they do not, then we have been fooling ourselves. As for unscientific scrutiny, we must defend our methods (if they are sound) and point out the errors and misinterpretations of those who attack those methods. However, failure to disclose these methods will be our undoing." As AAPOR Standards chair Kathy Frankovic (CBS) (1998) summed up the discussion, "full disclosure is VERY important to AAPOR members, no matter what the motivations of the questioner."

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[6]This and other references regarding the Huffington debate are to the dates of messages on AAPORNET.

[7]Later emails about Huffington have since appeared on AAPORNET, but these dealt with new charges and columns or otherwise were not part of the initial discussion.

[8]Representatives of all of organizations cited by Huffington are members of AAPOR and on AAPORNET. None of the mentioned organizations challenged what she reported on AAPORNET.

The discussion on revealing nonresponse then veered into examples of polls that did document their response rates (e.g. Paul Lavrakas, 10/16/98 and Rob Daves, 10/16/98) and laments that both newspaper and journal editors often nixed the reporting of methods (e.g. Tom Pellegrene - 10/18/98, Paul Tichenor - 10/19/98, and Linda Voigt - 10/19/98).

The next most prominent theme consisted of counter-attacks on Huffington as a poll basher, a conservative, a Republican partisan, an anti-democratic elitist, and an ideologue rather than a journalist (e.g. Hank Zucker, 10/12/98 and 10/13/98; Albert Biderman, 10/14/98; Mark Richards, 10/13/98 and 10/14/98; Susan Losh, 10/14/98; and Gary Henry, 10/16/98). These various alleged biases and agendas led several to understand the failure to supply her with information or to respond in anyway to her. Frank Rusciano (Rider College) (10/12/98) noted that "(I)f I received a call from her, I would not believe she desired the information in order to write a reasoned piece on the problem of response rates." Susan Losh (Florida State University) characterized Huffington as an advocate who would not be open to any reasoned dialogue, "In my opinion, there is no way to 'win' such a debate on scientific grounds because an advocacy scholar will select the 10 percent of material that supports [sic] their position and discard the 90 percent that falsifies it." Because of this futility, she cautioned that one must decide whether it is worthwhile responding to and debating them. But the same assessments of Huffington led others to contend that AAPOR must take the field to meet her charges. As Hank Zucker (Creative Research Systems)(10/12/98) said, "If opinions like hers are published unchallenged, people will believe them."[9]

A third, more minor issue was over whether nonresponse really matters. Lavrakas (10/13/98) argued that "the profession generally has had a misguided concern with the actual rates as opposed to being concerned with whether or not surveys are likely to have nonresponse error..." Miller (10/13/98) responded that "we should also -- as Paul Lavrakas notes -- be able to discuss the difference between response rate and nonresponse error. But we can't even engage in that discussion without first willingly and accurately reporting the nonresponse rate (see also Colm O'Muircheartaigh, 10/14/98)."

A final relatively late developing thread was over whether nonrespondents tended to be conservatives and/or Republicans. Hank C. Jenkins-Smith (University of New Mexico)(10/15/98) said they were; Scott Goold (University of New Mexico)(10/26/98) said they were conservatives, but not Republicans; Mitofsky (10/26/98)

[9]Several noted that Huffington's criticisms were being picked up by others (e.g. Donald Ferree - 10/16/98, Michael Traugott - 10/16/98; Mark Richards - 10/29/98).

rejoined the discussion to wonder whether Goold's conjectures were correct; Tom W. Smith (10/26/98) and Schuman (10/27/98) cited research countering the nonrespondents-are-conservatives/Republicans hypothesis, and Eric Plutzer (Penn State)(10/27/98) summed up by arguing that the situation was complex.

This AAPORNET exchange provides examples of how standards can and should work. At least four messages cited AAPOR's existing positions on the nonresponse in the code, "Best Practices," and "Standard Definitions" or the position of the British Marketing Research Society (MRS). Citing these sources both indicates the members of AAPOR and MRS are aware of and accept (and perhaps have internalized) the existing standards and that members are prepared to quote them in support of their positions on the disclosure of nonresponse rates (Miller, 10/14/98; Jan Werner, 10/15/98; Rob Daves, 10/16/98; Robert Worcester, 10/21/98). Most participants of course did not cite such authorities, although their positions were usually in conformity with the official standards and statements.

Building on the work of the Standard Definition committees and in response to the AAPORNET discussion on Huffington's charges that pollsters were not disclosing their response rates, Council early in 1999 set up a Disclosure Committee chaired by Mitofsky with Lavrakas, Elizabeth Martin (Bureau of the Census), Lydia Saad (Gallup), and Evans Witt (Princeton Survey Research Associates) as members "to encourage public polls to use AAPOR definitions for measuring response rates and to publically report response rates in a timely manner. Their task also includes looking into whether the AAPOR Code needs amendment on this topic (Kagay, 1999, p. 2; see also Frankovic, 1998)."

As Al Gollin (Newspaper Advertising Bureau)(1987, p 591-592) observed:

> The history of efforts made by AAPOR and other professional associations amply confirm the difficult of devising clear cut standards applicable to all of the conditions under which polling is undertaken. Even the guideline for minimal disclosure of polling methods, while less contentious as an issue than were (and are) performance or procedural standards, failed to win the assent of AAPOR members for almost 20 years after their initial proposal in 1947.

Organized Efforts of Professional, Trade, and Academic Organizations and the Federal Government Since 1970

In the 1970s and early 1980s several major institutional initiatives on the nonresponse issue were undertaken. In the commercial sector the Marketing Science Institute (MSI) and the Council of American Survey Research Organizations (CASRO) collaborated on a series of reports on nonresponse. Likewise, the professional and academic organizations were active. The American Statistical Association (ASA) organized several conferences and studies on nonresponse. Also in the academy, two major investigations by the National Academy of Sciences (NAS), the Panel on Incomplete Data, 1977-1983, and the Panel on Survey Measurement of Subjective Phenomena, 1980-1984, were conducted. Similarly, several initiatives within the federal statistical system were undertaken to develop standards and examine the problem of nonresponse. Most of these efforts were inter-connected, sometimes jointly organized, in other cases following on the heels of and drawing from earlier efforts, and in a number of cases enlisting the assistance of the same individuals.

Professional, Trade, and Academic Organizations

In 1973 the ASA with support from the National Science Foundation (NSF) held two Conferences on Surveys of Human Populations (CSHP) to "discuss the problems of present-day surveys...[and] explore whether or not these problems may now have reached a level or are growing at a rate that pose a threat to the continued use of surveys as a basic tool of social science research ("Report," 1974, p. 30)." 15 people participated in the meetings, 6 from universities, two from university-based survey research organizations, three from the government, two from the ASA, and two from commercial, survey-research firms. Coming to a conclusion to be echoed by numerous later investigations, the group found that "confusion" exists "in regard to what is meant by such measures as completion rates, nonresponse, refusals, etc." Furthermore, "there is no clear standard or practice universally used throughout the survey community (p. 31)." In part because of this lack of a common language and also because many organizations were unable or unwilling to share their own data, "little hard data are available for evaluating changing acceptance by respondents or other survey difficulties (p. 30)." However, since the participants felt that problems in general and nonresponse in particular were on the rise, they recommended that a well-staffed committee be funded to do "a detailed examination of the characteristics and impact of the trends explored in this report and to develop ways and programs for the survey research community to meet these trends" and "to develop adequately comprehensive guidelines or standards for use throughout the survey research profession (p. 33)." It suggested that professional societies should lead the effort and that the investigating committee should work with the Statistical Policy Division of the Office of Management and Budget. It also suggested that legal standards and the certification of survey researchers might be needed.

The CSHP suggestions were carried forward indirectly by the establishment in 1974 of the Survey Research Methods (SRM) section of the ASA. This new group at its first meeting set up a task force on standards (Bailar and Lanphier, 1978, p. vii). Moreover, in 1975 SRM, sharing CHSP's feeling that "people were growing reluctant to participate as respondents in sample surveys," secured funds from NSF to assess survey practices via a developmental and feasibility study of surveys of the federal government. This led to a survey of surveys (26 federally-sponsored and 10 non-federal surveys). Even though the data collectors and/or federal managers were directly contacted for the desired details on survey design and methods, Bailar and Lanphier (1978, p. 13) found:

> Survey response rates were difficult to collect and compare. Response rates have different names and different definitions in different places and circumstances.

This led to incomparability across surveys:

> In one survey, a response rate of .90 was actually .56 when substitutions were properly considered. Another response rate reported as .76 was really .50 when persons with unpublished phone numbers, telephones out-of-order, and some other cases were included as eligible units...

They were able to get a reported response rate from 26 of their 36 surveys, where able to check the reported response rate for 23 surveys, and found correct calculations for 18. Thus, correct response rates were known for only half the targeted surveys.

Building on the ASA's, NSF-supported efforts were the NAS Panels on Incomplete Data and Subjective Phenomena. The Panel on Incomplete Data was formed in 1977 "to make a comprehensive review of the literature on survey incompleteness in sample surveys and to explore ways of improving the methods of dealing with it." It was funded by NSF, the Social Security Administration, and the Department of Energy. Its 15 members consisted of eight from the government, five from universities, and two from survey research organizations (one university-based and one private). In its three volume report and collection of papers (Madow, Nisselson, and Olkin, 1983, Vol. 1, p. 8) it made 35 recommendations, including the following:

> #4 Compute nonresponse rates, completion rates, and item coverage rates during as well as after the data collection effort for the samples, for important domains, and for important items.

#5 Prepare one or more accountability tables[10] and define nonresponse and completion rates in terms of entries in the accountability table. Provide one or more tables containing the data used in calculating item coverage rates to avoid any misunderstanding of the definition.

#6 Consider preparation of accountability tables for domains and specified number of callbacks as well as for the total sample.

The Panel on Survey Measurement of Subjective Phenomena was organized in 1980 in response to "the discovery of several instances in which seemingly equivalent survey measurements made at approximately the same time produced surprisingly different results" in tandem "with a vigorous protest about the conduct of some particular surveys and with an apparent decline in public willingness to participate in surveys" (Turner and Martin, 1984, p. xiii). The Panel was funded by NSF and Russell Sage and consisted of 14 members, including six from universities, three from survey research organizations (two university-based and one private), three from the NAS, one from the government, and one from a non-profit social science research institute. Its findings were finalized in June, 1982 and published along with supporting papers in 1984 (Turner and Martin, 1984). While the Panel did not explicitly address nonresponse in its recommendations, it did call for the establishment of standards in several places (p. 309):

#3: Secure the agreement of the various agencies that publish survey findings, and especially the press and scholarly journals, to adhere to appropriate standards of reporting and disclosure.

Also, in the preface to recommendations 5-10 on "Upgrading Current Survey Practice" the Panel suggested (p. 311) that:

A knowledgeable working party of six or eight people could produce a document specifically oriented to surveys of

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[10] As the report explains, "Accountability tables disaggregate the difference between the size of the selected sample and the number of units in the responding subset of the sample, by the reason that sample units do not respond and perhaps by other variables as well. Accountability tables clarify the meaning of nonresponse rates, since the components used in the rates appear in the tables, and also make it possible for users to select alternative definitions that they prefer (Madow, Nisselson, and Olkin, 1983, Vol. 1. p. 29)."

> subjective phenomena comparable to the booklet, "Standards for Discussion and Presentation of Errors in Survey and Census Data" (Gonzalez, et al., 1975), based on practice of the Bureau of the Census and other government agencies engaged in fact-finding surveys. To be helpful such a document need not have the force of law; the cited document has only the force of example in regard to nonfederal survey organizations.

However, no such working group was formed.

In the commercial sector, the nonresponse problem was at the same time being taken up by the MSI and CASRO. MSI was founded in 1963 as "a bridge between business and academia," with a mission "to initiate, support and disseminate leading-edge studies by academic scholars that address research issues specified by members companies." In the late 1970s in response to industry concerns about threats to market research in general and nonresponse in particular, MSI, in cooperation with the CASRO, launched a series of nonresponse studies under the direction of Frederick Wiseman (Northeastern University). The first study (Wiseman and McDonald, 1978) looked at response rates from 182 telephone surveys. It found that comparisons were difficult "because of the lack of uniform definitions" and concluded that "top priority should be given to the establishment of industry-wide standard definitions and reporting procedures to help monitor industry trends, and to establish benchmarks to help research firms and users evaluate response levels in their own surveys (p. vi)." This led to the establishment in 1979 of a MSI Nonresponse Steering Committee consisting of representatives from five of the corporations that supported MSI. One of its main activities was to conduct a study of MSI and CASRO members (Wiseman and McDonald, 1980). Firms were asked how often they calculated response rates and were given a set of final outcome figures for a survey and asked to report what the response and other outcome rates were for the example survey. They found first that many firms often did not calculate response rates and second that few firms calculated rates in the same manner. Of the 55 responses to their survey 40 calculated response rates from the supplied figures as requested and they produced 29 different rates with no more than three adopting the same method. For the example data the calculated response rates ranged from 12% to 90%.

Moreover, as they reported (p. 30):

> When the Committee attempted to develop a reasonable set of operational definitions, it became apparent that before an industry-wide consensus could be reached, a dialogue would have to take place among users and producers of survey research data....Given the diversity of opinion that now exists within the industry with respect to the meaning and usefulness of various response and nonresponse rates, the

authors believe that it is inappropriate to present a proposed set of definitions and methods of calculation for consideration by survey research professionals at this time.

They called for a joint conference of MSI, CASRO, AAPOR, the ASA, the American Marketing Association, the Bureau of the Census, and others to work towards a consensus on this matter. This led to the last major MSI initiative on nonresponse, its Workshop on Improving Data Quality in Sample Surveys, held November 8, 1982 (Wiseman, 1983). While not focusing exclusively on nonresponse, the highlighted data quality problems included "(1) increased difficulty in contacting selected respondents, (2) increased respondent resistance, (3) increased market information requirements, and (4) increased cost of conducting research." This workshop included presentations from the CASRO Completion Rates Task Force, the NAS Panel on Survey Measurement of Subjective Phenomena, the Bureau of the Census, and several survey and market research organizations. The workshop organizers hoped that the workshop and published proceeding would lead "to the improved conduct and management of survey research activities not only within individual organizations, but throughout the entire industry as well." Since this workshop, MSI's research has shifted to other topics.

One of the important contributions to the workshop was Lester Frankel's (Audits and Surveys) presentation of CASRO's new standards on nonresponse. CASRO, a trade association of private survey and market research firms, was founded in 1975. In late 1979 CASRO formed a Completion Rates Task Force under Frankel's leadership. The committee of 15 had five members from the federal government, five from universities (including two from university-based, survey research organizations), four from private market and survey research firms, and one from the NAS. The task force's report "On the Definition of Response Rates," was issued in June, 1982. The report repeated the common lament that there was no common understanding of terms relating to nonresponse and proposed a basic definition of response rates and examples of how they should be calculated. The task force also seemed to favor "accounting tables" that accounted for the final status of all sampled cases.[11]

With the appearance of the CASRO report (1982), the

[11]Frankel (1983) said' "In the CASRO report it was recommended that an accounting table be used..." But the only reference in the report itself (Wiseman, 1983) is "Response rates from various segments of the sampled population in the form of an 'Accounting Table' are suggested by the Panel on Incomplete Data." The Panel actually used the term "accountability table."

authoritative overview of nonresponse issues by the Panel on Incomplete Data (1983), and AAPOR's final adoption of nonresponse disclosure as part of its code (1986), a lull in the organized efforts of the professional, trade, and academic organizations ensued. It was not until the AAPOR initiatives in the mid 1990s on Best Practices and Standard Definitions that professional, trade, and academic organizations again made serious forward strides.[12]

But in the meantime, the cause of survey methods research in general and of the matter of nonresponse in particular was being advanced by the establishment between 1985 and 1990 of three major, on-going conference series in the area of survey methodology. The first, in 1985-89,91-95,96, was the Bureau of the Census' Annual Research Conference. Proceedings are published by the Bureau. The second, with seven conferences from 1986 on, has been organized by the SRM Section of the ASA (with co-sponsorship from a varying set of other professional associations and occasionally government agencies). It publishes an edited book of each conference. The third, annual from 1990 on, is the International Workshop on Household Survey Non-response. It has been organized by and largely represents governmental research and statistical agencies. Papers are not routinely published, although on occasion have been (Koch and Porst, 1997). The first two conference series have routinely included survey (or unit) nonresponse among the many research topics covered. In particular, the SRM series 1999 conference, the International Conference on Survey Nonresponse, covers this topic. The third series has of course always focused exclusively on this issue. While these conference series have not had as their purpose the development of nonresponse standards, they have, to a greater or lesser degree, dealt with the problem of nonresponse, have furthered basic and applied understanding of nonresponse, and have thus indirectly advanced the goal of establishing standards and definitions.

In brief, starting in the 1970s a series of concerted efforts were made by professional, trade, and academic organizations to investigate the matter of nonresponse and to develop standards related to same. These efforts led to a series of major reports and official statements as well as the inclusion of some nonresponse standards in various codes of conduct and ethics (see section below on current organizational codes).

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[12]The Professional Marketing Research Society in Canada set up a Response Rate Committee in 1994 and it issued a report in 1997 (Allen, Ambrose, and Atlinson, 1997). However, this initiative did not come to AAPOR's attention until September, 1999 and was apparently also unknown to other American organizations.

Government Agencies

Overlapping and intertwined with the professional, trade, and academic efforts, the federal statistical system in general and the Bureau of the Census in particular was striving to establish better statistical and survey methods. It sought to formulate guidelines and standards for both statistical and survey work and the presentation of same in government reports. In addition, guidelines were developed by the Office of Management and Budget (OMB), and by certain other statistical agencies.

In 1973, following the charge of the President's Commission of Federal Statistics, the Bureau of the Census compiled a set of "Standards for Discussion and Presentation of Errors in Data" (U.S. Bureau of the Census, 1974). These later appeared in revised form in the Journal of the American Statistical Association (Gonzalez, Ogus, Shapiro, and Tepping, 1975). The standards were offered as "guidelines rather that rigid rules that must be followed in all cases (U.S. Bureau of the Census, 1974, p. i)." They stated that all statistical publications should discuss sampling and nonsampling error and cited nonresponse as one source of nonsampling error that should be reported. No definitions or detailed examples were provided, however.

At the same time OMB was beginning to develop guidelines for federal data collections. OMB has to approve all federal surveys and began issuing various guidelines and admonitions going back at least to the mid-1970s. In 1974 OMB (OMB, 1976, p. 12, 13) indicated that nonresponse error should be carefully considered in "in designing the survey, in establishing controls over survey operations, and for the information of users of the data when they are published." It also stated that "strenuous efforts should be made to collect data from every unit in the sample, using follow-ups where necessary."

Also, perhaps as early as 1976 OMB formulated positions on acceptable levels of nonresponse (Wiseman, 1983). In 1979 OMB (OMB, 1979, p. 6) had interim guidelines that stated:

> It is expected that data collection based on statistical methods will have a response rate of at least 75 percent. Proposed data collections having an expected response rate of less than 75 percent require special justification. Data collection activities having a response rate of under 50 percent should be terminated. Proposed data collection activities having an expected response rate of less than 50 percent will be disapproved. As a general rule, no request for clearance of a general purpose statistical survey or report having an anticipated response rate of less than 75 percent will be approved unless the Office of Federal Statistical Policy and Standards of the Department of Commerce concurs in

the request.

No definition of response rates was offered, however.

Over the years these performance standards do not seem to have been enforced rigidly within the federal sector and certainly did not become accepted outside the government. The numerical guidelines were rarely emphasized and often not mentioned in OMB documents. The final regulations implementing the Paperwork Reduction Act state that surveys which are not reliable and generalizable to the target universe will not be approved (OMB, 1999, p. 76 and Office of Policy for Extramural Research Administration, 1996). Current guidelines (OMB, 1999, p. 73) merely prohibit statistical surveys that "do not produce reliable results" and nonresponse is listed among the most common sources of failure. In Appendix C: Frequently Asked Statistical Questions, OMB discusses how one might estimate likely response rates for a survey (FASQ #1 - Estimating Response Rates) and data quality problems that may arise from nonresponse (FASQ #2 - Consequences of Low Response Rates). As before, no definitions are provided.[13]

Efforts to deal with nonresponse were also undertaken by the Federal Committee on Statistical Methodology (FCSM) and several other interagency committees. The FCSM, devoted to improving the quality of federal statistics, was formed in 1975. Its purpose is to develop and recommend "standards of statistical methodology to be followed by federal statistical agencies." Early in its deliberations the FCSM noted that there was a "semantic problem in statistics" in that often "(t)he same term is sometimes used with different meanings; and the same phenomenon is called by more than one term." In particular, they documented that this applied to the definition of "response rates" (Deighton, et al., 1978, p. iii, 8). Then over the years a number of FCSM's Statistical Policy Working Papers lightly touched on the issue of nonresponse. For example, No. 9 Contracting for Surveys (Brehm, et al., 1983, p. 43), indicated that project officers on surveys should "monitor closely the response rate being achieved..." No. 15 "Measurement Quality in Establishment Surveys" (Plewes, et al., 1988) contained a general discussion of the meaning, sources, and control of nonresponse, how to measure nonresponse bias, and a report on how current government surveys deal with these nonresponse issues. No. 17 "Survey Coverage" (Dippo, et al., 1990) discussed nonresponse as a component of coverage error and cited as examples how nonresponse rates are reported in several federal surveys.

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[13]However, the numerical guides were apparently not formally dropped and were sometimes referred to in documents (de Wolf, 2000 and Office of Policy for Extramural Research Administration, 1996).

However, it was not until the early 1990s that FCSM formed a sub-committee focusing on nonresponse. Its charge was to "better understand unit nonresponse in surveys, including levels of nonresponse and measures used to compute nonresponse rates (Shettle, et al., 1994, p. 972)." The subcommittee's initial project was to review nonresponse trends in federal demographic and establishment surveys from 1981-1991 (Shettle, et al., 1994; Johnson, et al., 1994; Osmint, et al., 1994). While not yet adopted as general FCSM guidelines, the subcommittee recommended the following (p. 975-976):

1. Survey staffs should compute response rates in a uniform fashion over time and document response rate components on each edition of the survey. (However, "The Subcommittee chose not to recommend that every survey use the same response rate computations.")

2. Survey staff for repeat surveys should monitor response rate components (e.g. refusals, not-at-homes, out-of-scopes, address not locatable, postmaster returns) over time, in conjunction with documentation of cost and design changes.

3. Agencies that sponsor surveys should be empowered to report the response rates of these surveys. The sponsoring agency should explain how response rates are computed for each survey it sponsors. Response rates for any one survey should be reported using the same measure overtime, so that users may compare the response rates. Response rate components, including actual counts, should be published in survey reports.

4. Some research on nonresponse can have real payoffs. It should be encouraged by survey administrators as a way to improve the effectiveness of data collection operations.

Two other interagency efforts dealing with nonresponse were organized in the 1990s. The Interagency Group on Establishment Nonresponse (IGEN), chaired by Leda Kydoniefs of the Bureau of Labor Statistics (BLS) and Jaki McCarthy of the National Agriculture Statistics Service with members from the Bureau of the Census, the Energy Information Administration, General Accounting Office, National Center for Education Statistics (NCES), and National Center for Health Statistics (NCHS) formed in 1998 and the Interagency Household Survey Nonresponse Group (IHSNG), chaired by the Census with members from the Bureau of Labor Statistics, the Bureau of Justice Statistics, and the NCHS, and some involvement of the Department of Energy and OMB organized in 1997 (Bay, 1999; Atrostic and Burt, 1999; and Kydoniefs and Stanley, 1999). These groups are studying and monitoring nonresponse and developing general, interagency methods to reduce nonresponse, but do not seem to be aimed at formulating standards on nonresponse per se.

In addition to the efforts of the Bureau of the Census (the main data collection agency of the federal government), OMB, and interagency groups like the FCSM, IGEN, and IHSNG, steps to deal to nonresponse have been taken by other components of the federal statistical system. NCES has a particularly extensive and detailed set of standards and guidelines (Flemming, 1992; Chromy, et al., 1999). These include target performance standards, requirements for follow-ups, standards for the computation of response rates, reporting requirements, and a checklist to evaluate types of nonsampling error (including nonresponse).[14]

Organized efforts have been underway since the 1940s to develop standards for nonresponse. Since the early 1970s a series of interconnected efforts have been carried out by professional, trade, and academic organizations and various government agencies to explore the problem of nonresponse and forge standards related to same. While hardly a centrally coordinated effort, each major organized initiative was generally aware of coterminous and preceding undertakings. Different organizations sometimes worked together (e.g. MSI and CASRO; AAPOR and SRM), government agencies funded academic programs (e.g. NSF's support of the ASA/SRM and NAS), several private undertaking were motivated, at least in part, by governmental actions (e.g. CASRO and MSI by OMB guidelines), and many individuals participated across succeeding efforts.[15] Through

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[14]For nonresponse standards of Statistics Canada see Hidiroglou, Drew, and Gray, 1993.

[15]Of the six major, organized efforts from the 1970s to the 1990s to examine and/or develop standards for surveys in general and nonresponse in particular: 1) the ASA's Conferences on Surveys of Human Populations, 2) the MSI initiative, 3) the CASRO Completion Rate Task Force, the NAS' Panels 4) on Incomplete Data and 5) for Survey Measurement of Subjective Phenomenon, and 6) the AAPOR Standard Definitions Committee), there was considerable overlap among the participants. No group had a membership that did not include at least one person from another of these committees. Often the overlap was large. Of the 15 members of the CASRO Task Force seven served on other committees. Likewise, of the 10 members of the AAPOR Committee four had prior service. Among those with multi-participation:

Barbara Bailar: 4 - CASRO, Incomplete, Subjective, AAPOR

Robert Groves: 3 - CASRO, Incomplete, AAPOR these and other initiatives a series of professional and industrial codes were developed regarding nonresponse

Current Professional, Academic, and Industry Codes and Positions

To ascertain the current situation regarding nonresponse standards the codes and official positions of the 18 major professional, trade, and academic associations involved in survey and marketing research were examined.[16] The core professional associations on the survey research side are the American Association for Public Opinion Research (AAPOR) and the World Association for Public Opinion Research (WAPOR). Then the European Society for Opinion and Marketing Research (ESOMAR) is a bridge between survey research and market research and the main market research associations are the American Marketing Association (AMA), Marketing Research Association (MRA), the Association for Consumer Research (ACR), Association of European Market Research Institutes (AEMRI), and the European Federation of Associations of Market Research Organizations (EFAMRO). More specialized within the market research arena are two associations dealing with audience and readership studies, the Audit Bureau of Circulations (ABC) and the Media Ratings Council (MRC). The main statistical groups are the American Statistical Association (ASA), the International Association of Survey Statisticians (IASS), and the International Statistical Institute (ISI). The main trade associations or associations of organizations are the Council of American Survey Research Organizations (CASRO), the Council for Marketing and Opinion Research (CMOR), the National Council of Public Polls (NCPP), and, on the market research side, the Advertising Research Foundation (ARF). Finally, there is an association of associations, the Research Industry Coalition (RIC), which includes among its

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Lester Frankel: 3 - Human Populations, CASRO (Chair), Subjective
William Kalsbeek: 2 - CASRO, AAPOR
William Madow: 2 - CASRO, Incomplete (Chair)
Monroe Serkin: 2 - CASRO, Incomplete
Tom W. Smith: 2 - Subjective, AAPOR (Chair)
Frederick Wiseman: 2 - MSI (lead), CASRO

[16]Coverage is restricted to international organizations and those in the United States although some foreign organizations are mentioned. For more on standards in other countries see Kasse, 1999 and "Guide to Standards..." n.d.. For directories of associations in other countries see www. imriresearch.com/groups/assocs.htm and www.mrsa.com.au/assocint.htm.

members AAPOR, ACR, AMA, ARF, CASRO, MRA, and NCPP, plus the American Psychology Association, the Newspaper Association of America, the National Association of Broadcasters, the Professional Marketing Research Society of Canada, the Qualitative Research Consultants Association, and the Travel and Tourism Research Association.[17]

a. AAPOR

AAPOR is a professional association of survey researchers. The AAPOR Code of Professional Ethics and Practices (AAPOR, 1986) in its Standards of Minimal Disclosure states:

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[17]Trade or industry associations are those in which organizations rather than individuals belong and consist of CASRO, CMOR, NCPP, ARF, ABC, MRC, AEMIRI, EFAMRO, and RIC. Professional and academic associations have individuals as members. The ACR appears to be the most academic (i.e. with the highest % of members being employed by colleges and universities). ASA has about 65% of its members as teachers or students. ISI and IASS have members mostly from the academic and governmental sectors and relatively few from the commercial sector. AAPOR has a plurality of members (usually 40-45%) from the academic sector. WAPOR has about a third from the academic sector and a majority from the commercial side. ACR and AAPOR have formal provisions for the representation of academic and non-academic members in their offices. Members of ESOMAR, AMA, and MRA are mostly from the commercial sector. MRA has company as well as individual memberships.

Two professional leadership associations not covered are the Market Research Council (MRC) and the Research Industry Leaders Forum (RILF). The MRC, a small elite group centered in New York City has been active since the 1920s, but, as its official history notes, "MRC has never tried to be a guiding force in research" and it is "basically a forum for discussion, and holds its discussion in camera (Beville and Blakenship, 1989)." The RILF is sponsored by ARF, AMA, CASRO, and MRA and started with biennial meetings in 1988. It is, as its name indicates, a forum for discussing ideas, and not a formal, independent organization.

One other organization that has been active on the nonresponse topic is the Marketing Science Institute (MSI) (Wiseman, 1983; Wiseman and McDonald, 1978; 1980). MSI is a research center supported by private companies and is not a professional, academic, or trade association. However, both because of its sponsorship by many of the important corporate consumers of market research and its influence in the field, it has exerted a significant influence.

> At a minimum, the following items should be disclosed:
>
> 5. Size of sample and, if applicable, completion rates and information on eligibility criteria and screening procedures.

AAPOR also has official statements on nonresponse beyond its code provisions. In its Best Practices booklet (AAPOR, 1997) AAPOR cites the following:

> 9. Maximize cooperation or response rates within the limits of ethical treatment of human subject.
>
> 12. Disclose all methods of the survey to permit evaluation and replication....
> A comprehensive list of the elements proposed for disclosure...includes:
>
> > size of samples and sample disposition - the results of sample implementation, including a full accounting of the final outcome of all sample cases: e.g. total number of sample elements contacted, those not assigned or reached, refusals, terminations, non-eligibles, and completed interviews or questionnaires;
>
> > documentation and full description, if applicable, of any response or completion rates cited (for quota designs, the number of refusals), and (whenever available) information on how nonrespondents differ from respondents;

In "Standard Definitions" (AAPOR, 1998) AAPOR provides a detailed set of final disposition of case codes for telephone and in-person household surveys, a set of formulas using these codes to calculate response and other outcome rates, and guidance on various related matters such as the definition of completed cases and how substitution should be reported.

The Standard Definitions have in turn been adopted by AAPOR's official journal, Public Opinion Quarterly (Price, 1999 and "Notice," 1999).

b. WAPOR

WAPOR, confounded with AAPOR in 1947, is an international, professional association of survey researchers. The WAPOR Code of Professional Ethics and Practices (WAPOR, n.d.) states:

> Every complete report on a survey should contain an adequate explanation of the following points:
>
> f) the degree of success in actually carrying out the [sample] design, including the rate of non-response and a comparison of the size and characteristics of the actual and anticipated samples;

WAPOR's journal, the <u>International Journal of Public Opinion Research</u>, has no guidelines on nonresponse.

c. CASRO

CASRO, found in 1975, is a trade association of for profit survey research firms. The CASRO Code of Standards and Ethics for Survey Research (CASRO, 1997) states:

> A Research Organization's report to a Client or the Public should contain, or the Research Organizations should be ready to supply to a Client or the Public on short notice, the following information about the survey:
>
> 6. A description of results of sample implementation including (a) a total number of sample elements contacted, (b) the number not reached, (c) the number of refusals, (d) the number of terminations, (e) the number of non-eligibles, (f) the number of completed interviews.
>
> 7. The basis for any specific "completion rate" percentages should be fully documented and described.

However, the information in points 6 and 7 is not required among that which must be included in "any general public releases of survey findings."

Details of the definition and calculation of response and completion rates are given in a report of the CASRO Task Force on Completion Rates (CASRO, 1982; Frankel, 1983).

CASRO does not have a official journal.

d. NCPP

NCPP, founded in 1968, is a association of organizations publically releasing survey results. In its Principles of Disclosure (NCPP, 1998a) the NCPP does not include anything relating to response rates in what must be automatically provided, but does provide for reporting under the following circumstances:

> It is reasonable to require disclosure of pertinent information regarding methods when questions are raised about survey results or how a survey has been conducted.

The Code then describes a procedure by which a survey methods inquiry may be pursued. It indicates that the NCPP Committee on Disclosure may require the release on certain information including (but not limited to):

> Sample design: sample frame, stages, number of sampling points, clustering, respondent selection, number of callbacks, refusal rate, substitution rules (if any), and non-contact rate of sample units;

In addition in its "20 Questions for Journalists" (NCPP, 1998b) which lists "questions for the journalist to ask the pollster before reporting poll results" the NCPP instructs:

> You ought to know how many people refused to answer the survey or were never contacted. The nonresponse rate is the percentage of people contacted who should have been interviewed, but were not.

NCPP does not have an official journal.

e. CMOR

CMOR is a trade association of survey-research firms. It has no code of ethics or standards. One of its two main missions is "promoting internal research practices to encourage respondent cooperation and self-regulation." It refers to as a benefit of membership its "efforts to increase respondent cooperation," and as one of its "top ten reasons to join CMOR" says "7. CMOR is committing resources to improve respondent cooperation (CMOR, 1998)."

CMOR also coordinated a study with eight survey firms using an experimental design to measure aspects of survey design associated with nonresponse ("Respondent Cooperation," 1996).

CMOR does not have an official journal.

f. ESOMAR

ESOMAR is a professional association of those involved in survey and market research. In its International Code of Marketing and Social Research Practice (ESOMAR, 1986) ESOMAR provides:

> 25. The Researcher must provide the Client with all appropriate technical details of any research project carried out for the Client.

In its notes to Rule 25 ESOMAR elaborates:

> The Client is entitled to the following information about any marketing research project to which he has subscribed:
> 2. Sample - a description of the intended and actual universe covered.
> - the size, nature, and geographic distribution of the sample (both planned and achieved); and where relevant, the extent to which any of the data collected were obtained from only part of the sample.
> - details of the sampling method and any weighting methods used.
> - where technically relevant, a statement of response rates and a discussion of any possible bias due to non-response.

The ESOMAR code has in turn been adopted by a number of national organizations such as the Market Research Societies of Great Britain and Australia.

ESOMAR's official journal, Marketing and Research Today, has no guidelines on nonresponse.

g. AEMIRI

AEMIRI is a trade association founded in 1991. All member companies of AEMRI subscribe to the ESOMAR code (see above). In addition the AEMRI Guidelines to Standards in Market Research (AEMIRI, 1999) require the following:

> Sampling
>
> 2. Details of sample sources used and an analysis of response rates must be available to clients if required...

AEMIRI does not have an official journal.

h. EFAMRO

EFAMRO is an international federation of market research agency associations within the European Union. Member follow the ESOMAR standards (see above) and also adhere to the EFAMRO Market Research Quality Standards (EFAMRO). These stipulate:

30. Records of All Fieldwork Operations:

To fully clarify the differences between the intended and the obtained samples, the following elements will be recorded and analyzed, where relevant:

> Penetration and incidence levels,

> "No Answer" rates observed,...

42. Completeness for Reproducibility:

In particular, the research report shall include relevant details of the following:

> the primary data collection method(s) used,
> the sample universe and its method of recruitment,
> the intended and achieved sizes and structures of the sample,
> The penetration/incidence levels,

EFAMRO does not have an official journal.

i. AMA

The AMA is a professional association of those involved in markering, including, but not limited to, those engaged in market research. In its Code of Ethics (AMA, 1999) the AMA refers to:

> Maintaining research integrity by avoiding misrepresentation and omission of pertinent research data.

In its official journal, the Journal of Market Research, authors using data are required to make available to the editors "exact information regarding their procedures, materials (excluding data), and stimuli..." They are also told that "empirical research should be reported in sufficient detail that readers can evaluate and replicate the methodology." As part of the "acceptance criteria" authors are expected to abide by the following:

> When data collection is discussed, consider the relevance of the sample to the subject matter. Carefully chosen sample groups are preferable to

haphazardly chosen subjects who have little knowledge of or relevance to the subject being studied.

Give as much information as possible about the characteristics of the sample and its representativeness of the population being studied.

Do not ignore the nonrespondents. They might have different characteristics than the respondents.

j. MRA

MRA is a professional association of practitioners of market research. In its Code of Data Collection Standards (MRA, 1999) MRA requires that its members "will report research results accurately and honestly."

The MRA's newsletter, Alert!, has not relevant standards.

k. ACR

ACR is a professional association of those interested in consumer research. ACR's mission is "to advance consumer research and facilitate the exchange of scholarly information..." It does not have any code and "does not monitor, evaluate or adjudicate ethical behavior." It further states that "Everything ACR members do in advancing consumer research is based on the belief that each other's research is honestly designed, analyzed, and reported (ACR, 1999)."

ARC does not have an official journal.

l. ARF

ARF is a trade association of organizations involved in advertising research. ARF does not have any code of ethics or standards. It does have as its mission "Promoting the highest quality business and consumer marketing, advertising and media research by developing guidelines and standards, and by providing objective and impartial technical advice and expertise." Research activities and reports are organized by Research Councils and these include the Research Quality, Methods, and Practices Council which aims "to support the development, application, and use of sound research methods and practices conductive to better business decision making for advertising, marketing, and media." ARF official reports are approved by one of the Research Councils and by its general Board of Directors.

Several of the "best" ARF reports were published together in the ARF Guidelines Handbook (ARF, 1990). Three of these reports, "ARF Criteria for Marketing and Advertising Research" (orginally issued in 1984), "ARF Guidelines for Audience Research on Business Publications" (1988), and "ARF Guidelines for Newspaper Audience Studies" (1990) discuss response rates. The Newspaper Audience Studies guidelines are the most complete and contain a definition of response rates as well as a list of steps that newspaper audience evaluation surveys should take including a minimum of six attempts, a minimum of six rings per telephone attempt, use of bilingual interviewers, use of "a special team to deal with difficult nonrespondents," and instructions to mix days and times of attempts. Also, among the "key ARF research projects" is one on "The Effect of Interview Attempts on Survey Results." However, unlike most other key research papers it does not put forward either guidelines or standards (ARF, 1999).

ARF's official journal, the Journal of Advertising Research, requires contributors to "make clear what the sampling frame was, why it was selected, and what the response rate was (ARF, 1999)."

m. ABC

ABC is a "tri-partite not-for-profit association" representing advertisers, advertising agencies, and publishers. Founded in 1914, its purpose is to audit and verify circulation figures for newspapers and magazines in the US and Canada. In its Newspaper Reader Profile Service (Audit Bureau of Circulations, 1999) it requires that "each study must employ identical research procedures satisfying minimum standards of performance and will be subject to ABC verification." In Section VI. Response Rates, its key requirements are as follows:

> Response rate is defined as the percentage of pre-designated eligible respondents who provide interviews as defined in Section V....

At least six attempts must be made to contact all pre-designated respondents. For telephone interviews, each time a number is dialed, the phone must ring at least six times before the attempt is classified as a "no answer." Every efforts must made to surmount language, cultural, behavioral, and other barriers to successfully completed interviews (such as the use of bilingual interviewers, a special team to deal with difficult respondents, etc.) To the extent feasible, call backs to reach numbers that do not answer (including answering machines) must be made at different times of the day and on different days of the week. In this regard, the research firm must keep individual records of success and explanations of failure....

Although the response rate would be as high as possible, a

> minimum 40 percent is required. Should a given study fail to achieve this required rate, it may be approved if ABC determines that 1) all reasonable actions were taken to achieve the 40 percent minimum and 2) the results of the study reflect the realities of the corresponding market....

In addition an example set of final dispositions are given and response rates are calculated using the illustrative data.

ABC is also part of the International Federation of Audit Bureaux of Circulations (1999) which is an association of similar media auditing organizations around the world. While it is developing minimum measurement and reporting standards regarding the Internet usage, it does not appear to have any standards for nonresponse on surveys.

ABC does not publish a professional journal.

n. MRC

MRC (originally referred as the Broadcast Rating Council and then called the Electronic Media Rating Council) was founded in 1964. It is a nonprofit association representing television and radio broadcasters, cable systems, advertising agencies, and media trade associations. Its purpose is to assure that audience research measures are reliable and valid. It does this through its Minimum Standards for Media Rating Research (Media Rating Council, 1997) and its accreditation of media reports (Dineley, 1998). In its disclosure standards it requires that

> B. Each rating report shall show the number of different households (or individuals or other sample units) initially selected and designated to provide audience information and the number among those that provide usable rating data utilized for that specific report...
>
> B7. Each rating report shall state that the audience data obtained from the sample used in audience measurement surveys are subject to both sampling and non-sampling errors and shall point out major non-sampling errors which are believed to affect the audience estimates.
>
> B17. In addition, each service shall maintain records of:
>
> > a. All attempts to place diaries or meters, or obtain interviews or whatever other form of cooperation is required for the research technique used.
> >
> > b. All unsuccessful attempts to obtain information, including- but not limited to - refusals, not at home,

cases requiring further discussion and/or correspondence (e.g. with another member of the household), busy signals (phone), and returns from postal authorities.

c. Actual or assumed reasons for non-cooperation.

d. Which cooperating sample members are original sample selections and which are first, second, third, etc., substitutions.

MRC does not have an official journal.

o. RIC

RIC as described above is an association of associations engaged in social and market research. It takes the following relevant positions on research (RIC, 1999):

> Describe how the research was done in enough detail that a skilled researcher could repeat the study.
>
> Explain the applicability and limitations of the research and provide information users need to judge for themselves the usefulness of the research and its quality.

RIC does not have an offical journal.

p. American Statistical Association

The ASA is a professional associations of statisticians.The ASA's Ethical Guidelines for Statistical Practice (ASA, 1999) under Responsibilities in Publications and Testimony requires:

> 5. Account for all data considered in a study and explain the sample(s) actually used.
> 6. Report the sources and assessed adequacy of the data.
> 12. Report the limits of statistical inference of the study and possible sources of error. For example, disclose any significant failure to follow through fully on an agreed sampling or analytic plan and explain any resulting adverse consequences.

Also under Responsibilities to Other Statisticians or Statistical Practitioners:

> 1. Promote sharing of (nonproprietary) data and methods...

The Ethical Guidelines for Statistical Practice of the Survey Research Methods Section (ASA-SRM, 1998) states:

> Statistical work must be visible and open to assessment with respect to quality and appropriateness in order to advance knowledge, and that such assessment may involve an explanation of assumptions, methodology, and data processing used...
> [Statisticians should] be prepared to document sources used in an inquiry.

Also, the Section on Survey Research Methods in its series "What is a Survey?" in the booklet "How to Collect Survey Data?" urges following up on nonrespondents to reduce the nonresponse rate and nonresponse bias (ASA-SRM, 1995a; 1995b; 1995c). In addition, the ASA and ASA-SRM have participated in various research efforts and conferences on nonresponse ("Report," 1974).

The official journal of the ASA, the Journal of the American Statistical Association, has one requirement for authors that indirectly touches on nonresponse:

> Whenever a data set is used, its source should be fully documented. When it is not practical to include the whole data set in the paper, the paper should state how the complete data set can be obtained. Unless conditions of security or confidentiality intervene, availability of the data on which the paper is based is a requirement of publication.

q. ISI

The ISI is a professional association of statisticians. The ISI Declaration on Professional Ethics (ISI, 1985) states:

> 2.4 Statisticians are frequently furnished with information by the funder or employer who may legitimately require it be kept confidential. Statistical methods and procedures that have been utilised to produce published data should not, however, be kept confidential....
> One of the responsibilities of the statistician's professional citizenship, for instance, is to be open about methods in order that the statistical

> community at large can assess, and benefit from, their application. Thus, insofar as it is practical, methodological components of inquires should be free from confidentiality restrictions so that they can form part of the common intellectual property of the profession.
>
> 3.2 Within the limits of confidentiality requirements, statisticians should provide adequate information to colleagues to permit their methods, procedures, techniques, and findings to be assessed.

The ISI's newletter, International Statistical Review, has no guidelines on nonresponse.

r. IASS

IASS is a section of ISI. It does not have its own code of standards/ethics and does not appear to have any relevant official positions. The IASS' official journal, Survey Statistician, has no guidelines on nonresponse.

Of the 18 professional, trade, and academic organizations examined, three have no codes nor any relevant official statements (CMOR, ACR, and IASS - but IASS is covered by the code of ISI). Another three organizations have only brief general statements about doing good, honest research (AMA, ARF, MRA). Yet another three have general pronouncements about being open about methods and sharing technical information with others, but no details on what should be documented (ASA, ISI, RIC). Then, there are nine that have some requirement regarding nonresponse (AAPOR, CASRO, ESOMAR, AEMRI, ERAMRO, NCPP, WAPOR, ABC, and MRC).[18]

Of the eight organizations that have an official journal (AAPOR, WAPOR, ESOMAR, AMA, ARF, ISI, IASS, ASA), one (AAPOR-POQ) has a definite standard about reporting and calculating response rates, two have some general pronouncements that mention nonresponse bias or the response rate (AMA-JMR and ARF-JAR), and one has a marginally relevant standard on data sharing (ASA-JASA).[19]

Of the nine referring to nonresponse in their codes and statements, all require that response rates (or some related

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[18]ARF could be added to this list if its guidelines for newspaper audience surveys were included as opposed to its less detailed, general pronouncements.

[19]On the editorial policies of other social science journals see discussion of enforcement below.

outcome rate) be reported. AAPOR, WAPOR, EFAMRO, ABC, and MRC put nonresponse among those facets of survey methodology that must be reported automatically and routinely while CASRO, ESOMAR, AEMRI, and NCPP have less comprehensive reporting rules. However, the ABC and MRC requirements are only for a narrow set of studies documenting media usage. ARF also has more stringent guidelines just for media usage surveys.

Only a subset of the nine mentioning nonresponse require anything beyond reporting requirements. Only five organizations provide at least some definition of response and/or related outcome rates and these appear in non-binding documents and statements and not as part of their codes (AAPOR, CASRO, NCPP, ABC, and MRC) and four provide no definitions (ESOMAR, EFAMRO, AEMRI, WAPOR). Only the AAPOR, CASRO, and ABC definitions are detailed.

Two organizations deal with the issues of nonresponse bias in their codes. The WAPOR code, right after requiring the reporting of the nonresponse rate, calls for information on the "comparison of the size and characteristics of the actual and anticipated samples" and the ESOMAR code requires in client reports "a discussion of any possible bias due to non-response." Three organizations mention nonresponse in official documents. AAPOR in its "Best Practices," but not its code, urges that nonresponse bias be reported. The ASA address the matter is its "What is a Survey?" series. The AMA in its publication, the Journal of Market Research, requires authors to "not ignore the nonrespondents. They might have different characteristics than the respondents."

Three organizations deal with technical standards. AAPOR, as part of "Best Practices," but not its code, indicates that survey researchers should try to maximize response rates and discusses means to do. ABC and ARF are more precise in specifying minimum number of calls and details on other efforts that should be employed by media evaluation surveys.

Finally, only ABC specifies a minimally acceptable response rate, although even it provides exceptions to its standard.

In addition, professional, trade, and academic organizations have advanced the cause of standards by their general promotion and dissemination of research methods. For example, as Hollander (1992, p. 83) has observed, "the annual AAPOR conference was recognized early on, together with POQ, which is older still, as a means of advancing standards..." Specific AAPOR-POQ examples include Kviz, 1975; the Huffington discussion above; and Frankovich, 1999.

In brief, only the professional, trade, and academic organizations at the core of survey research and in the sub-area of media ratings research take up nonresponse in their codes, official statements, and organizational journals. General market research and statistical organizations do not explicitly deal with nonresponse issues in their codes and standards and only marginally address these in the guidelines of their official journals. Even among the organizations that do address the matter of nonresponse the proclaimed standards are mostly minimal. Some, but not automatic, reporting is required by all of the core organizations. However, definitions are provided by only four of the nine and none include them as part of their codes. Other aspects such as nonresponse bias and performance standards are barely touched upon. Thus, even among those organizations that consider nonresponse, reporting standards are incomplete, technical standards are lacking and/or regulated to less official status, and performance standards are non-existent.

Reporting Nonresponse

The proof of the pie is in the tasting, not in the recipe. To see how the disclosure codes and other statements on documenting methods in general and nonresponse in particular have been carried out, the reporting and documentation practices of survey researchers, archives, newspapers, academic journals, and government agencies were examined.

Survey Reports and Releases

First, the study descriptions and standard methodology statements of the 11 major organizations conducting public opinion research in the public sphere were examined (Associated Press, the Gallup Organization, Louis Harris and Associates, Los Angeles Times, New York Times/CBS News, Pew Research Center/Princeton Survey Research Associates (PSRA), Roper Starch Worldwide, Wall Street Journal/NBC News, Washington Post/ABC News, Wirthlin Worldwide, and Yankelovich Partners). Four only mentioned sampling variation as a source of error in their surveys, four mentioned some additional sources of error, but did not mention nonresponse as one of these sources, and three included some statement about nonresponse as a source of error (e.g. Harris - "Unfortunately, there are several other possible sources of error in all polls or surveys that are probably more serious than theoretical calculations of sampling error. They include refusals to be interviewed (non-response), question wording and question order, interviewer bias, weighting by demographic control data and screening (e.g. for likely voters)."). However, no organization routinely reported response rates as part of their standard documentation. The one notable exception was in the Gallup Organization's release of its special Social Audit report on "Have and Have Nots" (www.gallup.com/poll/socialaudits/have_havenot.asp) which reported "Interviewers gained cooperation in 56% of households contacted. The overall response rate for the survey, using the conservative formula developed by the Council of American Survey Research Organizations (CASRO), is estimated to be 40%."

Second, 14 university-based survey research organizations were examined (Indiana University Center for Survey Research, National Opinion Research Center, University of Chicago, Ohio State Social and Behavioral Sciences Survey Research Center, Rutgers University Eagelton Institute, University of California, Los Angeles, Institute for Social Science Research, University of Cincinnati Institute for Policy Research, University of Maryland Survey Research Center, University of Michigan Institute for Social Research, University of Oregon - Oregon Survey Research Laboratory, University of Virginia Center for Survey Research, University of Wisconsin, Milwaukee, Institute for Survey and Policy Research, University of Wisconsin Survey Center, and Virginia Commonwealth University Survey and Evaluation Research Laboratory). Of these, five regularly issued state-level, public opinion polls roughly akin to the periodic polls conducted by the public pollsters. In their standard methodology statements three mentioned non-sampling sources of error including non-response and two routinely reported response rates. For example, the Buckeye State Poll of May, 1997 reported "A total of 2,881 randomly-generated telephone numbers were used in this survey... Of these numbers, 1,508 were known to reach a household in Ohio with an eligible respondent. From these households, interviews were completed in 55% of the cases (www.survey.sba.ohio-state.edu/bsp0597d.htm)." The other nine did not have a regular poll with a standard methodology statement, but did provide a list of their recent surveys on their Web sites. Two provided only a list with no full-text reports and no mention of response rates. One provided only a list with some mentions of response rates and no full-text reports. One provided a list with no response rates given, but included some full-text reports with some response rates given. One provided a list with no response rates cited, but included full-text reports and these generally included response rates. Three included a list with some response rates given and full-text reports that generally included response rates. One had a list page that was out-of-service and included full-text reports that generally included response rates.

Third, six other prominent sources of survey data were also examined (Kaiser's PSRA and National Public Radio surveys; Market and Opinion Research Institute (MORI-London), Mathmatica, Research Triangle Institute, and Westat). None had regular series that used a uniform methodology statement and most did not include a list of current projects. Full-text reports were frequently available, but only a minority of these cited response rates (e.g. MORI in a mail survey of boat owners reported "an encouragingly high response rate of 42%").

In sum, response rates are not routinely reported when survey results are released. Such reports are exceedingly rare in among public pollsters; are more common, but still atypical among other prominent survey organizations; and most common, but still far from universal, within the academic sector.[20]

Survey Archives

Nor can information on nonresponse for most surveys be found by going to the survey archives where the data sets and their sample design and methodological information are stored. When contacted, the three major survey archives indicated that they rarely had data on nonresponse.[21] The Roper Center at the University of Connecticut reported "There are virtually no data provided on response rates in the datasets archived...Occasionally, reports will provide this information, but that would be the case in probably fewer than 5% of the studies." The archive at the Institute for Social Science Research, University of North Carolina, indicated that "fewer than 2% of the studies...include response rate in the stuff they send us (despite the fact that we ask for it)." The Interuniversity Consortium for Political and Social Research (ICPSR) at the University of Michigan said that reporting was usual for federal surveys (especially in the last 10-15 years) and flagship surveys like the General Social Survey and American National Election Study, but that "many of the frequently-conducted telephone surveys right up 'til today...do not include response rates in their technical documentation..."

Newspapers

Given the infrequency of the reporting of response rates in survey reports and especially the low level among the top public pollsters, it is unsurprising that newspapers rarely report response or related outcome rates. A study by the Panel for Survey Measurement of Subjective Phenomenon in 1980 found that only 2% of poll reports in American newspapers mentioned the nonresponse rate and less than 1% did so in British newspapers (Turner and Martin, 1984). An analysis of 31 Swiss newspapers in 1997 found that no articles dealing with polls reported a response rate (Hardmeier, 1999). A search of the Nexis/Lexis data base of major newspapers over a six month period from December, 1998 to May, 1999 found 70 articles that mentioned something about response or other outcome rates to surveys (e.g. Daily Yomiuri - Tokyo, "poll of traffic controllers has 83% response rate" and Star Tribune - Minnesota, "The cooperation rate among those contacted for this poll is

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[20]On the lack of nonresponse data from commercial pollsters see Bradburn, 1992; Brehm, 1993; Groves and Couper, 1998; and Smith, 1995.

[21]All quotes are from email communications to the author.

66%..."). This was estimated to represent something between 0.7-1.4% of all articles citing survey data.

Academic Journals

Following the lead of Presser (1984), the top academic journals in Sociology, Political Science, and Survey Research were examined. Surveys are directly used in 86% of the articles in survey research journals, 45% of sociology articles, and 31% of political science articles (Table 1). Of the articles that directly used surveys, response rates were documented in 34% for Survey Research, 29% for Sociology, and 20% for Political Science. In addition, partial information on response rates (e.g. panel attrition, but not initial nonresponse and nonresponse for screened in cases, but not screening nonresponse) were provided for 6% of the articles in Survey Research, 15% in Sociology, and 2% in Political Science. Thus, 60% of articles using surveys in Survey Research made no mention of response rates, as did 56% in Sociology, and 77% in Political Science. A small number of the articles without response rates did refer to other articles or reports in which technical details and sometimes explicitly response rates were available, but the majority of articles in each field had neither direct nor indirect information on response rates. Even when response rates were given, the information provided was typically meager. In Survey Research only 20% provided any definition, as did 8% in Sociology, and 2% in Political Science. For most of these cases the definitions were minimal and the supporting details were incomplete. In addition, in a number of cases the reported rates were miscalculated or questionable.[22]

In part the low level of reporting in these major academic journals is a function of their editorial policies. None of the Sociology journals, two of the Political Science journals (American Journal of Political Science and Journal of Politics), and the International Journal of Public Opinion Research have no requirement on reporting response rates. Public Opinion Quarterly has for some time required that "all submissions that make use of survey data not archived at the Interuniversity Consortium for Political and Social Research or the Roper Center must contain...b. The response rate and details of its calculation (if response rate

[22]One study reported a 62% response rate, but the true rate was about 52% when noncontacts were retained in the base. In another case uncontacted phone numbers were dropped from the base and an unclear description made it impossible to determine whether they were reporting a response rate or a cooperation rate. Finally, another study reported a suspect, response rate of 99%.

not appropriate, the number of refusals)."[23] Likewise, the American Political Science Review, in response to criticism by Stanley Presser (1980), in 1980 adopted a policy that "manuscripts relying on data drawn from sample surveys not available from ICPSR must include an appendix with the information cited in Presser's letter ("Editor's Note," 1980, p. 460). Presser's list included "2. Response rate (for quota designs, the number of refusals)." Current APSR instructions ("Editor's Notes," 1998, p. viii) to contributors do not include the ICPSR exemption and require:

> For manuscripts containing quantitative evidence and analysis, authors should describe their empirical procedures in sufficient detail to permit reviewers to understand and evaluate what has been done and, in event the article is accepted for publication, to permit other scholars to carry out similar analyses on other data sets. For example, for surveys, at the least, sampling procedures, response rates, and question wordings should be given... ("Instructions," 1998)

The efficacious impact of these editorial policies is at best minimal. Only 42% of recent Public Opinion Quarterly articles using surveys reported response rates and its unclear how many of the non-reporting 58% were exempt because they were archived since articles typically make no reference to this fact.[24] For APSR only 21% of survey articles reported response rates and this level was little different from the Political Science journals that had no editorial policies requiring report of response rates (20%).

Government Reports

To gauge current nonresponse reporting practices a dozen papers in the Current Population Report series of the Bureau of the Census were examined. Short reports included a general statement about nonsampling error, a person to contact for more information on data sources and accuracy, and no explicit mention of nonresponse. Moderate-length reports had a methods appendix usually called something like "Source and Accuracy of Estimates." These generally included a standard table giving the average or general number of noninterview cases for the Current Population Survey

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[23]For recent modification of this rule see the preceding discussion of the development of standards by AAPOR.

[24]Moreover, the reports from the archives cited above indicate that for most archived studies no nonresponse information is available.

(CPS). Definitions of nonresponse or of response rates were not given. Nor were rates for particular CPS surveys reported. Some moderate-length reports included references to papers with more details on CPS methodology and/or error structure, but these mostly dated from the late 1970s. Finally, a few longer reports, especially those dealing in part with the Survey of Income and Program Participation, included detailed discussion of nonresponse and nonresponse bias as well as references to recent relevant methodological papers.

Overall, reporting of nonresponse is a rarity in the mass media and in public polls. Nonresponse is more regularly documented in academic and governmental studies, but is still sporadic at best. Moreover, when reported, response rates are seldom defined. Even rarer are explicit cites of AAPOR, CASRO, or NCPP nonresponse standards. A search of statistical, sociological, political science, and demographic journals on **JSTOR** found a single article that used and referenced the nonresponse rules of these organizations. Cites in books and project reports also are very uncommon (for a few examples see the Gallup have/have not report mentioned above; Frey, 1983; 1989; Wood and Gutterbock, 1998; Davis, Smith, and Marsden, 1999).

Professionalization and Industry Standards

Standards are developed and enforced by various processes. Any entity (a family, business, voluntary association, government agency, etc.) can establish internal rules and regulations (e.g. corporate dress codes, job performance evaluation procedures, machine precision levels, etc.) and enforce same. More general standards (i.e. pan-entity) tend to develop and exist in three major type. First, standards may evolve from general practice and be maintained and enforced by convention. These include most customs with examples running from the rules of etiquette in polite society to the use of the 0.05 level for accepting statistical significance in the social sciences.

Second, standards may be formally adopted by non-governmental associations or organizations. Most common are standards adopted by professions and trades. These include rules promulgated by voluntary associations of those engaged in the same occupation to regulate the operation of their specialty and trade associations that set standards for a particular industry.

Third, standards may be set by the government by legislation or administrative rule. They may apply to society in general (e.g. criminal statutes) or to only some sub-group (e.g. affirmative action guidelines for government contractors). Of course, these different sources of standards may overlap in various complex ways. Social conventions may be adopted by associations or governments, associations may have some of their standards take on the force of law (e.g. state licensing requirements for many occupations), and the government may give professional, trade, and academic associations the power to set and enforce rules that are legally binding (e.g. the medieval guilds).

During the last century an emerging source of standards have been professional associations. More and more occupations have followed the lead of such groups as doctors and lawyers and organized associations for the self-regulation of their professions (Abbott, 1988; Freidson, 1984, 1994; Wilensky, 1964). One of the "necessary elements" of professionalization is the adoption of "formal codes of ethics...rules to eliminate the unqualified and unscrupulous, rules to reduce internal competition, and rules to protect clients, and emphasize the service ideal...(Wilensky, 1964, p. 145)" and "codes of ethics may be created both to display concern for the issue [good character] and to provide members with guides to proper performance at work (Freidson, 1994, p. 174)."

Survey research has begun to follow the path of professionalization, but has not completed the journey.[25] In the estimation of Wolfgang Donsbach (1998), survey research falls into the category of "semi-professional." Among other things, it has been the failure of survey researchers "to define, maintain, and reenforce standards in their area (Donsbach, 1998, p. 23)" that has deterred full professionalization. As Irving Crespi (1998, p. 77) has noted, "In accordance with precedents set by law and medicine, developing a code of standards has long been central to the professionalization of any occupation." He also adds that "One hallmark of professionals is that they can, and do, meet performance standards." In Donsbach's analysis (1998, p. 26) the problem is that standards have neither been sufficiently internalized nor adequately enforced:

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[25]Wilensky (1964) proposes five sequential steps that occupations go through to professionalization: 1) the emergence of the professional, 2) establishing training schools and ultimately university programs, 3) local and then national associations, 4) state licensing, 5) formal codes of ethics. Survey research has only partly achieved the second, for although there are some excellent training programs and university programs, most practitioners are formally trained in other fields (statistics, marketing, psychology, sociology, etc.). Survey research resisted certification and state licensing, although recent support for the proscription of fraudulent practices disguised as surveys (e.g. push polls and sugging - selling under the guise of a survey) have moved the field more in that direction. Only in the early formation of professional associations did survey research fully embrace professionalization.

We have developed codes of standards, but we still miss a high degree of internalization in the process of work socialization. We also lack clear and powerful systems of sanctions against those who do not adhere to these standards. It is the professional organizations' task to implement these systems and to enforce the rules.

There are various reasons for the limited adoption and enforcement of standards and the incomplete professionalization. First, the survey research profession is divided between commercial and non-commercial sectors. Coordinating the quite different goals and needs of these sectors have been difficult. As the AAPOR example above demonstrates, there has frequently been a split between these sectors on standards and other matters. Moreover, the trade association, CASRO, only includes for-profit firms. In addition, for quite different reasons both sectors have had particular reasons for failing to vigorously pursue professionalization. The academics have been the most open to professionalization in general and standards in particular since most are already members of two types of well-organized professions (university teachers) and their particular discipline (e.g. statistician, psychologist, sociologist, etc.). But while this socialization has made them open to professionalization and standards, it has also hampered the professionalization of survey research since the academics already are usually, twice-fold professionals and may have only a secondary interest in survey research as a field/profession. The commercial practitioners have seen themselves more as businesspersons and less as professionals and many have seen standards as externally imposed constraints (akin to government regulations) that would interfere with their businesses. Of course it is not inevitable that businesses would oppose standards and people in business fields would necessarily resist professionalization. For example, the Society of Automobile Engineers was successful from early on in establishing industry-wide standards and recommended practices (Thompson, 1952). However, this has not transpired within the survey research industry. Suggested reasons for the limited development of cooperation within the survey field include a high level of competition (Bradburn, 1992) and that fewer benefits from collaboration and coordination may exist.[26]

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[26]The setting of a standard gauge for railroads is an example in which several industries benefitted. Builders of railroad equipment needed to produce only one size of wheels and axles, shippers gained as transfers costs were reduced, and railroads won increased traffic as unnecessary costs were eliminated.

Second, survey research is an information field with strong formative roots in both journalism and politics. Some have seen any attempt to regulate the industry (especially by government, but even via self-regulation), as an infringement on their first amendment rights and undemocratic. They lean more towards an unregulated, marketplace-of-ideas approach.

In brief, the incomplete professionalization of survey research has retarded the development of nonresponse standards and their enforcement. Incomplete professionalization in turn has resulted from the fractious inter-sectoral and inter-disciplinary nature of survey research and from the high value placed by practitioners on the ideal of independence and idea that the marketplace would exercise sufficient discipline. Both economic and intellectual laissez-faireism has undermined the adoption of standards.

Summary and Conclusion

The impetus for nonresponse standards has come from several sources. First, there is a scientific and professional interest in advancing the field and improving the survey craft. Nonresponse has long been a major topic in the survey methodology literature and widely acknowledged as a prominent source of survey error. This has included explicit efforts by individual scholars to establish uniform definitions. Second, there are serious applied concerns about nonresponse. Declining response rates have been a perennial concern of survey researchers since at least the early 1970s ("Report," 1974; Day, 1975; Bailar and Lanphier, 1979; Steeh, 1981; Wiseman and McDonald, 1978, Goyder, 1987; Frey, 1989; Groves, 1989; Abelson, 1992; Bradburn, 1992; Singer, Mathiowetz, and Couper, 1993; Yamada and Synodinos, 1994; Brehm, 1993; Brick, et al., 1997; O'Rourke, et al., 1998; Groves and Couper, 1998; Massey, O'Connor, and Krotki, 1998; Atrostic, et al., 1999, Cox, et al., 1999, "Privacy," 1999; but see also Johnson, et al., 1994; Osmint, et al., 1994; Gonzalez, Kasprzyk, and Scherren, 1995, Smith, 1995) and response-related issues are what survey practitioners see as the top future challenges (Rudolph and Greenberg, 1994). Third, the adoption of guidelines for surveys done for the federal government have sparked action by professional, trade, and academic associations.

These interests and concerns have generated an on-going string of organized efforts to study and deal with the problem and have led to a number of notable standards and official statements on the matter. These are most extensive among organizations at the core of survey research (AAPOR, WAPOR, CASRO, ESOMAR, and NCPP) and in the area of auditing media usage (ABC, ARF, MRC) and less detailed among general market research and statistical organizations less centrally involved. (Likewise, survey research journals have better documentation of nonresponse than do journals in the other social sciences.)

Also, professional, trade, and academic organizations have less directly advanced the cause of standards by their general promotion and dissemination of research methods. As Hollander (1992) has observed, "the annual AAPOR conference was recognized early on, together with POQ, which is older still, as a means of advancing standards..." However, neither the direct nor indirect efforts have in practice led to uniform standards or routine disclosure being adopted.

Regarding the development of standards for nonresponse the professional, trade, and academic organizations have so far done the following:

1. Disclosure standards are required by the codes of the major professional, trade, and academic organizations in the field of survey research.

2. Technical standards in terms of the definition of terms and calculation of response rates and other outcome rates are being formulated as part of official statements by the organizations (see the CASRO's "On the Definition of Response Rates" and AAPOR's "Standard Definitions" in particular).

3. Performance standards in terms of levels of success that must be achieved (e.g. minimum response rates) or specific procedures that must be followed (e.g. a minimum number of call backs) have not been seriously considered by organizations except for audience validation surveys, although there have been some organized efforts to document performance levels and procedures being utilized (Bailar and Lanphier, 1978; Wiseman and McDonald, 1978 and 1980; O'Rourke, et al., 1998; O'Rourke, 1998).

Various agencies of the federal government have in turn carried out the following regarding nonresponse:

1. As part of general disclosure or documentation standards the Census and some other parts of the statistical system have adopted guidelines on the reporting of survey results and methodology.

2. Technical standards have generally not been formulated (but see NCES's guidelines), nor have general definitions, but there are recent calls for consistent reporting of nonresponse within a survey time series.

3. Performance guidelines were adopted by OMB in terms of both

minimally acceptable and target response rates, but technical standards to enable these standards were lacking and the numerical standards were not promulgated in writing after the statistical policy function was returned to OMB in 1981.

However, despite the development of these governmental and non-governmental standards for nonresponse, enforcement has been lacking. Disclosure standards are routinely ignored and technical standards regarding definitions and calculations have not been widely adopted in practice. First, response rates and other outcome rates are usually not reported. Second, when reported, they typically are not defined. Third, when their basis is documented, various meanings and definitions are employed. As Richard Lau (1995, p. 5) has noted, "Unfortunately, survey organizations do not typically publish response rates; indeed, there is not even a standard way of determining them." And as James Frey (1989, p. 50) has observed, "Response rates are calculated in various ways by different research organizations. The basis on which these rates are calculated is not often reported." (See also, Kasprzyk and Kalton, 1998).

Moreover, it appears that no survey researcher or survey organization has been investigated for failing to disclose required information on nonresponse by any of the professional or trade associations with codes and enforcement mechanisms. If non-enforcement was because the code provisions were being widely adhered to, the lack of reenforcing sanctions would be understandable. But the low level of compliance along with the nonenforcement means that neither the organizations nor their members are taking the nonresponse provisions seriously.

This in part is because of incomplete professionalization. Without a professional, collective interest in standards above personal and organizational self-interest, many have opposed standards because they do not want to have to live up to them. In regards to nonresponse, the differences in choosing what to call a response rate do not mainly reflect random differences in choices or in training and education. Many quite intentionally select methods counter to those endorsed by CASRO, AAPOR, and advanced in major scholarly publications. They adopt methods that allow them to claim a much higher response rate than permitted under the stricter conventions.[27] Common practices to inflate response rates include 1) calculating a cooperation rate and reporting it as a response

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[27]Wiseman and McDonald (1978 and 1980) and Bailar and Lanphier (1978) found that when surveys reported response rates that were different than obtained by the standard methods, their reported rates were uniformly higher than the stricter, conventional rates.

rate, 2) ignoring nonresponse related to substitution, and 3) dropping from the base various non-interviewed sub-groups (e.g. unanswered phone numbers, language problems).

The development of nonresponse standards has followed a long, difficult, and complex path. Nonresponse has been recognized as a source of survey error for over 50 years and for about as long associations and scholars have been debating professional standards. Slowly out of this deliberation a set of professional standards on disclose, definitions, and the calculation of nonresponse have emerged. These standards grew from the efforts of many individual scholars and practitioners, from the organized efforts of several different professional, trade, and academic organizations (sometimes working together and sometimes undertaking separate efforts), and from the federal government's initiatives to support conferences and research projects, establish documentation protocols for reporting their own statistical and survey work, and develop guidelines for surveys conducted for the government. Participants in these efforts have fully spanned the various segments of the research community: basic and applied, commercial and non-commercial, and private and governmental.[28]

While the progress towards developing nonresponse standards has been notable, the task remains unfinished. Detailed technical standards are just being established and the disclosure standards have yet to be generally adopted among practitioners and no meaningful enforcement of standards has so far occurred.

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[28] Looking at the six main organized efforts that involved 78 members on the various panels, task forces, and committees, there have been 24 from universities, 17 from the federal government, 13 from university-based survey research organizations, 10 from private survey/market research firms, 5 from other private companies, 8 from professional, trade, and academic organizations, and 1 from a non-profit, social science research institute.

Table 1

Articles Using Survey Data by Field and Year

	1949-50	1964-65	1979-80	1994-95
Sociology	24.1 (282)	54.8 (259)	55.8 (285)	45.0 (309)
Political Science	2.6 (114)	19.4 (160)	35.0 (203)	30.5 (305)
Survey Research	---	---	---	85.7 (105)
Public Opinion Quarterly Only	43.0 (86)	55.7 (61)	90.6 (53)	92.6 (54)

Source: 1949-1980 - Presser, 1984; 1994-95 author's own calculations

Sociology: American Journal of Sociology, American Sociological Review, and Social Forces.

Political Science: American Journal of Political Science, American Political Science Review, Journal of Politics

Survey Research: International Journal of Public Opinion Research, Public Opinion Quarterly

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