

Overview: The General Social Survey Project

Peter V. Marsden, Harvard University

Tom W. Smith, NORC, University of Chicago

GSS Project Report No. 31

June, 2016

In this document we provide a general overview of the General Social Survey (GSS) project, which began in 1972. It presents a general overview of the project, its research methods, and its content, omitting many nuances. Davis and Smith (1992) provide a more extended guide to the GSS through 1990. Much more detail about it, including full documentation and question wording for items, is to be found at the project website (<http://gss.norc.org/>).

The GSS is the principal data collection activity of the National Data Program for the Social Sciences (NDPSS). Primary objectives of NDPSS include (a) assembling high-quality, nationally representative survey data on societal trends in the United States, (b) developing data bases permitting comparisons of the U.S. to other societies, and (c) making these data easily accessible to scholars, students, and the public with minimal delay. The GSS pursues its first objective through regular measurement of a “replicating core” set of survey questions. It addresses the second via its participation in the International Social Survey Program (ISSP). To meet the third, NDPSS disseminates data via numerous channels, notably a dedicated website (<http://gss.norc.org/>). As of early 2016, more than 27,000 books, articles, chapters, and other research publications had drawn on GSS data.

The National Science Foundation provides ongoing core financial support for NDPSS. Numerous other agencies and foundations also support the project, primarily by funding innovative modules on particular topics that ordinarily appear in only one GSS.¹

¹ Notable exceptions that have appeared repeatedly include a module of items on risky behaviors supported by the Centers for Disease Control, and a module of items on the quality of working life supported by the National Institute for Occupational Safety and Health.

NORC at the University of Chicago conducts GSS sampling, fieldwork, and data preparation.

James A. Davis originated the GSS concept and was a principal investigator of the project from 1972 until 2009, at which point he became its senior advisor. As the project continued and grew, the set of principal investigators (PIs) expanded to include Tom W. Smith (in 1980), Peter V. Marsden (from 1997 to 2016), Michael Hout (in 2009), and Michael Davern and Jeremy Freese (both in 2015); Stephen Morgan will join the PI team in 2017. A Board of Overseers of outstanding scholars in the social sciences also guides the GSS.²

Study Design

The GSS is designed principally as a repeated cross-sectional survey that draws a new random sample of respondents each time it is conducted. Such a design is optimal for measuring aggregate change within a population. From 1972 until 1993, GSSs were conducted almost annually. Beginning in 1994, GSSs have been done biennially, with larger samples.³

A repeated cross-section design does not measure change at the level of individuals, however. Between 2006 and 2014, the GSS added a panel component to its basic design. It reinterviewed each year's respondents in each of the two subsequent GSSs, producing three 3-wave, 2-year-interval panels (covering 2006-2010, 2008-2012, and 2010-2014) that can distinguish true change and unreliability. During this period,

² More than 90 scholars representing many fields from over 60 universities and research institutes have served on the Board of Overseers. Additionally, numerous researchers—from a dozen disciplines and more than 100 institutions—have participated in the design of GSS topical modules.

³ Due to funding shortages, no GSSs took place in 1979, 1981, or 1992. The 1994 shift to biennial administration was a cost-saving measure.

many topical modules and some ISSP modules were administered as part of panel reinterviews of respondents sampled two and four years earlier. The project reverted to a repeated cross-sectional design beginning in 2016.

Target Population

The GSS targets the adult (age 18 and older) household population of the United States. Adults living outside of households—in dormitories, military quarters, nursing homes, prisons, or other group quarters—are not represented by the survey. As of 2010, the US Census Bureau reported that about 97.4% of U.S. adults reside in households.

Until 2006, only English-speaking adults were part of the GSS target population. In the mid-1980s, more than 98% of the adult household population was English-speaking. As of 2007, the US Census Bureau estimated that 1.5% of US adults did not speak English “at all” while an additional 3.1% of adults spoke English “not well.”⁴ Beginning in 2006, the GSS expanded its target population to include Spanish-speaking adults.⁵ Recent Census Bureau estimates for 2007 indicate that among US residents age 5 or older who do not speak English at all, 82.3% speak Spanish, and that among US residents age 5 and over who speak English “not well,” 70.4% speak Spanish (Shin and Kominski, 2010). Adults who do not speak English or (after 2004) Spanish are not represented by the survey.

⁴ See <http://www.census.gov/population/www/cen2000/briefs/phc-t20/tables/tab03.pdf>; retrieved June 10, 2010.

⁵ Because of this change in the GSS target population, trend studies involving GSSs after 2004 must take measures to ensure that their working samples are comparable across years. This is not straightforward because bilingual respondents who elect to be interviewed in Spanish after 2004 could nonetheless complete the interview in English, and hence would have been within the pre-2006 target population. Smith (2007) assesses language-related differences in responses in the 2006 GSS, and suggests that Spanish monolinguals (i.e., those Spanish-speaking respondents who would not have been in the pre-2006 target population) can be identified using respondent self-assessments of whether they could have completed an interview in English (mnemonic SPANSELF) and interviewer assessments of same (mnemonic SPANINT).

Sampling Methods

For each GSS, NORC draws a nationally representative sample of U.S. households. Details of its sampling methods have changed somewhat over time, but they always begin by sampling successively smaller geographic areas in several stages. Such multistage designs are commonly employed when drawing cluster samples for large-scale studies that rely on in-person interviews for data collection. Early GSSs (1972-1974) employed quota sampling (with quotas for sex, age, and employment status) at the block level. GSSs beginning in 1975 shifted to a full probability design, enumerating and then sampling households within blocks. Until 2002, households within blocks were listed via traditional field-listing techniques. Since 2004, much household listing has relied on US Postal Service Delivery Sequence Files.⁶ One adult per sampled household is randomly selected as the interviewee from a list of eligible adults within that household.

Beginning in 2004, the GSS added a “two-phase” or “subsampling of nonrespondents” component to its sampling design. This maintains a nationally representative sample while limiting the high field costs incurred in pursuing difficult-to-interview cases at the end of the survey’s field period (see Hansen and Hurwitz, 1946). During the first phase, interviewers attempt to secure interviews with respondents from all sampled households. Nonrespondents at the end of phase 1 are then randomly subsampled: no further attempts are made to contact some, while intensive efforts are

⁶ See Harter, Eckman, English, and O’Muircheartaigh (2010) for an informative discussion of multistage area probability designs in general, and the sample design for recent GSSs in particular.

made to complete interviews with others. Such subsampling potentially reduces both nonresponse error and nonresponse bias.⁷

Weights

The basic GSS sampling design assigns equal probabilities of selection to all eligible U.S. households, so at the household level (for measures of household characteristics such as the number of resident adults, or whether it rents or owns its housing unit) the sample is “self-weighting.” Several features of the sample design can require that weights be used, however.

First, most analyses of GSS data seek to estimate characteristics of the adult population, not characteristics of the population of households. Since it includes only one adult per household, the GSS sample underrepresents adults living in larger households. Weighting observations proportionally to the number of adults residing in a household can adjust for this. Second, the subsampling-of-nonrespondents feature of post-2002 GSS samples means that they include a disproportionate number of first-phase respondents, so weights based on sampling phase are necessary. Third, the 1982 and 1987 GSSs included supplementary oversamples of black adults to allow improved estimates for this subgroup, and hence observations should be weighted accordingly when calculating estimates for the adult population in those years.^{8,9}

⁷ Smith (2006a) gives details about the implementation of the subsampling of nonrespondents design within the GSS.

⁸ Mnemonics for available for GSS weighting variables include ADULTS (to adjust for undersampling of adults in larger households), PHASE (to distinguish first- and second-phase respondents in the two-stage sampling design), and OVERSAMP (to adjust for oversampling of blacks in 1982 and 1987). For the 2004 and later GSSs, variable WTSS adjusts for both number of adults and phase, while variable WTSSNR includes an additional adjustment for differential nonresponse across areas. WTSSALL adjusts for household size until 2002, and for both household size and phase thereafter. Neither WTSS, WTSSNR nor WTSSALL compensates for the oversampling of black respondents in 1982 and 1987, so special weighting

Interview Mode and Field Methods

After households are sampled, interviewers contact them in person. They begin by enumerating the composition of the household and determining which household members are within the target population and therefore eligible as GSS respondents. One eligible adult is then randomly chosen as the designated interviewee for that household.

The in-person interview is the preferred data collection mode for the GSS, and the vast majority of GSS data are collected via personal interviews. Until the 2000 GSS, interviewers used traditional paper-and-pencil techniques relying on printed questionnaires. Beginning in 2002, interviewers used computer-assisted personal interview (CAPI) techniques; physical questionnaires no longer exist, though visual aids such as show cards are still printed and used. Most questions are interviewer-administered, but some data—notably questions about sexual behavior and (in some years) ISSP modules—are collected using self-administered instruments. In some instances when it proves impossible to arrange an in-person interview, GSS interviews are conducted by telephone.

The GSS and NORC assign high priority to quality control and pursue it in several ways. Interviewers are extensively trained on topics including their role and responsibilities, the importance of confidentiality and data security, methods of household listing and respondent selection, approaches to obtaining respondent cooperation, asking questions, recording answers, and neutral probing of answers. They also undergo project-specific training about the GSS per se. Supervisors monitor the

factors must be introduced in those years. Appendix A of the GSS Codebook (available at <http://gss.norc.org/Get-Documentation>) lists some other special situations that require other weights.

⁹ One may adjust for the oversampling of black adults in 1982 and 1987 by excluding the oversampled cases (values 4, 5, and 7 on variable SAMPLE) instead of weighting by OVERSAMP.

work of interviewers closely and regularly. As many as twenty percent of respondents are recontacted by NORC to verify that interviews took place.

Response Rates

As part of its emphasis on data quality, the GSS devotes considerable effort to maintaining representativeness by securing the cooperation of respondents at high rates. To do so, NORC uses tactics including highly experienced interviewers, multiple attempts to contact respondents (at different times of day), offers to conduct interviews in locations other than the respondent's household, and (sometimes) cash or noncash incentives. Highly skilled "converter" interviewers are employed in attempts to secure interviews with reluctant respondents. In the subsampling of nonrespondents design introduced beginning in 2004, the reduced interviewing staff in the second phase is composed of those interviewers who proved to be most productive during the first phase.

Prior to 2000, the GSS response rate—that is, the percentage of eligible respondents who completed interviews—varied around 75-77%, with a high of 82.4% in 1993 and a low of 73.5% in 1978. Since 2000, response rates have fallen somewhat, averaging just over 70%.¹⁰ Nonetheless, GSS response rates remain very high by standards of the survey industry (Dixon and Tucker, 2010).

Data Preparation, Coding, and Post-Field Processing

Data from completed interviews are promptly and carefully edited for completeness, clarity, and proper use of coding conventions. This includes, e.g., consistency checks and checks for missing data on crucial questions, especially basic

¹⁰ Since the introduction of the subsampling-of-nonrespondents design in 2004, response rates reported are weighted rates that give extra weight to responses by second-phase (post-subsampling) respondents.

demographic items. Codes to identify cases with missing data are also supplied at this stage.

The GSS distinguishes three standard types of missing data: “don’t know,” for answers indicating that the respondent is uncertain or ambivalent; “no answer” for cases in which data are unavailable as a result of interviewer error or respondent refusal to answer;¹¹ and “not applicable” for respondents who were intentionally not asked a question for one reason or another. A question may be “not applicable” because the respondent is screened out (e.g. never-married respondents are not asked about marital happiness), because he or she was not randomly designated to answer a particular ballot or experimental form, or because a question (e.g. from a one-time topical or cross-national module) was not part of the GSS in the year that the respondent was sampled.

The vast majority of GSS questions are closed-ended items with pre-designated sets of response alternatives. Some open-ended items are used, however, notably for measuring industry and occupation. These are coded according to well-established standard protocols. Supervisors direct and monitor the work of coders for these operations.

For the most part, NDPSS leaves recoding and scale construction to users, rather than constructing scales and indexes based on batteries of related items on topics such as intergroup relations or gender role attitudes. It makes occasional exceptions to this practice, providing recodes of occupation into prestige and socioeconomic index scores (Nakao and Treas, 1992; Hout, Smith and Marsden, 2015) and a recode of religious denomination into three categories spanning a fundamentalist-liberal continuum (Smith, 1990).

¹¹ Explicit “refused” codes are used for a few items, such as income, gun ownership and Presidential vote.

Overview of Content

The substantive content of the GSS consists of three major components: the replicating core, topical modules, and cross-national (ISSP) modules. The replicating core consists of questions included regularly. It is the principal resource for studies of social trends based on the GSS, and is discussed in more depth in the next section of this document.

Topical modules introduce innovative content and depth into the GSS, providing data on topics not previously investigated or more detailed coverage of topics already included in the replicating core. Most topical modules appear in only a single GSS, but some—notably one including measures of sexual behavior and one on the quality of working life—have been included repeatedly. Items from topical modules are sometimes later added to the replicating core. Through 2016, some 116 topical modules on a wide range of subjects—including immigration, intergroup relations, medical care, political participation, religion, social networks, work, and many more—had appeared as part of the GSS.

Cross-national modules are developed collaboratively by the GSS with other members of ISSP, and administered as part of ongoing surveys such as the GSS in all member nations. These modules support the comparative study of important societal domains by examining differences across societies and across time.¹² The topics of ISSP modules rotate over time, now on roughly a 10-year cycle. Such modules mix replication

¹² As of 2016, survey organizations representing 60 countries had participated in the ISSP at some point, though not all have maintained membership continuously. European and North American countries are well-represented among these, as are Australia, New Zealand, and—increasingly—East Asian countries. Fewer countries in Africa, South America, and South or Central Asia are currently members, though the number of such countries has risen.

and innovation, typically including about 60 questions—40 drawn from previous ISSP modules on the designated topic, and 20 new items about that topic. Modules are developed over a two-year period which begins when a topic is selected at an annual ISSP plenary session. A drafting group proposes a set of questions, which is then pretested and revised. All member nations subsequently have the opportunity to comment on the draft, and individual questions are eventually approved one-by-one at a subsequent plenary session. ISSP questions are proposed and discussed in British English; upon adoption, modules are translated into the local language(s) of member countries.

Between 1985 and 2014, the GSS collected U.S. data for 30 separate ISSP modules on eleven distinct topics, including citizenship, the environment, health, leisure time and sports, national identity, the role of government, religion, social equality, social networks and social support, women and work, and work orientations. To facilitate comparative analysis, all member nations collect data on a standard set of sociodemographic variables.

Within both the replicating core and topical modules, the GSS regularly conducts randomized experiments that assess effects of variations in question wording and other aspects of the survey process. A long-running (since 1984) experiment within the core involves the wording of items about national spending priorities (Rasinski, 1989; Smith, 2006b). Several topical modules—e.g. on attitudes toward poor families or the stigma associated with mental illness—have used factorial vignette designs (Rossi and Nock, 1982; Pescosolido, Monahan, Link, Stueve and Kikuzawa, 1999).

Content of the Replicating Core

The GSS replicating core supports the study of societal trends by measuring a wide range of attitudes, behaviors, and individual characteristics regularly over time. It emphasizes literal replication of question wordings over time, on the oft-repeated reasoning that “[i]f you want to measure change, don’t change the measure” (Smith, 2005).^{13,14}

The primary components of the core measure sociodemographic and “background” characteristics of respondents and their households, and a broad range of social and political attitudes and behaviors. The core includes an unusually large set of sociodemographic items, including such standard measures as age, education, family income, family/marital status, race, and sex, as well as less common ones such as ethnic origins, political party affiliation, and religious affiliation. It measures features of work/employment including employment status, annual earnings, occupation and industry, and supervisory responsibilities. Also included are proxy reports about the spouse (e.g. education, religious affiliation) and extensive information about the respondent’s social origins, such as family type, parental education and occupation, and religious background.

Most, though not all, core items measuring attitudes and behaviors are administered as part of a split-ballot structure, such that usually a random two-thirds of

¹³ Notwithstanding this vital principle, both the substantive content of the core and the wording of core items do occasionally change. Many new time series have been initiated—sometimes by incorporating items from topical modules—and many existing ones have been terminated. To properly assess the effect of changes in question wording on measured trends, the GSS ideal is to phase in wording changes by conducting split-sample experiments in which the old and new wordings are administered to random subsets of GSS respondents in a given year; this assesses effects of the altered wording to calibrate its impact on estimated trends.

¹⁴ Many core items were drawn from pre-1972 national surveys, permitting trend studies covering longer time frames than the period spanned by the GSS itself. For example, the item on capital punishment was first administered in Gallup polls conducted in the mid-1930s, and the tolerance/civil liberties items on were drawn from 1950s surveys (Stouffer, 1992).

GSS respondents answers each item in any given year. This device permits the survey to track a larger number of attitudes and behaviors within the available interview time, and also to estimate associations between all pairs of core items. Major categories of attitudes and behaviors measured include abortion views, civil liberties, class identification/economic well-being, confidence in institutions, attitudes about crime and criminal justice, family and children, gender role attitudes, intergroup attitudes, political orientations, national spending priorities, religious attitudes and behaviors, sexual attitudes, socializing, subjective well-being, verbal ability, voting and voting preferences, and work orientations.

Apart from the series generated by items within the replicating core per se, GSS time series arise when cross-national (ISSP) modules repeat items. For example, the GSS measured several items in ISSP role of government modules five times between 1985 and 2016. See http://gss.norc.org/documents/other/Replicating_Core.pdf for an inventory of repeated items in the GSS.

Documentation and Resources

The GSS Cumulative Codebook (available at <http://gss.norc.org/Get-Documentation>) provides the most comprehensive documentation for the GSS, including detail on its sampling design, the question wording for all items, details on fieldwork procedures and interviewer specifications, and extensive information on coding and recoding of items. The Codebook may be viewed at the official GSS project website (<http://gss.norc.org/Get-Documentation>), among other locations.

The website offers numerous other resources of interest to GSS users. These include a guide to more than 290 GSS Reports—almost all of which are available via the

site—organized into topical, social change, international, methodological, and project report series. Also available is a searchable GSS project bibliography listing uses of the GSS known to NDPSS. The project website permits users to download data, including customized data sets, and panel data sets including within-respondent repeated items. Basic statistical analyses may be conducted via the GSS Data Explorer (<https://gssdataexplorer.norc.org/>).

NDPSS seeks to make the GSS widely available and easy to use. It encourages others to prepare special-purpose GSS data sets for use in teaching and other applications. Hundreds of versions of GSS data exist. Apart from the official NORC project website, GSS data are available through—among many other sources—the Roper Center for Public Opinion Research (<https://ropercenter.cornell.edu/>), the Interuniversity Consortium for Political and Social Research (<http://www.icpsr.umich.edu/>), and the Survey Data Archive at the University of California, Berkeley (<http://sda.berkeley.edu/>).

References

- Davis, James A. and Tom W. Smith (1992). *The NORC General Social Survey: A User's Guide*. Newbury Park, CA: Sage Publications.
- Davis, James A., Tom W. Smith and Peter V. Marsden. (2009) *General Social Surveys: Cumulative Codebook: 1972-2008*. Chicago: NORC.
- Dixon, John and Clyde Tucker (2010) "Survey Nonresponse." Pp. 593-630 in *Handbook of Survey Research*, Second Edition, edited by Peter V. Marsden and James D. Wright. Bingley, UK: Emerald Publishing Group, Ltd..
- Hansen, Morris and William N. Hurwitz (1946) "The Problem of Non-Response in Sample Surveys." *Journal of the American Statistical Association* 41 (4): 517-529.
- Harter, Rachel, Stephanie Eckman, Ned English, and Colm O'Muircheartaigh (2010) "Applied Sampling for Large-Scale Multi-Stage Area Probability Designs." Pp. 169-197 in *Handbook of Survey Research*, Second Edition, edited by Peter V. Marsden and James D. Wright. Bingley, UK: Emerald Publishing Group, Ltd..
- Hout, Michael, Tom W. Smith and Peter V. Marsden (2015) "The Social Standing of Occupations in the United States, 1963-2012." Paper presented at a session on Public Opinion, Annual Meetings of the American Sociological Association, Chicago, IL, August, 2015.
- Nakao, Keiko and Judith Treas (1994) "Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure Up." Pp. 1-72 in *Sociological Methodology 1994*, edited by Peter V. Marsden. Cambridge, MA: Blackwell.
- Pescosolido, Bernice A., John Monahan, Bruce G. Link, Ann Stueve, and Saeko Kikuzawa (1999) "The Public's View of the Competence, Dangerousness, and Need for Legal Coercion of Persons with Mental Health Problems." *American Journal of Public Health* 89 (9): 1339-1345.
- Rasinski, Kenneth A. (1989) "The Effect of Question Wording on Public Support for Government Spending." *Public Opinion Quarterly* 53 (3): 388-394.
- Rossi, Peter H. and Steven L. Nock (1982). *Measuring Social Judgments: The Factorial Survey Approach*. Beverly Hills: Sage Publications.

- Shin, Hyon B. and Robert A. Kominski (2010) "Language Use in the United States, 2007." American Community Survey Report ACS-12, US Census Bureau. Retrieved from <http://www.census.gov/population/www/socdemo/language/ACS-12.pdf> on June 10, 2010.
- Smith, Tom W. (1990) "Classifying Protestant Denominations." *Review of Religious Research* 31 (3): 225-245.
- Smith, Tom W. (2005) "The Laws of Studying Societal Change." *Survey Research* 36 (2): 1-5. Also available as GSS Social Change Report 50. Chicago: NORC.
- Smith, Tom W. (2006a) "The Subsampling of Non-Respondents on the 2004 GSS." GSS Methodological Report 106. Chicago: NORC.
- Smith, Tom W. (2006b) "Wording Effects on the National Spending Priority Items across Time, 1984-2006." GSS Methodological Report 107. Chicago: NORC.
- Smith, Tom W. (2007) "An Evaluation of Spanish Questions on the 2006 General Social Survey." GSS Methodological Report 109. Chicago: NORC.
- Stouffer, Samuel. (1992) *Communism, Conformity, and Civil Liberties: A Cross-Section of the Nation Speaks Its Mind*. New Brunswick, NJ: Transaction Publishers.