Prepared by Jennifer Todd and Yasamin Miller, SRI

Introduction

This report outlines the methodology used for the 2008 Cornell National Social Survey (CNSS), a general survey of continental United States residents that was managed and conducted by the Survey Research Institute (SRI). Since it was founded in 1996, the Survey Research Institute has grown into a premier survey research facility and now comprises more than 60 staff and 22 Computer-Assisted Telephone Interviewing (CATI) stations.

The CNSS, an omnibus national survey, initiated in 2008 by the Office of the Provost for the Social Sciences at Cornell University with the objectives of providing Cornell researchers with the opportunity to:

- Test survey questions on a national sample.
- Collect survey data for inclusion in grant proposals, thus enhancing the likelihood of investigator's achievement of external funding.
- Enhance current and/or future research efforts.
- Measure trends over time.
- Have access to a national data set for use in classroom instruction.

The data consist of standard demographic variables in addition to questions submitted by researchers at Cornell University. To get a copy of the codebook and data set please go to: http://ciser.cornell.edu/CNSS.

CNSS Omnibus Modules

The CNSS includes questions developed by Cornell University faculty and researchers who are interested in surveying continental United States residents on special topics. Unlike other surveys – such as the annual Empire State Poll (see www.sri.cornell.edu for more information) – in which researchers pay a nominal fee to include questions on the survey, participation in the CNSS is competitive based, and they are free of charge.

Researchers at Cornell were encouraged to submit survey questions related to their research. Those who demonstrated that participation would supplement and enhance their research activities were given priority in the competitive review process.

The SRI Advisory Committee, comprising of social survey experts in a wide range of disciplines, reviewed all submitted proposals and made the final decision on the successful applicants. Their selection of modules for the 2008 CNSS includes:

- Social capital
- Health and well-being
- Political identity
- Consumer identity
- Treatment of prisoners during war
- Social integration/environmental sustainability
- Attitudes towards immigrants
- National civil justice
- Virtual worlds

Sampling Methodology

The CNSS sample consisted of randomly selected households generated by random digit dial (RDD) sampling of all telephone exchanges within the continental United States and included both listed and unlisted households. Genesys Sampling Systems of Fort Washington, PA (a widely used full-service sampling company that provides samples to survey research organizations) supplied the sample, which excluded known business telephone numbers, disconnected numbers, and non-household numbers.

Selection of individual respondents came in two steps: a household was randomly selected and then a household member who was at least 18 years old was randomly selected using the "most recent birthday" selection method.[1]

These selection procedures ensured that every household with a telephone had an equal chance of being included in the survey; and once a household was selected, each adult in the household had an equal chance of being chosen.

[1] *O'Rourke, D., Blair, J., "Improving Random Respondent Selection in Telephone Surveys," Journal of Marketing Research, Vol. XX (November 1983), 428-32.*
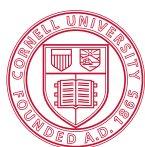
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CNSS Data Collection

Telephone data collection commenced on November 1, 2008 and was completed on December 22, 2008. All interviews were conducted using a Computer-Assisted Telephone Interviewing (CATI) software system, with an average interview length of 19 minutes. The survey was administered in English only.

SRI survey interviewers are employed throughout the year. All interviewers undergo rigorous training by the SRI training staff and then complete four weeks of probationary interviewing and follow-up training. For each survey project, including CNSS, interviewers are given a survey-specific orientation in addition to training on the survey instrument.

All interviewing staff are monitored and supervised at all times by an SRI supervisory team. The SRI employs a computer-based proxy system that allows for audio and video monitoring of all interviewer stations. All supervisors regularly monitor interviewers to maintain data collection quality, provide immediate feedback, and troubleshoot issues as they arise.

SRI utilizes a Computer-Assisted Telephone Interviewing (CATI) system called CASES (Computer-Assisted Survey Execution System). CASES is developed, distributed and supported by the Computer-Assisted Survey Methods (CSM) Program at the University of California, Berkeley and commissioned by the U.S. Census Bureau. For more than 20 years, CASES has been one of the most widely used interviewing systems by survey centers in the United States. SRI employs programmers to support the CATI software and survey operations and to ensure data collection quality.

For the CNSS, the core demographic questions and the omnibus modules were administered to all respondents. As a part of the survey-design, a random selection of one-third of all households were offered a $10 incentive to complete the survey.

Table 1 presents a distribution of the final sample status by incentive structure. Overall, the cooperation rate (which is often referred to as the response rate) was 60.4% and the American Association of Public Opinion Research (2) definition of response rate was 28.9%. For households not offered an incentive, 641 respondents participated from a sample list of 3,975; this indicates a cooperation rate of 60.0% and response rate of 28.8%. For households offered an incentive, 359 respondents participated from a sample of 2,118; this is a cooperation rate of 61.2% and a response rate of 29.3%. Additional data are detailed in Table 1.

Table 1 Final Sample Status for CNSS

	No Incentive	Incentive	Total
Completed Survey	641	359	1000
Refusal	428	228	656
Active	1101	606	1707
Physical/Language Problem	59	33	92
Ineligible/Not a Household	269	142	411
Total	*3975*	*2118*	*6093*
Response Rate[2]	28.8%	29.3%	28.9%
Cooperation Rate[2]	60.0%	61.2%	60.4%

[2] *American Association for Public Opinion Research (AAPOR) response rate and cooperation rate calculations. The response rate is the total number of survey completions divided by the total eligible sample (total sample minus all ineligible, non-households, and estimated proportion of households where eligibility was not determined). Cooperation rate is the total number of survey completions divided by the number of potential interviews (this includes all instances where contact was made with a properly selected person, but not including those instances where the respondent was incapable of cooperating due to language or physical limitations).*

Sampling Error

The sampling error for the CNSS assumes the traditional 95% confidence level, which is equivalent to a "significance level" of .05. This means that for questions with approximately 1000 respondents there is no more than a one in twenty chance that variations in the respondent sample will cause the CNSS results to deviate by more than 3.1 percentage points when respondents are asked yes/no questions and an even distribution of responses is assumed (i.e., 50% say "yes" and 50% say "no"). Furthermore, the sampling margin errors differ according to incentive status, such that there is a one in twenty chance of a sampling error greater than 5.2 percentage points for the sample offered an incentive, compared to 3.9 for respondents not offered an incentive (numbers not presented in Table 2).

Sampling error is determined by the assumed distribution of responses and by the size of the sample. An extreme distribution of question responses has a smaller error range. If the distribution of responses were 80/20, for example, the sampling error would be 2.5% for the total sample of 1000. See Table 2 for additional distributions and sampling error calculations. The size of the sample or subpopulation is also important because the margin of sampling error increases as the sample size decreases.

The margin of error from responses of demographically distinct subgroups within the CNSS will vary depending on the size of the group in question. Again, Table 2 provides some standard sampling errors for different size groups.
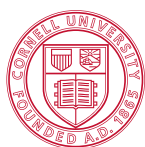
Table 2 Sampling Error Margins by Question Response Distribution and Sample Size[3]

		Size of Sample (N)				
		1000	800	600	400	200
Question Response Distribution (%)	50/50	3.1	3.5	4.0	4.9	6.9
	60/40	3.0	3.4	3.9	4.8	6.8
	70/30	2.8	3.2	3.7	4.5	6.4
	80/20	2.5	2.8	3.2	3.9	5.5
	90/10	1.9	2.1	2.4	2.9	4.2

[3] *Calculations made using the Survey System sample size calculator.* http://www.surveysystem.com/sscalc.htm

Lastly, besides the possible sample error mentioned above, all public opinion polls may incur other sources of error associated with telephone data collection procedures, including the sampling error from the systematic exclusion of households without telephones, question wording, question order, and interviewer-induced bias.

Respondent Demographics

The accuracy of the CNSS can be evaluated by comparing selected characteristics of the survey respondents to data from the U.S. Census. Table 3 compares the distribution of all 1000 CNSS respondents' characteristics with the actual continental distributions as drawn from the 2005-07 American Community Survey of the U.S. Census and Bureau of Labor Statistics (BLS).

Table 3 Key Respondent Demographics for CNSS (% reported)

Characteristics	No Incentive (N=641)	Incentive (N=359)	Total* (N=1000)	US Census/ ACS[4]
Age				
18-24	5	7	5	13
25-34	9	11	10	18
35-44	18	19	18	19
45-54	28	25	27	19
55-64	19	19	19	14
65 and older	19	17	18	17
Gender				
Male	48	41	46	49
Female	52	59	54	51
Race				
White	78	78	78	76
Black	10	12	11	13
Other	12	10	11	11
Ethnicity				
Hispanic	8	4	7	13
Non-Hispanic	92	95	93	87
Employment Status				
Employed	61	60	60	61
Unemployed	17	21	19	7
Not in labor force	22	19	21	32
Annual Household Income				
Less than $10,000	4	5	4	8
$10,000-49,999	27	33	29	42
$50,000-99,999	30	26	29	31
$100,000 or more	32	29	31	19
Education (18 yrs+)				
Less than Bachelor's Degree	52	62	56	73
Bachelor's Degree or higher	47	38	44	27

* Note: CNSS percentages may not add up to 100 due to missing data.

[4] *Estimates made using the 2005-07 American Community Survey of the U.S. Census and Bureau of Labor Statistics.* http://www.census.gov

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