

Methodology

Annenberg Supreme Court Survey - Public

Prepared by Princeton Survey Research Associates International
for the Annenberg Foundation Trust at Sunnylands and The Annenberg
Public Policy Center

June 2005

Summary

The Supreme Court Public Survey sponsored by the Annenberg Foundation Trust at Sunnylands and directed by The Annenberg Public Policy Center, obtained telephone interviews with a nationally representative sample of 1,504 adults living in continental United States telephone households. The interviews were conducted in English by Princeton Data Source, LLC from March 17 to April 18, 2005. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is $\pm 2.8\%$.

Details on the design, execution and analysis of the survey are discussed below.

Sample Design

The sample was designed to represent all continental U.S. telephone households. The telephone sample was provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications. The sample was drawn using standard *list-assisted random digit dialing* (RDD) methodology. *Active blocks* of telephone numbers (area code + exchange + two-digit block number) that contained three or more residential directory listings were selected with probabilities in proportion to their share of listed telephone households; after selection two more digits were added randomly to complete the number. This method guarantees coverage of every assigned phone number regardless of whether that number is directory listed, purposely unlisted, or too new to be listed. After selection, the numbers were compared against business directories and matching numbers purged.

Contact Procedures

Interviews were conducted from March 17 to April 18, 2005. As many as 10 attempts were made to contact every sampled telephone number. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample.

Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each household received at least one daytime call in an attempt to find someone at home. In each contacted household, interviewers asked to speak with the youngest adult male currently at home. If no male was available, interviewers asked to

Speak with the oldest female at home. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender.

Weighting and analysis

Weighting is generally used in survey analysis to compensate for patterns of nonresponse that might bias results. The interviewed sample of all adults was weighted by form to match national parameters for sex, age, education, race, Hispanic origin and region (U.S. Census definitions). These parameters came from a special analysis of the Census Bureau's 2004 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States that had a telephone.

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the *Deming Algorithm*. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 1 compares weighted and unweighted sample distributions to population parameters.

Table 1: Sample Demographics

	Parameter	Unweighted	Weighted
<u>Gender</u>			
	Male	48.1	48.8
	Female	51.9	51.2
<u>Age</u>			
	18-24	12.6	11.2
	25-34	18.0	17.4
	35-44	20.3	20.1
	45-54	19.3	19.7
	55-64	13.4	13.7
	65+	16.4	16.8
<u>Education</u>			
	HS Graduate or less	50.9	49.9
	Some College	23.3	22.7
	College Graduate	25.8	26.9
<u>Region</u>			
	Northeast	19.2	19.2
	Midwest	23.0	23.6
	South	36.0	36.2
	West	21.8	21.0
<u>Race/Ethnicity</u>			
	White/not Hispanic	71.7	73.3
	Black/not Hispanic	10.8	10.7
	Hispanic	11.9	9.5
	Other/not Hispanic	5.6	5.2

Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from systematic non-response. The total sample design effect for this survey is 1.22.

PSRAI calculates the composite design effect for a sample of size n , with each case having a weight, w_i as:

$$deff = \frac{n \sum_{i=1}^n w_i^2}{\left(\sum_{i=1}^n w_i \right)^2} \quad \text{formula 1}$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect (\sqrt{deff}). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}} \right) \quad \text{formula 2}$$

where \hat{p} is the sample estimate and n is the unweighted number of sample cases in the group being considered.

The survey's *margin of error* is the largest 95% confidence interval for any estimated proportion based on the total sample—the one around 50%. For example, the margin of error for the entire sample is $\pm 2.8\%$. This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 2.8 percentage points away from their true values in the population. The margin of error for estimates based on form 1 or form 2 respondents is $\pm 4\%$. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

Response Rate

Table 2 reports the disposition of all sampled telephone numbers ever dialed from the original telephone number sample. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:¹

- Contact rate—the proportion of working numbers where a request for interview was made—of 85 percent²
- Cooperation rate—the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused—of 50 percent
- Completion rate—the proportion of initially cooperating and eligible interviews that were completed—of 96 percent

Thus the response rate for this survey was 41 percent.

Table 2: Sample Disposition

Total Numbers dialed	7,186	
Business	680	
Computer/Fax	545	
Other Not-Working	1,437	
Additional projected NW	164	
Working numbers	4,361	60.7%
No Answer	34	
Busy	20	
Answering Machine	458	
Callbacks	18	
Other Non-Contacts	120	
Contacted numbers	3,710	85.1%
Initial Refusals	1,073	
Second Refusals	771	
Cooperating numbers	1,866	50.3%
No Adult in HH	34	
Language Barrier	263	
Eligible numbers	1,569	84.1%
Interrupted	65	
Completes	1,504	95.9%
Response Rate		41.0%

¹ PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

² PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" over 10 or more attempts are actually not working numbers.