

Survey Methodology

Summary

The 2008 Conversion Recontact Survey, conducted by the Pew Research Center's Forum on Religion & Public Life, obtained telephone interviews with a nationally representative sample of 2,867 adults living in continental United States telephone households. The survey was conducted by Princeton Survey Research Associates International (PSRAI). Interviews were conducted on landline telephones¹ in English and Spanish by Princeton Data Source (PDS), LLC from Oct. 3 to Nov. 7, 2008. Statistical results are weighted to correct known demographic discrepancies.

Design and Data Collection Procedures

Sample Design

New interviews were conducted with a sample of respondents who participated in the original "U.S. Religious Landscape Survey," which collected data from a representative group of more than 35,000 adults nationwide in the spring and summer of 2007. This callback sample was used to reinterview two primary groups of interest – converts and nonconverts. Respondents were identified as either converts or nonconverts based on responses to questions in the original survey that asked about their current religious affiliation and their childhood affiliation.

Nonconverts were defined as those who currently have the same religion as they did in childhood, including people who have always been unaffiliated with any religion. Converts were defined as those whose current religion is different than their childhood religion, and this group can be broken down into four subgroups.

¹ In the original U.S. Religious Landscape Survey, interviews were completed with 500 "cell-phone only" respondents (i.e., individuals who have and use a cellular telephone and who do not have a landline telephone in their household). An analysis of those data revealed no significant differences in the religious makeup of a sample that includes cell-only respondents and the full sample based solely on respondents from landline households. As a result, cell-only respondents were excluded from the analyses of the original Landscape Survey and thus were excluded from the new recontact survey as well.

Four Major Groups of Converts

	Currently unaffiliated	Currently affiliated
Childhood Catholic	Raised Catholic, now unaffiliated	Raised Catholic, now affiliated with new religion
Childhood not Catholic	Raised in non-Catholic faith, now unaffiliated	Not raised Catholic, now affiliated with new religion

Quotas were set for all groups so that there would be enough cases for analysis. The quotas and available sample are summarized below.

Quota/Target Groups and Available Sample Fitting Criteria

Quota groups	Quota	Sample available from Landscape Survey
Raised Catholic, now unaffiliated	400	1,399
Raised Catholic, now affiliated with new religion	400	1,849
Raised in non-Catholic faith, now unaffiliated	400	2,600
Raised in non-Catholic faith, now affiliated with new religion	342	7,340
Raised unaffiliated, now affiliated with a religion	350	1,232
Nonconverts, affiliated	770	19,000
Nonconverts, unaffiliated	200	753

A small number of respondents were excluded from the callback sample entirely because they gave an ambiguous response to one of the religious affiliation items in the original survey or because they belong to small groups within the “other Christian,” “other world religions” or “other faiths” religious traditions. Those who have changed faiths within the unaffiliated tradition (e.g., those who were raised atheist and are now agnostic, or those who were raised agnostic and are now nothing in particular) are excluded as well. In total, these excluded cases represent roughly 4% of the U.S. population, according to Landscape Survey estimates.

Questionnaire Development and Testing

The questionnaire was developed by the Pew Forum. In order to improve the quality of the data, the questionnaire was pretested with a small number of respondents using the callback sample. The monitored pretest interviews were conducted using experienced PDS interviewers who could best judge the quality of the answers given and the degree to which respondents understood the questions. Some final changes were made to the questionnaire based on the monitored pretest interviews. The pretest interviews were not included in the analysis.

Contact Procedures

Interviews were conducted from Oct. 3 to Nov. 7, 2008. 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 person who was previously interviewed based on their age and gender. Once the correct respondent was on the phone, interviewers verified their current religious affiliation as well as the childhood religious affiliation of converts to make sure they matched what was reported in the original survey. Respondents who did not confirm their previously reported religious affiliations were screened out as ineligible.

Weighting and Analysis

The data were weighted in two stages. A first-stage weighting adjustment accounts for the fact that the callback sample oversamples most of the convert groups and undersamples most of the nonconverts. The following table shows the weighted distribution of target groups from the original Landscape Survey weighted data alongside the distribution in the final recontact sample. The first-stage weight simply adjusts the recontact distribution to match the distribution in the original sample.

First-Stage Weight

	Weighted sample distribution from Landscape Survey	Recontact distribution		Weight
Raised Catholic, now unaffiliated	5%	401	14%	0.33
Raised Catholic, now affiliated with new religion	5%	401	14%	0.39
Raised in non-Catholic faith, now unaffiliated	8%	400	14%	0.60
Raised non-Catholic faith, now affiliated with new religion	19%	342	12%	1.62
Raised unaffiliated, now affiliated with a religion	4%	350	12%	0.31
Nonconverts, affiliated	56%	772	27%	2.06
Nonconverts, unaffiliated	3%	201	7%	0.40
Total		2,867		

After the first-stage weight, sample demographics were balanced to match population parameters for sex, age, education, race/ethnicity, region and population density. The basic parameters were derived from an analysis of the U.S. Census Bureau's 2006 Annual Social and Economic Supplement that included all continental U.S. telephone households. The population density parameter was derived from 2000 Census data at the county level. The sample group variable was also included in the sample balancing. The table below compares population parameters with weighted and unweighted recontact sample demographics.

Sample Demographics

	Parameter	Unweighted	After first-stage weight	Weighted
	%	%	%	%
Gender				
Male	48.4	46.0	43.5	47.6
Female	51.6	54.0	56.5	52.4
Age				
18-24	12.8	2.7	1.8	6.1
25-34	17.9	8.9	6.5	15.7
35-44	19.2	16.1	13.4	20.3
45-54	19.5	23.6	22.1	22.4
55-64	14.4	23.3	24.5	16.7
65+	16.2	25.5	31.7	18.8
Education				
Less than high school graduate	15.2	5.5	5.9	11.2
High school graduate	35.8	26.0	27.6	36.2
Some college	22.9	23.6	23.1	22.4
College graduate	26.2	44.9	43.5	30.1
Race/Ethnicity				
White/not Hispanic	69.3	86.2	86.2	75.4
Black/not Hispanic	11.3	4.6	5.6	10.0
Hispanic	13.4	5.8	4.6	8.9
Other/not Hispanic	6.1	3.5	3.5	5.8
Region				
Northeast	18.4	19.1	19.2	18.8
Midwest	23.0	27.5	27.3	24.8
South	36.9	30.7	34.2	35.5
West	21.7	22.8	19.3	20.8
County Population Density				
1 - Lowest	20.1	21.9	22.3	20.9
2	20.0	22.6	22.9	20.0
3	20.1	23.3	22.8	21.4
4	20.2	18.2	18.4	19.1
5 - Highest	19.6	13.8	13.5	18.6

Effects of Sample Design on Statistical Inference

Postdata 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 disproportionate sampling and systematic nonresponse.

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 ease of interpretation, analyses reported here are restricted to the following groups: those raised Catholic who are now unaffiliated, those raised Catholic who are now Protestant, those raised Protestant who are now unaffiliated, those who have changed religions within Protestantism, those raised unaffiliated who are now affiliated with a faith, those who are affiliated with a religion and currently belong to the religious faith in which they were raised and those who are unaffiliated with a religion and were raised unaffiliated. The sample sizes, design effects and margins of error for these groups are presented below. 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.

Margins of Error and Design Effects

	n	Design effect	Margin of error
Raised Catholic, now unaffiliated	401	1.75	± 6.5 percentage points
Raised Catholic, now Protestant	343	1.76	± 7 percentage points
Raised Protestant, now unaffiliated	360	2.02	± 7.5 percentage points
Raised Prot., now part of new Prot. faith	292	1.74	± 8 percentage points
Raised unaffil., now affiliated with a religion	350	1.88	± 7.5 percentage points
Raised affiliated, still in same faith	772	1.67	± 5 percentage points
Raised unaffiliated, still unaffiliated	201	1.92	± 10 percentage points

Response Rate

The table below reports the disposition of all sampled telephone numbers dialed from the callback 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:²

- Contact rate – the proportion of working numbers where a request for interview was made – of 80 percent³
- Cooperation rate – the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused – of 60 percent
- Completion rate – the proportion of initially cooperating and eligible interviews that were completed – of 96 percent

Thus the response rate for the recontact survey was 47 percent. Combined with the response rate of 24 percent in the original Landscape Survey, the overall response rate is 11 percent.

² PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

³ PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" are actually not working numbers.

Sample Disposition

8,609	Total numbers dialed
20	Business/Government/Nonresidential
30	Fax/Modem
7	Cell phone
1,084	Other not working
152	Projected not working (No answer/Busy)
7,316	Working numbers
85.0%	Working rate
51	Projected noncontact (No answer/Busy)
394	Answering machine/Voice mail
934	Could not find original respondent
75	Other noncontact
5,862	Contacted numbers
80.1%	Contact rate
459	Callback
1,875	Refusal
3,528	Cooperating numbers
60.2%	Cooperation rate
35	Language barrier
523	Did not confirm religion
2,970	Eligible numbers
84.2%	Eligibility rate
103	Interrupted
2,867	Complete
96.5%	Completion rate
46.6%	Response rate