

An Evaluation of Spanish Questions on the 2006 General Social Survey

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March, 2007

GSS Methodological Report No. 109

Introduction

In 2006 the General Social Survey (GSS) secured support from the National Science Foundation to add Spanish to its standard, English-language version. With this expansion the GSS target population becomes adults living in US households and able to do an interview in either English or Spanish (Davis, Smith, and Marsden, 2007).

This report describes 1) the process by which the Spanish-language version of the GSS was developed, 2) the different language-use/ability groups in which Hispanics are distributed, 3) the changes in the coverage of the Hispanic population and in the total, target population of the GSS including changes on demographics, interviewer variables, and non-demographics, 4) evidence of language problems in the translations, and 5) the implications for trend analysis on the GSS.

Translation

Translation from English into Spanish utilized the following procedures. First, using the committee-translation approach, translations were made by Research Support Services (RSS) (Schoua-Glusberg, 2006). Under the RSS, committee-translation approach, three translators simultaneously and independently translated the questions. They then met and compared their versions. Under Schoua-Glusberg's direction they reconciled disagreements and settled on a collaborative translation that provided the best functional equivalence to the original GSS wordings. In addition, the committee strove to come up with a Spanish version that was equally suitable for the various Hispanic sub-populations in the US (e.g. Puerto Rican, Mexican, South American). Second, RSS's translations were reviewed by a bilingual NORC staffer and in collaboration with RSS changes were made in various items. Finally, the revised Spanish translation was reviewed by Tom W. Smith, the GSS Director. He and the bilingual NORC staffer discussed various points and the final Spanish version was adopted.

2006 GSS

Altogether on version 1-6 of the 2006 GSS 427 Hispanics were interviewed.¹ Of these 220 were interviewed in English and 227 in Spanish. No non-Hispanics were interviewed in Spanish.²

Language use/ability was divided into four categories: 1) did in English, not interviewable in Spanish, 2) did in English, interviewable in Spanish, 3) did in Spanish, interviewable in English, and 4) did in Spanish, not interviewable in English. Thus, there are the English monolinguals, two groups of bilinguals (depending on which language was used), and the Spanish monolinguals. These four categories were operationalized in four different ways. Language of interview was a fixed attribute so the different implementations were based on which of two measures of English ability was used to measure bilingualism among the Spanish interviewees and where the self-assessment of Spanish ability was cut among English interviewees.

The first measure of English ability among Spanish interviewees was an assessment by the interviewers. The interviewers answered the following:

Before 2006 the GSS was only administered in English. Those without enough English to do the interview were excluded as out-of-scope, language problems. In 2006 a Spanish version of the GSS was added. If there had been no Spanish version available in 2006, could this respondent have been interviewed in English or do you think s/he would have been excluded as a language problem?

Could have been interviewed in English	1
Would have been excluded as a language problem	2

The second measure of English ability among Spanish interviewees was a self-assessment by respondents:

¹This number and all others in this report are weighted figures (Davis, Smith, and Marsden, 2007).

²On Version 7 there were an additional 225 Hispanic respondents 109 were interviewed in English and 116 in Spanish. Because those interviewed in English on version 7 were not asked about Spanish-language ability, these cases are not used in most of the subsequent the analysis.

If this interview had only been available in English, would you...

Have been able to do the interview easily in English,	1
Have been able to do the interview with difficulty, or	2
<u>Not</u> have been able to do the interview?	3

Interviewers judged that 14.5% of Spanish interviewees could have done the survey in English and that 85.5% would have been excluded as language problems. Among Spanish respondents 9.9% said they could have easily done the survey in English, 21.5% could have done it with difficulty, and 68.6% could not have done it. There was a high degree of agreement between these two independent measures. 94.6% of those who said that doing an interview in English would have been easy were rated by interviewers as interviewable in English. Conversely, 99.6% of those who said they could not have done an English interview were similarly judged by interviewers. Of those who indicated that they could have done the interview with “difficulty”, 22.5% were rated as interviewable in English by interviewers, and 77.5% as not interviewable. This largely negative evaluation is consistent with the respondents’ self-assessment that an English interview would have been difficult.

On versions 1-6, respondents interviewed in English were asked the following questions:

Can you speak a language other than English?	
What other language(s) do you speak?	
How well do you speak that language?	
Very well	1
Well	2
Not Well	3
Poorly/Hardly at All	4

Spanish speakers were identified through these items.

The first language-use/ability scale classifies as English monolinguals those indicating no Spanish, English/Spanish as those with any Spanish ability, Spanish/English as those judged by interviewers as able to have done the interview in English, and Spanish monolinguals as those deemed by interviewers as unable to have done an English interview. The second language-use/ability scale divides up English cases the same as the first, but uses respondents’ self-assessments of English ability and includes those in the easy and difficult group in the bilingual group and only those unable to have done an English interview as Spanish monolinguals. The third language-use/ability scale has English monolinguals as those with no Spanish plus those who spoke Spanish hardly at all and English/Spanish bilinguals as those speaking Spanish better than poorly. As in the first scale, Spanish respondents were divided according to the interviewers’ evaluation into bilinguals and Spanish monolinguals. The fourth language- use/ability scale has English monolinguals and English/Spanish bilinguals classified as in the third scale and Spanish/English bilinguals and Spanish monolinguals according to respondent self-assessment as in the second scale.

Among Hispanics on versions 1-6, the following table indicates the distribution of respondents across these four scales:

	English Only	English Spanish	Spanish English	Spanish Only	All
First	42	178	29	178	427
Second	42	178	66	141	427
Third	60	160	29	178	427
Fourth	60	160	66	141	427

Thus, the second scale minimizes the size of the monolingual categories and the third scale maximizes the monolinguals. The bilingual groups are closest in size in the fourth scale and furthest apart in the first scale.

In effect, the language-use/ability scales form a measure of general language assimilation for Hispanics that should associate with other measures of assimilation.

Trends among Hispanics

As expected, the addition of a Spanish-language version appreciably expanded the coverage of Hispanics. As Table 1 show, by various measures the % Hispanic rose from 9.1-10.4% in 2004 to 14.4-16.8% in 2006.

In addition, the profile of Hispanics changed in certain ways. As Table 2 indicates, with Spanish language added Hispanics are less assimilated (fewer born in the US, living in the US at age 16, or with parents born in the US), less educated, younger, and fewer with no children. There were no differences on gender, marital status, labor-force status, or religion.

Socio-Demographics

As Table 3 shows, Hispanics differ appreciably in their socio-demographic profile by language use/ability.³ First, there is a strong assimilation gradient with living in the US at age 16, being born in the US, and having parents born in the US falling from a high among English monolinguals to lower levels among English bilingual and then Spanish bilinguals to the lowest level among Spanish monolinguals. Second, % Catholic rose from a low among the English monolinguals to a high among Spanish bilinguals and Spanish monolinguals. This is also probably an assimilation effect. Third, living in a non-entry state had a complex and unexpected relationship to language use/ability. As expected living outside the entry states was highest among the English monolinguals. But it was then second highest for the Spanish monolinguals, third highest for the English bilinguals and very low and last for the Spanish bilinguals. Thus, this does not follow a simple assimilation model of geographic dispersion. Fourth, education is highest among the English monolinguals and lowest among the Spanish monolinguals. Fifth, full-time, labor-force participation is highest among bilinguals and lower among both monolingual groups. Sixth, the English monolinguals have the largest proportion under 30 and the Spanish monolinguals the smallest share. Seventh, the English monolinguals have the fewest married people and Spanish bilinguals and monolinguals have the highest proportion married. Eighth, having no children is greatest among the English monolinguals and lowest among the Spanish monolinguals. Finally, gender and rural-urban residence do not vary by language use/ability.

Interviewer Assessments

Interviewers rated respondents on their comprehension and cooperativeness. As Table 3 shows, the relationship of language use/ability to these variables is complex. Comprehension is rated highest for the English monolinguals and Spanish bilinguals, lower for the English bilinguals, and lowest for the Spanish monolinguals. Given that comprehension correlates with education, the low ratings for the Spanish monolinguals is not surprising, but the English bilinguals show less understanding than would be predicted based on their level of education. Cooperation is also highest among the English monolinguals and Spanish bilinguals and notably lower for both the Spanish monolinguals and English bilinguals. Thus, the two bilinguals groups are quite different on these two interviewer assessments with Spanish bilinguals rating very high on both comprehension and cooperation while English bilinguals are rated notably lower on both. One possibility is that English bilinguals may have had relatively weak English language skills making interviews with them more burdensome. However, the broader and narrower definitions of this group show no difference in rating which argues against this explanation.

Non-demographics

Table 4 examines 35 non-demographics by language use/ability. These items were selected to represent the full range of non-demographics in the 2006 GSS. Examples from all major substantive scales (e.g. abortion, Stouffer civil liberties, confidence in institutions) and a wide range of response scales (e.g.

³ The four language-use/ability classification generally showed the same patterns and only in the exceptional case where they made a difference will their specific results be referred to.

agree/disagree, numerical, unbalanced trichotomies) were examined. First, the differences across the four language-use/ability levels for each the four classification methods were examined. Overall, there was a high number of statistically significant differences (109 out of 140). These were about equally common across the four classification methods (first 25/35; second 27/35; third 28/35; and fourth 29/35). Next, differences between just the two bilingual groups were considered. Given the smaller samples and the more limited group differentiation, considerably fewer statistically significant associations appeared (29 out of 140). Statistically significant differences were more common for classification 2 and 4 (10 each) than for 1 and 3 (respectively 5 and 4). This is probably mainly due to classifications 2 and 4 counting more people as bilinguals (226-244) than classifications 1 and 3 did (189-207).

As with both the trends and language-use/ability group differences shown for the demographics, this variation across language-use/ability groups indicates some notable shifts in the profile of Hispanics. Table 4 presents the full results, but examples include that 1) support for capital punishment declines from English monolinguals to Spanish monolinguals, 2) support for more foreign aid is greater for Spanish-language cases than English-language cases, 3) support for science spending declines from English to Spanish monolinguals, 4) middle class self-identification falls from English to Spanish monolinguals, 5) financial satisfaction is lowest among Spanish monolinguals, 6) job satisfaction is highest among the bilinguals, 7) self-rated health is highest among the English monolinguals and lowest among the Spanish monolinguals, 8) finding homosexual activity “always wrong” increases from English monolinguals to the Spanish-language respondents, 9) having close friends who are either Black or White is greatest among the English monolinguals, 10) Democratic party identification is highest among the bilinguals, and 10) presidential voting declines from among the English monolinguals to the Spanish monolinguals.

Language Effects

Besides indicating shifts in the profile of Hispanics, data in Table 4 can also be used to assess possible language effects. In looking for possible language effects two conditions were required: 1) that there was statistically significant variation across the language-use/ability continuum and 2) that there was a statistically significant difference between the English and Spanish bilingual groups. Next, two additional factors were considered: 1) on how many of the four classification approaches were the first two conditions met and 2) did the pattern of difference across language-use/ability groups show the largest difference between the two bilingual groups. The pattern most suggestive of a language effect would be little or no difference between the English monolinguals and English bilinguals, a large difference between the English and Spanish bilinguals, and little or no difference between the Spanish bilinguals and Spanish monolinguals. That represents an inter-language difference with no evidence of intra-language difference across the language-use/ability groups. In contrast a pattern with a linear or at least monotonic change from the English monolinguals through the bilinguals to the Spanish monolinguals would suggest an assimilation effect more than a language effect.

Of the 35 non-demographics examined 13 met the first two conditions (spending on social security, spending on foreign aid, class self-ID, abortion legal if poor, abortion legal for any reason, morality of homosexuality, happiness, financial change, political party ID, attending religious services, close to Blacks, anti-religious book in library, and militarist to teach in college). Of these two (on homosexuality and the anti-religious) met the criteria on only one of the four classifications and were dropped from consideration as not showing a strong nor robust pattern. Nine met the criteria on two classifications (social security, foreign aid, class, legal abortion for any reason, happiness, party ID, attendance, and militarist). Two were statistically significant on all four classifications (abortion legal if poor, financial change). Looking at both the magnitude of the differences and their pattern across the language-use/ability continuum suggested four items as most likely to indicate a language effect (happiness, abortion legal if poor, abortion legal for any reason, financial change).

Financial change showed statistically significant variation across all four classifications with little difference within the English groups, a large difference between bilinguals with Spanish bilinguals indicating much more improvement than English bilinguals did and then with Spanish monolinguals indicating much lower improvement. Thus, while the bilingual results are robust across classification schemes, the difference within the Spanish groups indicates that variation is also occurring that is unrelated to questionnaire language.

General happiness showed much lower well-being among the Spanish groups than among the English groups with the largest difference between the English and Spanish bilinguals. The bilingual

differences were only statistically significant for two classifications, but the other two indicated a similar pattern.

The item on whether abortion should be legal for a woman with a very low income who can not afford more children receives much higher support among English-language respondents than among those interviewed in Spanish with a large difference between the bilingual groups and this occurs for all four classifications. The pattern is similar for being able to obtain legal abortions for any reason, but the bilingual gap was statistically significant for only two classifications.

To check whether these detected differences were due to language effects, three examinations were carried out. First, linguistically and substantively similar questions in the GSS were searched for and examined. Second, multivariate analyses were carried out on the bilinguals controlling for assimilation-related variables and other demographics. Finally, additional translations were conducted.

First, in looking for similar GSS items no suitable items were found for financial change (FINALTER). General happiness (HAPPY) had an item on marital happiness (HAPMAR) which used both the same key concept term (happy/feliz) and the same three, response options, but differed in only applying to married respondents. Marital happiness showed no statistically significant variation by language use/ability on any of the four classifications, but as with general happiness, marital happiness was rated lower in the Spanish versions.

For abortion there were a total of seven sub-questions and the four not selected for initial comparison (abortion if... doesn't want to marry - ABSINGLE, pregnant due to rape - ABRAPE, doesn't want any more children - ABNOMORE, serious defect in the child - ABDEFECT) were examined. All seven items showed statistically significant differences by language use/ability. Across the bilingual groups, mother's health showed no statistically significant variation on any version, having no more children and birth defect showed marginally significant association on version 2 and 4, for any reason and rape showed statistically significant differences on versions 2 and 4, and not wanting to marry and being too poor showed differences on all four classifications. The pattern thus leans in the direction of generally finding lower support among the bilinguals using Spanish than among the bilinguals using English, but the strength of the association is variable. It tended to be greater among those situations asked about later on (ABPOOR, ABRAPE, ABSINGLE, and ABANY were 4th-7th) than the situations asked about first (ABDEFECT, ABNOMORE, and ABHLTH were 1st-3rd). This raises the possibility the meaning shifted across items as the introductory phrase receded in memory. However, since the introductory phrase appeared as an optional re-read on the CAPI screen for each follow-up question in both the English and Spanish versions, it is not obvious why order would matter.

Second, multivariate models were run to see if other variables could explain the differences in responses between the bilinguals interviewed in Spanish and those in English. Various models were tested, but ultimately one assimilation variable (born in the US), one SES variable (education) and the demographic most closely related to happiness (marital status) were used in all models. The models failed to account for the language differences on financial situation or happiness. The differences also remain statistically significant for abortions for those with low incomes, but the association between language and abortions for any reason was not statistically significant with the controls.

Finally, the items that were identified as showing a statistically significant difference between the bilingual Hispanics that were most likely due to language were back translated from Spanish to English by three people, two native Spanish speakers and one native English speaker. Smith then compared the back translations to the source English wordings and individually discussed the differences with the translators.

On general happiness the one clear difference between the English and the Spanish was in the response categories "very happy, pretty happy, and not too happy" and "muy feliz, feliz, o no muy feliz". In Spanish the middle option has no modifier. The back translators thought that "feliz" alone might be seen as a stronger or more positively leaning category than "pretty happy" and as such might attract responses away from "muy feliz" and thus lower the proportion in that category vs. "very happy." This would be especially true if "pretty" acted in English as a de-intensifier rather than an intensifier, but its impact is not clear. There was a consensus that using "basante" as a modifier for the middle option might have been a better translation.

On financial change the main difference was that "financial situation" was translated as "situacion economica" rather than using the term "financiera". In general, the back translators saw "economica" as appropriate and in this question the difference between asking about ones "economic" vs. "financial" situation in this context is probably also small in English.

On the abortion items, the back translations of the seven conditions under which a woman might be able to obtain a legal abortion did not suggest any appreciable difference between the English and Spanish. However, the part of the translation of the introductory phrase “Please tell me whether or not you think it should be possible for a pregnant woman to obtain a legal abortion...” into “Por favor digame si pensa o no que una mujer embarazada deberia poder hacerse un aborto en forma legal...” was seen as possibly problematic. The Spanish translation for “should be possible...to obtain” was “deberia poder hacerse”. This was back translated in one case as “should be able to have” and as indicating that the women should be able to get an abortion for herself, as “ought to be able to make happen”, and “ought to have”. Thus, the Spanish appears to indicate more acceptance of abortion itself rather than just its legal availability. This in turn would most likely lower support for abortion. Moreover, while the “ought to have” is a mistranslation, it suggests the possibility that some respondents may have also misunderstood the item as actually recommending that a woman in the situation should obtain an abortion.

For general happiness and some of the abortion items, experiments are tentatively planned for the 2008 GSS with the items being administered to random half using their 2006 translations and revised translations that will attempt to more closely match the original English wordings.

In addition, to the overall differences in distributions examined in Table 4, attention was also focused on don't know responses (DKs). A scale was made of the number of DKs to 25 of the items appearing in Table 4. On average respondents gave only 0.8 DKs for these 25 items. DK levels did not vary by language ability/use on any of the four classification schemes. Thus, DK levels do not appear to be related to language, assimilation, or other factors.

Finally, one special battery of questions that were translated was a 10-item vocabulary test designed to measure verbal ability (Krosnick and Malhotra, 2007). It was not possible to attempt to develop a Spanish vocabulary test that matched the English in reliability and other psychometric properties. Instead the 10 English target words and each of the five possible responses for the word being defined were simply translated into Spanish. Table 5 shows there are statistically significant differences in vocabulary scores across language groups with the highest score among the English monolinguals followed by bilinguals in Spanish, Spanish monolinguals, and bilinguals in English. This order is surprising since (as discussed below) vocabulary has a substantial association with education. Mean years of schools completed (13.4) is highest among the English monolinguals which is consistent with their top vocabulary score. But Spanish monolinguals have the lowest education (8.5 years of schooling completed) yet score above the English bilinguals with a mean of 13.0 years of schooling. Also, unexpected was that the Spanish bilinguals outscored the English bilinguals even though they are lower in education (mean 12.0 vs. 13.0 years of schooling). This raises the possibility that the vocabulary test is easier in Spanish than in English.

A second comparison of vocabulary scores by language use/ability looked at the correlation between vocabulary and education (years of schooling completed). For non-Hispanics Pearson's r equaled .415, $prob.=.000$. For all Hispanics it was .317 ($prob.=.000$), for Hispanics interviewed in English it was .358 ($prob.=.000$), and for Hispanics interviewed in Spanish it was .416 ($prob.=.000$). Thus, vocabulary has a substantial correlation with education for all groups.

Comparability across Years

As indicated above, the expansion of the target population to include Spanish-speakers notably changed the number and composition of Hispanics in the GSS. For time series from the GSS as a whole and for Hispanics in particular to be strictly comparable, analysis needs to be restricted to the English-language population which means excluding from analysis non-English Hispanics in 2006 and subsequent years. This can be achieved by using one or both of the language ability measures described above: 1) the interviewer's assessment as to whether the interview could have been conducted in English and 2) the respondent's evaluation of whether they could have done the interview in English. By the interviewer measure on the whole sample (versions 1-7), 329 Hispanics were interviewed in English and 323 in Spanish. Of the Spanish cases interviewers judged that 47 could have been interviewed in English and thus 276 would be excluded as Spanish monolinguals not eligible under the previous English-only criteria. By the respondent measure 32 say they could have done the survey easily in English and 70 with some degree of difficulty. Thus, at least 222 and a maximum of 292 would be excluded as Spanish monolinguals by this measure. So far, it is not clear which of these approaches comes closest to duplicating the coverage of Hispanics using only English-language interviews. The best course for now is to try the various alternatives

when doing trends analysis. Preliminary analysis indicates that the different approaches produce similar adjustments. Analysis adding in the 2008 GSS results should help to clarify the best adjustment.

Conclusion

As anticipated, the adding of Spanish-language interviews notably increased the number and proportion of Hispanics in the GSS. In addition, the composition of the Hispanic population changed in several notable ways. The adding of Spanish-language interviews shows that Hispanics are notably less assimilated than indicated in the previous English-only samples and also differ on several other demographics. This variation across demographics is often, but not always, linked to the differences in level of assimilation across the language-use/ability groups. The analysis of non-demographics further indicates that Hispanics more often than not significantly differ across language-use/ability groups. However, no differences in levels of opinionation appears across groups. As such, the coverage of the Hispanic population is now more complete and its profile more accurate.

Further analysis of the differences across language-use/ability groups focusing on the English and Spanish bilinguals identifies a few items on which language effects may be occurring. These will be explored further by building Spanish-wording experiments into the 2008 GSS.

Table 1

Trends in Hispanic Coverage on GSS, 1996-2006

Hispanic	1996	1998	2000	2002	2004	2006	Prob
Main Ethnicity (ETHNIC)	7.4	7.2	8.3	8.8	10.4	16.8	.000
Any Hispanic (ETH1,ETH2,ETH3)	6.7	6.5	7.6	8.6	9.2	15.1	.000
Hispanic vs. Other (HISPANIC)	----	----	8.1	8.1	9.1	14.5	.000

Table 2

Changes in Profile of Hispanics, 2000-2006

Demographics	2000	2002	2004	2006	Prob.
% Male	43.9	43.4	48.3	48.3	.456
% Under 30	30.7	32.2	40.2	28.1	.033
% Married	53.9	50.9	49.4	52.6	.181
% No Children	27.2	29.0	34.4	26.2	.000
% Working Full Time	71.0	56.3	62.7	57.0	.131
% College Degree	13.8	16.4	17.8	12.0	.000
% Catholic	70.7	65.1	62.6	69.5	.095
% Both Parents from US	37.2	32.8	38.4	25.3	.000
% Born in US	53.2	60.0	69.5	36.9	.000
% Lived in US at Age 16	70.3	69.5	84.0	49.3	.000

Table 3

Socio-Demographics and Interview Variables by Language Use/Ability

Socio-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% Both Parents US					
First	86.0	24.5	11.7	14.1	.000
Second	“	“	9.9	15.6	.000
Third	79.2	20.0	11.7	14.1	.000
Fourth	“	“	9.9	15.6	.000
% Born US					
First	94.4	57.8	34.3	2.9	.000
Second	“	“	18.5	2.2	.000
Third	95.4	53.2	34.3	2.9	.000
Fourth	“	“	18.5	2.2	.000
% Lived US Age 16					
First	100.0	76.7	54.7	13.9	.000
Second	“	“	38.2	11.1	.000
Third	99.8	74.4	54.7	13.9	.000
Fourth	“	“	38.2	11.1	.000
% Catholic					
First	43.9	63.5	78.8	78.0	.000
Second	“	“	77.8	78.3	.000
Third	41.7	66.5	78.8	78.0	.000
Fourth	“	“	77.8	78.3	.000
% Non-entry States ^a					
First	65.0	28.3	1.5	41.6	.000
Second	“	“	11.9	47.2	.000
Third	56.3	27.4	1.5	41.6	.000
Fourth	“	“	11.9	47.2	.000
% Large Central City					
First	21.0	27.2	41.4	23.1	.262
Second	“	“	37.0	20.5	.031
Third	18.4	29.0	41.4	23.1	.092
Fourth	“	“	37.0	20.5	.008

Table 3 (continued)

Socio-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% White					
First	23.2	14.8	15.3	21.8	.002
Second	“	“	21.8	20.4	.003
Third	17.6	15.9	15.3	21.8	.009
Fourth	“	“	21.8	20.4	.016
% Male					
First	58.7	53.4	59.2	44.2	.002
Second	“	“	56.5	41.6	.066
Third	57.9	53.2	58.2	44.2	.009
Fourth	“	“	56.5	41.6	.016
% Less than 30					
First	53.6	34.0	27.6	20.3	.006
Second	“	“	24.3	19.9	.004
Third	53.3	31.9	27.4	20.3	.003
Fourth	“	“	24.3	19.9	.002
% Married					
First	28.8	46.6	58.4	58.1	.010
Second	“	“	62.5	56.1	.005
Third	26.2	49.5	58.4	58.1	.006
Fourth	“	“	62.5	56.1	.003
% No Children					
First	46.9	33.4	34.9	15.5	.003
Second	“	“	20.1	17.4	.003
Third	44.4	32.8	34.9	15.5	.004
Fourth	“	“	20.1	17.4	.003
% Working Full Time					
First	43.5	64.6	61.3	52.8	.000
Second	“	“	61.7	50.4	.000
Third	53.2	63.4	61.3	52.8	.000
Fourth	“	“	61.7	50.4	.000

Table 3 (continued)

Socio-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% College Degree					
First	23.5	16.2	10.9	5.5	.000
Second	“	“	8.8	5.1	.000
Third	22.5	15.8	10.9	5.5	.000
Fourth	“	“	8.8	5.1	.000
% Friendly (Interviewer)					
First	92.8	76.7	97.1	73.1	.024
Second	“	“	92.0	69.2	.002
Third	86.7	77.1	97.1	73.1	.040
Fourth	“	“	92.0	69.2	.040
% Comprehension Good (Interviewer)					
First	94.8	78.6	94.1	59.8	.000
Second	“	“	90.2	52.8	.000
Third	91.8	77.9	94.1	59.8	.000
Fourth	“	“	90.2	52.8	.000

^aEntry states are California, Arizona, New Mexico, Texas, Florida, New York, and New Jersey. Non-entry states are the remaining states and Washington, DC.

Table 4

Non-demographics by Language Use/Ability

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% for Death Penalty (CAPPUN)					
First	63.3	59.5	45.1	37.9	.000
Second	“	“	47.1	35.0	.000
Third	64.8	58.6	45.1	37.9	.000
Fourth	“	“	47.1	35.0	.000
% for Tough Courts (COURTS)					
First	68.7	56.5	70.8	44.1	.036
Second	“	“	56.7	43.8	.075
Third	62.0	57.6	70.8	44.1	.096
Fourth	“	“	56.7	43.8	.182
% for Gun Regulations (GUNLAW)					
First	66.9	84.3	93.8	84.1	.211
Second	“	“	91.2	82.7	.148
Third	76.5	82.9	93.8	84.1	.670
Fourth	“	“	91.2	82.7	.524
% More Spending for Social Security (NATSOC)					
First	52.3	65.6	51.2	49.6	.059
Second	“	“	49.1	50.2	.015
Third	52.6	67.0	51.2	49.6	.020
Fourth	“	“	49.1	50.2	.005
% More Spending for Parks (NATPARKS)					
First	33.8	43.5	43.8	36.1	.517
Second	“	“	40.0	35.8	.378
Third	46.6	39.8	43.8	36.1	.629
Fourth	“	“	40.0	35.8	.477

Table 4 (continued)

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% More Spending for Foreign Aid (NATAID)					
First	6.2	16.0	28.4	25.0	.000
Second	“	“	19.1	28.4	.000
Third	14.2	14.1	28.4	25.0	.000
Fourth	“	“	19.1	28.4	.000
% More Spending for Science (NATSCI)					
First	41.9	38.7	31.4	29.9	.003
Second	“	“	26.4	31.8	.023
Third	43.0	37.9	31.4	29.9	.003
Fourth	“	“	26.4	31.8	.003
% More Spending for Children (NATCHILD)					
First	50.4	53.5	67.8	50.8	.679
Second	“	“	53.8	53.0	.739
Third	49.5	54.2	67.8	50.8	.812
Fourth	“	“	53.8	53.0	.863
% Believing in Afterlife (POSTLIFE)					
First	68.2	68.2	80.2	51.7	.002
Second	“	“	66.3	50.8	.010
Third	69.6	67.7	80.2	51.7	.002
Fourth	“	“	66.3	50.8	.012
% Attending Church Weekly+ (ATTEND)					
First	29.1	18.6	13.2	16.5	.001
Second	“	“	13.2	17.3	.000
Third	24.2	19.2	13.2	16.5	.004
Fourth	“	“	13.2	17.3	.000

Table 4 (continued)

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% Middle/Upper Class (CLASS)					
First	41.9	33.8	29.3	15.9	.002
Second	“	“	22.5	15.5	.001
Third	41.4	33.1	29.3	15.9	.001
Fourth	“	“	22.5	15.5	.001
% Own Home (DWELOWN)					
First	60.0	51.4	35.0	43.7	.067
Second	“	“	45.3	40.7	.073
Third	51.1	53.8	35.0	43.7	.042
Fourth	“	“	45.3	40.7	.046
% Financially Satisfied (SATFIN)					
First	29.0	23.8	22.5	9.3	.000
Second	“	“	19.7	7.2	.000
Third	24.7	24.8	22.5	9.3	.000
Fourth	“	“	19.7	7.2	.000
% Better Financial Position (FINALTER)					
First	41.0	37.3	73.5	48.5	.000
Second	“	“	60.8	48.0	.000
Third	41.6	36.7	73.5	48.5	.000
Fourth	“	“	60.8	48.0	.000
% Very Satisfied with Job (SATJOB)					
First	31.0	53.0	55.9	36.1	.015
Second	“	“	50.9	33.2	.002
Third	38.8	53.0	55.9	36.1	.032
Fourth	“	“	50.9	33.2	.006

Table 4 (continued)

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% Very Happy (HAPPY)					
First	26.6	37.1	18.9	13.7	.000
Second	“	“	15.0	14.2	.000
Third	27.8	37.9	18.9	13.7	.000
Fourth	“	“	15.0	14.2	.000
% Health Excellent (HEALTH)					
First	52.4	27.2	33.6	12.0	.000
Second	“	“	26.8	9.3	.000
Third	44.6	26.8	33.6	12.0	.000
Fourth	“	“	26.8	9.3	.000
% Fear to Walk at Night (FEAR)					
First	22.3	37.0	55.4	50.0	.082
Second	“	“	46.8	52.0	.077
Third	22.4	39.0	55.4	50.0	.042
Fourth	“	“	46.8	50.0	.039
% Great Deal Confidence, Exec. Fed. Govt. (CONFED)					
First	20.5	15.4	19.3	13.9	.351
Second	“	“	10.9	16.8	.018
Third	14.6	17.0	19.3	13.9	.025
Fourth	“	“	10.9	16.8	.001
% Great Deal Confidence, Congress (CONLEGIS)					
First	26.9	11.7	27.1	20.0	.066
Second	“	“	23.5	19.8	.157
Third	19.1	13.0	27.1	20.0	.093
Fourth	“	“	23.5	19.8	.213

Table 4 (continued)

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% Great Deal of Confidence.					
Religion (CONCLERG)					
First	11.1	24.2	19.3	32.9	.447
Second	“	“	26.5	33.1	.510
Third	12.4	25.2	19.3	32.9	.060
Fourth	“	“	26.5	33.1	.073
% Homosexuality Always Wrong (HOMOSEX)					
First	44.9	51.0	73.9	68.4	.000
Second	“	“	55.6	74.1	.000
Third	48.0	50.6	73.9	68.4	.000
Fourth	“	“	55.6	74.1	.000
% Premarital Sex Always Wrong (PREMARSEX)					
First	21.0	13.4	11.4	26.5	.003
Second	“	“	20.6	38.2	.001
Third	22.4	12.1	11.4	26.5	.002
Fourth	“	“	20.6	38.2	.002
% Disagree Women Not Suited for Politics (FEPOL)					
First	87.1	74.9	66.0	54.2	.007
Second	“	“	60.4	54.4	.013
Third	78.6	76.9	66.0	54.2	.008
Fourth	“	“	60.4	54.4	.015
% For Abortion if Women Low Income (ABPOOR)					
First	50.0	50.1	6.6	20.9	.000
Second	“	“	15.1	21.2	.000
Third	54.3	48.4	6.6	20.9	.000
Fourth	“	“	15.1	21.1	.000

Table 4 (continued)

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% For Abortion for Any Reason (ABANY)					
First	50.0	42.7	21.2	15.7	.000
Second	“	“	19.6	15.0	.000
Third	46.5	43.1	21.2	15.7	.000
Fourth	“	“	19.6	15.0	.000
% For Abortion is Women's Health Threatened (ABHLTH)					
First	72.7	86.2	93.3	72.9	.000
Second	“	“	80.8	72.5	.000
Third	78.4	85.9	93.3	72.9	.009
Fourth	“	“	80.8	72.5	.007
% Minorities Should Work Way Up (WRKWAYUP)					
First	65.8	63.0	84.0	85.5	.004
Second	“	“	87.2	84.3	.003
Third	62.2	64.1	84.0	85.5	.016
Fourth	“	“	87.2	84.3	.012
% Close to Blacks -8+9 (CLOSEBLK)					
First	38.8	16.6	27.8	4.5	.000
Second	“	“	14.0	3.9	.000
Third	38.5	13.7	27.8	4.5	.000
Fourth	“	“	14.0	3.9	.000
% Close Whites – 8+9 (CLOSEWHT)					
First	48.1	28.6	15.4	12.8	.001
Second	“	“	17.0	11.5	.000
Third	38.8	29.6	15.4	12.8	.010
Fourth	“	“	17.0	11.5	.001

Table 4 (continued)

Non-Demographics	Language Use/Ability				Prob.
	English Only	English Spanish	Spanish English	Spanish Only	
% Allow Anti-Religionist Book (LIBATH)					
First	84.5	60.7	84.6	60.2	.137
Second	“	“	78.6	56.4	.010
Third	79.4	59.4	84.6	60.2	.124
Fourth	“	“	78.6	56.4	.009
% Allow Militarist to Teach College (COLMIL)					
First	62.2	48.9	33.6	30.4	.002
Second	“	“	25.7	32.7	.002
Third	59.2	48.3	33.6	30.4	.004
Fourth	“	“	25.7	32.7	.004
% Voted for President in 2000 (VOTE00)					
First	46.8	38.1	30.6	12.1	.000
Second	“	“	25.0	9.9	.000
Third	48.1	36.6	30.6	12.1	.000
Fourth	“	“	25.0	9.9	.000
% Voted for President in 2004 (VOTE04)					
First	77.9	50.5	45.3	11.4	.000
Second	“	“	36.0	6.9	.000
Third	75.1	48.3	45.3	11.4	.000
Fourth	“	“	36.0	6.9	.000
% Democratic (PARTYID)					
First	25.1	43.6	54.0	22.1	.000
Second	“	“	40.0	20.4	.000
Third	33.0	42.7	54.0	22.1	.000
Fourth	“	“	40.0	20.4	.000

Table 5

Vocabulary Score (WORDSUM) by Language Use/Ability

(Mean Number Correct)

	English Only	English Spanish	Spanish English	Spanish Only	Prob.
First	6.50	4.73	6.32	5.10	.000
Second	“	“	5.74	5.09	.001
Third	6.42	4.53	6.32	5.10	.000
Fourth	“	“	5.74	5.09	.000

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