ARTICLES

Who Are Latino Cell Only Respondents? A Comparative Look

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Survey Practice

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Background

According to the National Center for Health Statistics' National Health Interview Survey conducted between January and June, 2010, more than one in every four (26.6 percent) American homes has only cell phones and no landline phones. Nearly one in every six (15.9 percent) American homes has a landline yet receives all or almost all calls on cell phones. It was reported that Hispanic adults (34.7 percent) are more likely than non-Hispanic white adults (22.7 percent) or non-Hispanic black adults (28.5 percent) to live in cell phone only households.

Objectives

Given these and several other crucial survey findings from reputable sources, a study was designed by Encuesta, Inc. that explored related topics in order to assess:

- Do we really need to include a Hispanic targeted cell phone sample frame and cell phone only Hispanics sample when conducting surveys?
- Are cell phone only Hispanics different than other Hispanics or cell phone only non-Hispanics?
- Can exclusion of cell phone only Hispanics bias the survey results?

The study gathered a demographic profile and included a variety of topics such as healthcare, economic indicators, politics, and corporate responsibility.

Methodology

A nationally representative telephone survey was conducted with n=358 U.S. Hispanic and n=302 non-Hispanic (all other races and ethnicities in a representative mix) adults. Field/interviewing was between November 6 and 27, 2009. A proprietary random probability landline (random digit dialing [RDD] and listed Hispanic last name, n=443) and cell phone (RDD, n=217) frame sampling approach was used.

Interviews were conducted in English or Spanish, according to respondent preference. Of all interviews conducted among Hispanics, 56 percent were in Spanish and 44 percent were in English. Of the Hispanics interviewed, 46 percent were Spanish-Dominant, 39 percent were Bilingual, and 15 percent were English-Dominant according to the Encuesta, Inc. / Marin Acculturation Scale, a scale based on a series of questions that determine language usage in different situations.

The cumulative AAPOR RR3 for the household tier was: Hispanic .197, non-Hispanic .198, and cell phone tier .152. The cumulative AAPOR COOP3 for the household tier was: Hispanic .415, non-Hispanic .382, and cell phone tier .322. Overquotas were treated in the quota filled disposition as part of the calculations. No weighting was applied as a quota sample approach was employed, using for example age and gender distributions available from sources such as the Census and Pew Research Center. Different confidence levels are used for statistical testing to be able to maximize the ability to render differences especially in the case of small sample sizes.

Key Findings

Cell Phone Ownership

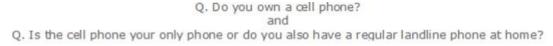
Cell phone ownership is higher among non-Hispanics compared to Hispanics. While 91 percent of non-Hispanics claim that they own a cell phone, 67 percent of Hispanics claim to own one.

Cell phone ownership is more common among younger Hispanics and non-Hispanics. While 69 percent of Hispanics who are under 55 years old say that they own a cell phone, 52 percent of Hispanics who are over 55 years old have a cell phone. Among non-Hispanics, 93 percent of those who are under 55 years old state that they own a cell phone versus 84 percent of those who are over 55 years old.

Cell Phone vs. Landline Phone

One in five Hispanics are cell phone only users, a proportion similar to non-Hispanics (Note: this study was originally conducted in 2009; this rate is climbing and now much more commonplace). A significant difference between Hispanics and non-Hispanics is evident in terms of landline phone ownership. While 33 percent of Hispanics only own a landline phone and do not have a cell phone, only 10 percent of non-Hispanics are landline only.

Hispanics who are between 18 and 34 years old are more likely to be cell phone only users than Hispanics who are 35 and older (32 percent versus 12 percent, respectively).



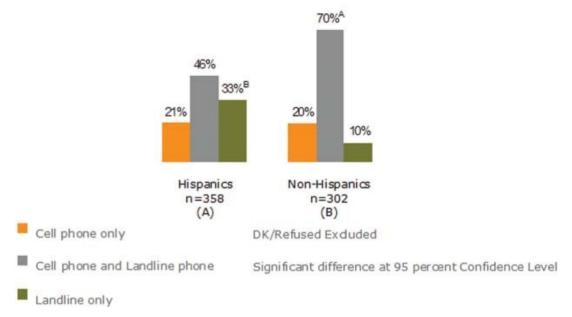


Figure 1

Cell Phone Only Hispanics versus the Rest of Hispanics and Cell Phone Only Non-Hispanics

Demographics

Striking differences exist between cell phone only Hispanics and the rest of Hispanics. Cell phone only Hispanics are more likely to be younger, U.S.-born, and single than the rest of Hispanics. Just like cell phone only Hispanics, cell phone only non-Hispanics are also more likely to be younger and single than the rest of non-Hispanics. Compared to cell phone only Hispanics, cell phone only non-Hispanics are significantly younger and more likely to be single.

Differences in socioeconomic status are also prevalent. Cell phone only Hispanics tend to have higher mean annual household income and more years of education compared to landline only Hispanics. Among non-Hispanics, cell phone only respondents are more likely to have more years of education than landline only respondents. Same is true for the comparison between cell phone only Hispanics and cell phone only non-Hispanics, even though cell phone only non-Hispanics have more years of education, the mean annual household income of cell phone only Hispanics and cell phone only non-Hispanics is similar.

Compared to cell phone only non-Hispanics, cell phone only Hispanics are more likely to be older, married, and live in an urban setting.

Table 1

	Hispanics		···	Non-Hispanics		
	Cell Phone Only	Cell Phone and Landline Phone	Landline Only	Cell Phone Only	Cell Phone and Landline Phone	Landline Only
	b0000004		1000001	b000004	<i></i>	1
	(A)	(B)	(C)	(D)	(E)	(F)
Base: Total Respondents	n=74	n=165	n=118	n=61	n=212	n=27
Mean Age	33.0D	39.5A	42.9AB	29.7	43.9BD	50.2CDE
Base: Total Respondents (DK/Ref Excluded)	n=51	n=128	n=90	n=45	n=153	n=18
Mean Household Income \$ (000)	36.1C	38.2C	24.8	39.6	51.8BD	29.4
	%	%	%	%	%	%
Base: Total Respondents (DK/Ref Excluded)	n=74	n=165	n=117	N/A	N/A	N/A
U.S. Born	45 BC	35C	15	N/A	N/A	N/A
Base: Total Respondents (DK/Ref Excluded)	n=73	n=160	n=116	n=61	n=206	n=26
Have Children in Household						
Under 18 Years Old	52D	70 ACE	60F	30	45DF	31
Base: Total Respondents (DK/Ref Excluded)	n=73	n=159	n=115	n=59	n=206	n=27
Single	47 BC	28	32	63AEF	28	33
Base: Total Respondents (DK/Ref Excluded)	n=71	n=160	n=114	n=61	n=207	n=27
Mean Years of Education	11.8C	11.8C	8.3	14.1AF	14.6BDF	12.5C

Significant difference at 80 percent Confidence Level

Table 2

	Cell Phone Only		
	Hispanics	Non-Hispanics	
	(A)	(B)	
Base: Total Respondents	n=74	n=61	
Mean Age	33.0B	29.7	
	%	%	
Base: Total Respondents (DK/Ref Excluded)	n=73	n=59	
Married	40B	27	
Base: Total Respondents (DK/Ref Excluded)	n=73	n=60	
Reside in Urban/Down town	67B	40	

Significant difference at 95 percent Confidence Level

Attitudes and Behaviors

As part of the study, Hispanics and non-Hispanics were asked about corporate responsibility, economic indicators, politics, healthcare, and their activities on cell phone. In all of these topics, significant differences between cell phone only Hispanics and cell phone only non-Hispanics as well as differences between cell phone only Hispanics and the rest of Hispanics are observed.

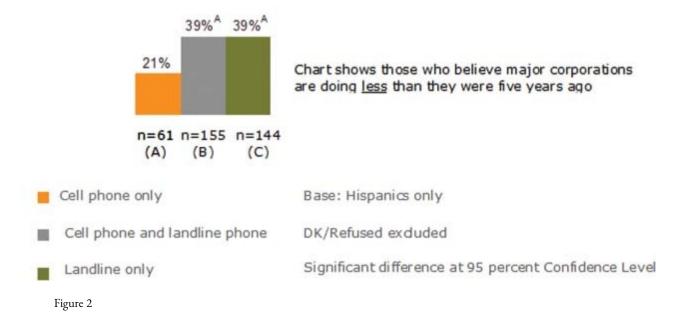
Cell phone only Hispanics are not only different demographically but also have distinct attitudes compared to the rest of Hispanics in several areas. One example is their attitudes in their views about corporate responsibility. Compared to the rest of Hispanics, cell phone only Hispanics are less likely to believe that major corporations in all industries are doing less than they were five years ago in terms of their involvement in the community (21 percent of cell phone only Hispanics think so versus 39 percent of Hispanic cell phone and landline phone users and 39 percent of landline only Hispanics). This difference does not exist among non-Hispanics, as 30 percent of cell phone only Hispanics think that major corporations are doing less than they were five years ago in their community compared to 33 percent of non-Hispanic cell phone and landline phone users and 29 percent of landline only non-Hispanics.

Another example where there are differences in attitudes is related to economic indicators. Cell phone only Hispanics are more optimistic than the rest of Hispanics with regards to the U.S. economy since they are more likely to think that the U.S. economy is going in the right direction. While 55 percent of cell phone only Hispanics believe that the U.S. economy is going in the right direction, 41 percent of Hispanic cell phone and landline phone users and 40 percent landline only Hispanics believe so. No significant difference is evident among cell phone only non-Hispanics and the rest of non-Hispanics in this regard. A total of 46 percent of cell phone only non-Hispanics think that the U.S. economy is going in the right direction compared to 42 percent of non-Hispanic cell phone and landline phone users and 38 percent of landline only non-Hispanics.

Another example was noted with regard to opinions related to healthcare. For example, compared to cell phone only non-Hispanics, cell phone only Hispanics are more likely to favor a requirement for all Americans to have health insurance with the government providing financial help for those who can't afford it (79 percent of cell phone only non-Hispanics compared to 91 percent of cell phone only Hispanics), to favor a requirement for employers to pay into a government healthcare fund if the employers do not provide health insurance to their employees (81 percent of cell phone only non-Hispanics compared to 90 percent of cell phone only Hispanics), and to raise taxes on families with incomes of more than \$350,000 as a way to pay for changes to the healthcare system (66 percent of cell phone only

Q. How would you rate major corporations in all industries today in terms of their involvement in your community?

Would you say they are doing more, less, or about the same as they were five years ago?



Q. Now thinking about the economy in general, do you think the U.S. economy is going in the right direction or wrong direction?

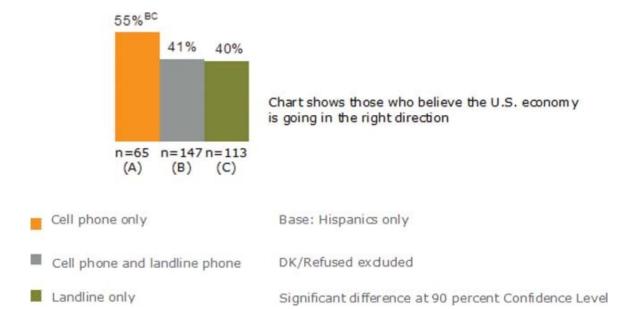


Figure 3

non-Hispanics versus 78 percent of cell phone only Hispanics). However, cell phone only Hispanics and cell phone only non-Hispanics have similar opinions in favoring a government health insurance plan to compete with private health insurance plans (73 percent versus 69 percent, respectively), requiring insurance companies to sell health coverage to people, even if

	Cell Phone Only	
	Hispanics	Non- Hispanics
	(A)	(B)
TABLE SHOWS THOSE WHO FAVOR		
	%	%
Base: Total Respondents (DK/Ref Exduded)	n=67	n=56
Requiring that all Americans have health insurance, with the government providing financial help for those who can't afford it	91B	79
Base: Total Respondents (DK/Ref Exduded)	n=66	n=55
A government health insurance plan to compete with private health insurance plans	73	69
Base: Total Respondents (DK/Ref Exduded)	n=72	n=60
Requiring insurance companies to sell health coverage to people, even if they have pre-existing medical conditions	93	90
Base: Total Respondents (DK/Ref Exduded)	n=70	n=58
Requiring employers to pay into a government healthcare fund if they do not provide health insurance to their employees	90B	81
Base: Total Respondents (DK/Ref Exduded)	n=68	n=56
Raising taxes on families with incomes of more than $\$350,000$ as a way to pay for changes to the healthcare system	78B	66
Base: Total Respondents (DK/Ref Exduded)	n=61	n=55
Limits on the amount of money that patients can collect in medical malpractice lawsuits	61	53

Significant difference at 80 percent Confidence Level.

they have pre-existing medical conditions (93 percent versus 90 percent), and limits on the amount of money that patients can collect in medical malpractice lawsuits (61 percent versus 53 percent).

Cell phone only Hispanics also have distinct political views compared to cell phone only non-Hispanics. They are less likely to be conservative and more likely to be moderate.

There are variations in the extent of cell phone usage for some activities, too. One activity where there are differences is recording video clips. Cell phone only Hispanics are more prone to recording video clips with their cell phones than cell phone only non-Hispanics (49 percent compared to 37 percent, respectively).

Special Topic: Acculturation

Demographics

Generally speaking and according to this study, compared to acculturated Hispanics (Bilingual and English-Dominant combined), Spanish-Dominants are more likely to be older, married, foreign-born, with less mean years of

Q. How would you describe your political views?

	Cell Phone Only		
	waaaaaaaaaaaaaaaaaaaa		
	Hispanics	Non-Hispanics	
	(A)	(B)	
	%	%	
Base: Respondents who are U.S. citizens (DK/Ref Exduded)	n=41	n=53	
Liberal	39	40	
Moderate	42B	28	
Conservative	20	32A	

Significant difference at 80 percent Confidence Level

Table 5

	Hispanics		
	Spanish-Dominant	Bilingual and English-Dominant Combined	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	(A)	(B)	
Base: Total Respondents	n=164	n=194	
Mean Age	43.2B	35.9	
Base: Total Respondents	n=125	n=144	
Mean Household Income \$ (000)	27.3	38.5A	
	%	%	
Base: Total Respondents	n=164	n=193	
U.S. Born	4	53A	
Base: Total Respondents	n=162	n=188	
Have Children in Household			
Under 18 Years Old	67	60	
Base: Total Respondents	n=160	n=187	
Single	23	42 A	
Married	67B	47	
Base: Total Respondents	n=160	n=185	
Mean Years of Education	8.4	12.5A	

education and annual household income. The proportion of acculturated Hispanics and Spanish-Dominant Hispanics who have children in household under 18 years old is comparable.

Cell Phone Ownership

Acculturated Hispanics are more likely to own a cell phone compared to Spanish-Dominant Hispanics (81 percent compared to 49 percent, respectively). Compared to Spanish-Dominant Hispanics, acculturated Hispanics are more likely to only have a cell phone (13 percent compared to 27 percent, respectively).

Attitudes and Behaviors

With respect to corporate responsibility, Spanish-Dominant Hispanics and acculturated Hispanics have similar points of view. While 38 percent of Spanish-Dominant Hispanics say that the major corporations in all industries today are doing less than they were five years ago in terms of their involvement in their community, a comparable portion, 33 percent, of acculturated Hispanics think the same.

Compared to Spanish-Dominant Hispanics, acculturated Hispanics seem to have differences in their views regarding some of the proposals that were considered to address healthcare. Acculturated Hispanics are significantly less likely than Spanish-Dominant Hispanics to favor a government health insurance plan to compete with private health insurance plans (72 percent compared to 88 percent, respectively), requiring employers to pay into a government healthcare fund if they do not provide health insurance to their employees (85 percent versus 95 percent), and limiting the amount of money that patients can collect in medical malpractice lawsuits (62 percent versus 75 percent). In some other proposals regarding healthcare, though, the proportion of Spanish-Dominants and acculturated Hispanics who favor the proposal is similar; such as requiring all Americans to have health insurance with the government providing financial help for those who can't afford it (95 percent of Spanish-Dominants versus 91 percent of acculturated Hispanics), requiring insurance companies to sell health coverage to people, even if they have pre-existing medical conditions (95 percent compared to 94 percent), and raising taxes on families with incomes of more than \$350,000 as a way to pay for changes to the healthcare system (78 percent compared to 75 percent).

Acculturated Hispanics are more optimistic about the state of the U.S. economy than Spanish-Dominant Hispanics. While 49 percent of acculturated Hispanics think the U.S. economy is going in the right direction, 37 percent of Spanish-Dominants think so. When it comes to political views, no significant differences between Spanish-Dominant Hispanics and acculturated Hispanics are noted.

Acculturated Hispanics seem to be more likely to use their cell phone for several activities compared to Spanish-Dominant Hispanics. With their cell phone, they take pictures, record video clips, play music or MP3s, record

Q. Now I would like to ask you about some of the specific proposals being considered to adress healthcare. Would you favor or oppose...?

	Hispanics	
	waamaanaanaanaanaanaanaanaanaanaanaanaana	
	Spanish- Dominant	Bilingual and English- Dominant Combined
	(A)	(B)
TABLE SHOWS THOSE WHO FAVOR		
	%	%
Base: Total Respondents (DK/Ref Exduded)	n=158	n=184
Requiring that all Americans have health insurance, with the government providing financial help for those who can't afford it	95	91
Base: Total Respondents (DK/Ref Exduded)	n=158	n=182
A government health insurance plan to compete with private health insurance plans	88B	72
Base: Total Respondents (DK/Ref Exduded)	n=161	n=191
Requiring insurance companies to sell health coverage to people, even if they have pre-existing medical conditions	95	94
Base: Total Respondents (DK/Ref Exduded)	n=162	n=185
Requiring employers to pay into a government healthcare fund if they do not provide health insurance to their employees	95B	85
Base: Total Respondents (DK/Ref Exduded)	n=156	n=187
Raising taxes on families with incomes of more than $\$350,000$ as a way to pay for changes to the healthcare system	78	75
Base: Total Respondents (DK/Ref Exduded)	n=148	n=178
Limits on the amount of money that patients can collect in medical malpractice lawsuits	75B	62

Significant difference at 95 percent Confidence Level

Q. How would you describe your political views?

	Hispanics		
	Spanish-Dominant Bilingual and English-Dominant C		
	(A)	(B)	
		мининининининининин	
	%	%	
Base: Respondents who are U.S. citizens (DK/Ref Exduded)	n=45	n=128	
Liberal	29	36	
Moderate	38	32	
Conservative	33	32	

Significant difference at 80 percent Confidence Level

video clips, play games, use the Internet, send or receive text messages and e-mail, use mobile maps for driving directions, and watch video or TV programs more than Spanish-Dominant Hispanics.

Q. Please tell me if you use your cell phone to do each of the following activities.

	Hispanics	
	Spanish- Dominant	Bilingual and English-Dominant Combined
	(A)	(B)
	%	%
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=81	n=158
Take pictures	47	72A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=80	n=158
Record video clips	21	46A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=80	n=158
Play games	21	45A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=81	n=158
Use the Internet	15	48A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=81	n=157
Send or receive text messages	52	82A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=81	n=158
Send or receive e-mail	21	44A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=78	n=158
Use mobile maps for driving directions	10	31A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=81	n=157
Watch video or TV programs	5	20A
Base: Respondents who own a cell phone (DK/Ref Excluded)	n=81	n=158
Play music or MP3s	20	43A

Significant difference at 95 percent Confidence Level

Conclusions

The findings indicate that excluding the cell phone only Hispanics when conducting research may introduce noncoverage error. A significant proportion of Hispanics are cell phone only with substantial demographic differences compared to the rest of Hispanics, especially landline only Hispanics, as well as to the cell phone only non-Hispanics. Leaving out this important population group may skew research results.

A weighting adjustment related to the cell phone only Hispanics' unique demographics may not be enough to overcome noncoverage error. This population group is different not only in terms of demographics but also

socioeconomics, acculturation, as well as attitudes and behaviors related to healthcare, political views, corporate responsibility, and adoption of technology. Hence, weighting practices relying on only demographics may not resolve the issue of bias on survey findings resulting from the exclusion of cell phone only Hispanics. The fast growing phenomenon among U.S. Hispanics in recent years and into the foreseen future must be addressed. Furthermore, if a propensity score weighting method is to be applied, then the knowledge base and survey source must be robust.

REFERENCES

Blumberg, S.J., and J.V. Luke. 2010. "Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January-June 2010." National Center for Health Statistics.