

## **Conducting Surveys In The Age of Wireless Technology: The Pros and Cons of Using Cell Phones**

An interesting and eye opening webinar led by Scott Keeter, Director of Survey Research for the Pew Research Center reveals there is a significant percentage of people in the United State who are only accessible by cell phones. Keeter includes examples of studies done by various health care and non-profit organizations showing this trend. By not including cell phones in surveys there is a chance for key groups to be under represented, especially young people and transient population segments. Leaving out information from these groups could result in a possibility of skewed survey estimates.

Over the last six years the number of people who utilize cell phones as their primary phone line has increased tremendously. According to a recent study done by the National Interview Survey the cell phone only adult population increased from less than 10% in 2004 to 28% in 2010. When looking at specific demographic groups in more detail, the increase in the number of cell phone only users between 2004 to 2010 is very revealing:

- Hispanics(Immigrant population) increased from 10% to 38%
- Young Adults (Ages of 18 to 24) increased from 10% to 46%
- Adults(Ages 25 to 29) increased from 10% to 54%

These statistics are a strong indicator that our society is moving away from landlines and the best way to reach someone is by cell phone. However, even with the increasing use of cell phones, Keeter does point out there are still individuals who are mostly accessible only by landlines. People who are 65 and older are less likely to be closely connected to only cell phones and are more easily reached at home.

When doing survey research it is important to include information from cell phones and landlines. In a real world example, Keeter shows results from a Likely Voter Estimate survey generated by the Pew Research Center from 2008 to 2010. This survey was used to determine which political candidate(Obama or McCain) for president would be most preferred by potential voters. In explaining the two different methods for collecting information, Keeter warns that bias can occur when omitting responses from cell phone only populations.

Taking a well round approach to survey research is good; however, there are a few drawbacks to conducting research with cell phone only users. Keeter mentions that when cell phones are called there is an increased chance of: getting people who are not eligible to participate(e.g., children under the age of 18), non-working numbers or encountering voicemail messages. Geographic information associated with a person's cell phone number may be erroneous. There is an increased chance that a person's cell phone area code does not correspond to their zip code information. Also there are ethical and legal concerns to consider before contacting people on their cell phones. Certain state laws such as the CAN SPAM Act prohibit people to be solicited by text messages. And cell phone users are even prohibited from talking on their phones while driving. The TCPA Act of 1991 makes it clear to companies that cell phone numbers cannot be either hand or automatically dialed without the consent of the cell phone user. Getting in contact with people on their cell phones needs to be done with a lot of forethought and careful planning.

Conducting research certainly can present challenges when it comes to deciding whether to include cell phone only populations in your data collection methods. Before deciding to use or not use cell phone only populations, here are some things to consider:

- For immigrant and younger populations, the cell phone may be the best means of reaching them – so include more of them.
- For some established and older populations, landlines may still be effective, so the cell phone only sample could be reduced.
- Cell phone only penetration tends to be less than 20% in the northeastern states whereas states in the southeastern and southwestern regions tend to show a greater chance of reaching someone by cell phone.(National Health Interview Survey & Center for Disease Control).

Even when data is collected there are some concerns about data quality. Both the interviewer and respondent can feel rushed to complete the interview due to time constraints. At times poor audio quality on cell phones can interfere with the rapport between the interviewer and the respondent. Respondents on cell phones answering questions are many times multi-tasking and might be distracted. If sensitive questions are asked and the respondent happens to be in a public place on a cell phone he or she may not be willing to provide the information that is needed. All of these concerns can affect the quality of data that is collected via a cell phone interview.

Despite these set backs in cell phone interviews, there are ways to account for any problems and it is still good to include cell phones in your data. Including some cell phone respondents with a landline may give you a more valid sample of the “cell mostly” population. A general approach to combining and weighting is a good way to work with data from cell phone and land line surveys. According to Keeter the Pew Research and Gallup are now using 60% landline and 40% cell phone for general public surveys, That mix yields 16-18% cell-only.

If utilizing cell phones or even landlines is not an option for survey research, here are some other methods to consider:

- Online Panels can provide coverage of some of the cell-only population
- Registration based samples (for voter and political surveys)
- Address based sampling(can be used for phone, internet, mail or in person interviewing)
  - USPA Delivery Sequence file(for household information)
  - Knowledge Networks, Nielsen and Arbitron audience measurement

Using any of the above methods can be helpful to anyone but will not always guarantee a 100% success rate in data capturing. Knowing when to combine these methods with the use of data collected from cell phones and landlines will provide researchers with a greater understanding of their target audiences.

The advent of cell phones and other wireless technologies has provided researchers with new ways to reach a wider variety of audiences. Collecting vital data from an incredible stream of information requires a strong understanding of survey research concepts, wireless technology and telecommunication laws. Communicating with audiences who are becoming mobile will be a challenge but one that is worth pursuing.

For more information on the webinar, feel free to contact Scott Keeter at [skeeter@pewresearch.org](mailto:skeeter@pewresearch.org) or view the Cell Phone Task Force Report by visiting the website for the American Association for Public Opinion Research at [www.aapor.org](http://www.aapor.org).

---

*Adding Cell Phones to Your Telephone Surveys*, American Association for Public Opinion Research Webinar Presented by Scott Keeter, Director of Survey Research Pew Research Center, August 24, 1011.