

Societal Impact Highlights



Researcher: Paula Vicente

Research Group: Research Methods

Case study: Using mobile phones to collect survey data

Summary

The increase in the penetration rates of mobile phones along with the increase in the percentage of mobile-phone-only households is influencing survey companies to include mobile phone numbers in supplement to the traditional fixed phone surveys, or even change to mobile phone surveys. The research by Paula Vicente shows that mobile phones-based research poses a set of methodological issues that are distinct from those associated with fixed phone surveys, and this impacts the way market survey companies work.

Underpinning research

The research by Vicente et al. (2009) and Vicente and Reis (2009) present evidence that support the need for including mobile phones in telephone surveys, firstly because mobile phone users are different from fixed phone users in variables relevant for market research – age, educational level, professional status, household size, marital status – and secondly, because mobile-only users have specific characteristics that make them differ from general mobile phone users, namely in terms of age, educational level, professional status and family life-cycle status.

Adoption of mobile phones to conduct telephone surveys requires methodological adaptations to be implemented in order to improve its efficiency. Research by Vicente (2015) reveals that establishing contact with mobile phone users is a greater challenge than obtaining a completed interview, which suggests that although mobile phone users always have their mobile phone

with them, this does not mean they are contactable at any time. The best times to call in telephone surveys are well documented and the calling protocols in telephone surveys do take into account what the literature prescribes in terms of time periods of calls and number of call attempts. In mobile phone surveys Vicente (2015) present evidence that the calling protocol in mobile phone surveys require adaptation not only in terms of number of call-backs to non-contacted numbers but also in terms of best times to call – days of the week are not all equally good to make contact and obtain an interview and more than 4 call-backs have a minor impact on the overall interview rate.

The mobility of the mobile phone may also change the way interviews are conducted. It is assumed in fixed phone surveys that all respondents are at home when being interviewed, but this may not be the case in mobile phone surveys. Research by Vicente and Lopes (2015) present evidence that at-home respondents and outside-home respondents are not demographically equivalent, namely in terms of sex, age, educational level, professional status and main contributor to household income. The demographic profile of outside-home respondents was found to be coherent with the profile of the so-called hard-to-reach people – male, young, highly educated - which shows that mobile phones help survey organizations reach specific subgroups of the population because they make it easier to contact potential respondents when they are not at home.

References to the research

- Vicente, P., Lopes, I. (2015) When should I call you? An analysis of differences in demographics and responses according to respondents' location in a mobile CATI survey, *Social Science Computer Review*, 33, 6, 766-778. DOI: 10.1177/0894439314560696.
- Vicente, P. (2015) The best times to call in a mobile phone survey, *International Journal of Market Research*, 57, 4, 555-570. DOI: 10.2501/IJMR-2014-047.
- Vicente, P. (2015) Mobile market research and the hard-to-reach consumers BRU-IUL Working Paper Series 2 15/05.
- Vicente, P., Reis, E. (2010) Marketing research with telephone surveys: is it time to change?, *Journal of Global Marketing*, 23, 4, 321-332. DOI: 10.1080/08911762.2010.504521.
- Vicente, P., Reis, E., Santos, M. (2009) Using mobile phones for survey research: a comparison with fixed phones, *International Journal of Market Research*, 51, 5, 613-633. DOI: 10.2501/S1470785309200852.

- Vicente, P., Reis, E. (2009) The mobile-only population in Portugal and its impact in a dual frame telephone survey, *Survey Methods Research*, 3, 2, 105-111.

Details of the impact

In the 1990s, telephone surveys became the dominant mode of data collection in countries with extensive telephone coverage. Phone surveys are based on the assumption that their sampling frame can provide good coverage of the target population. On one hand, this condition requires that the percentage of target population missing from the sampling frame is small, and on the other hand, the units excluded from the frame are not very different from those included. As a result of the appearance and development of mobile communications, we are currently moving away from the telephone coverage configuration that enabled telephone surveys to be developed. The rapid and pervasive dissemination of mobile phones is stimulating a trend towards the usage of mobile phone surveys in studies designed to be representative of the general population either to supplement or even to replace traditional telephone surveys. Mobile phone surveys offer the possibility of covering the part of the population that owns only a mobile phone and is therefore excluded from current fixed phone surveys.

International associations of survey research professionals, such as AAPOR–American Association for Public Opinion Research and ESOMAR–European Society for Opinion and Marketing Research acknowledge the need for telephone surveys methodology to be adapted to the specificities of mobile communications, therefore research conducted on the impact of using mobile phones to collect data on survey outcomes reflects on the standards and practices of survey companies who conduct telephone surveys. Both AAPOR and ESOMAR have already adapted their codes of conduct in order to accommodate the specificities of mobile communications: “AAPOR cell phone task force: new considerations for survey researchers when planning and conducting RDD and other telephone surveys in the US with respondents reached via cell phone numbers” (AAPOR 2010) and “ESOMAR Guideline for conducting survey research via mobile phone” (ESOMAR 2011).

The research by Vicente et al. (2009) and Vicente and Reis (2009) present evidence that support the need for including mobile phones in telephone surveys, but the adoption of mobile phones to conduct telephone surveys requires methodological adaptations in order to improve its efficiency, Vicente (2015).

These research findings have been communicated to a broad audience through a range of activities led by Vicente, including scientific dissemination and activities aimed at reaching wider audiences. Vicente and co-workers (Catarina Marques and Elizabeth Reis) from BRU-IUL organized one thematic session at the ISCTE-IUL (Department of Quantitative Methods for Business and Economics) with title "Não-Respostas nas Sondagens com Telemóveis" funded by FCT project entitled "Erro de não-resposta nas sondagens telefónicas com telemóveis: causas, efeitos e correcções", This thematic session was directed to professionals from market survey companies. Two of the major companies operating in Portugal were present - Marktest and GfK. These companies conduct mobile phone surveys and demonstrated interest in knowing more about Vicente's research in order to improve their survey practices. The session was also attended by ISCTE PhD students of Sociology interested in implementing data collection procedures using mobile phones and in understanding the major challenges mobile phones pose to social research.

Sources to corroborate the impact

The following events confirm the research impacts stated in this case study:

- The seminar "Não-Respostas nas Sondagens com Telemóveis" took place at ISCTE-IUL on the 26th of February 2015, within the scope of the FCT funded project (PTDC/EGE-GES/116934/2010) entitled "Erro de não-resposta nas sondagens telefónicas com telemóveis: causas, efeitos e correcções" (end 27.02.2015).

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- Vicente is invited speaker within the Seminar of Research Design in the ISCTE-IUL PhD Program on Tourism Management, with a communication titled "Using mobile phones to collect survey data" (2016).