Opportunities, Challenges and Applications
of the Mobile Research Methods

Daniele Toninelli, PhD[1]; **Robert Pinter**, PhD[2]; **Pablo de Pedraza**, PhD[3]

[1]University of Bergamo, [2]Corvinus University of Budapest/eNET Ltd, [3]University of Amsterdam/University of Salamanca

Abstract

This poster aims to introduce the forthcoming book "**Mobile Research Methods: Opportunities and challenges of mobile research methodologies**". The book has been developed by some members of the Task Force 19 within the framework of the WebDataNet research group.

In the book, a wide-ranging set of themes regarding **mobile research methods** are introduced and discussed. The book describes the main characteristics of these quickly spreading research methods as well as the opportunities and challenges associated with mobile research.
This poster summarizes the book's structure and the main content of its chapters.

Introduction: Importance of Mobile Research

Nowadays, data are continually being captured by several different types of devices. Among them, **mobile devices** (mobile phones, smartphones, tablets) are the most widespread. These devices have improved **Internet coverage**, worldwide (*Fig. 1*). Their popularity is due in part to their portability and to the fact they allow people to go online while doing other things (shopping, reading newspapers, participating in forums or in surveys, communicating with friends, and so on).

Consequently, mobile devices have great potential and are quickly gaining popularity as **data collection** tools. Applied research has only started exploring the new opportunities offered by such devices (e.g. they can be used in mobile Internet based surveys, in mobile ethnography, in location based research or in passive measurement). Moreover, mobile device usage is also already influencing the applicability of **traditional research methods** (for example: the representativeness of traditional landline samples is challenged by mobile-only respondents; mobile devices may be used in CAPI, Computer-Assisted Personal Interviews, instead of laptops; respondents in online surveys planned for fixed PCs may rather use mobile devices).
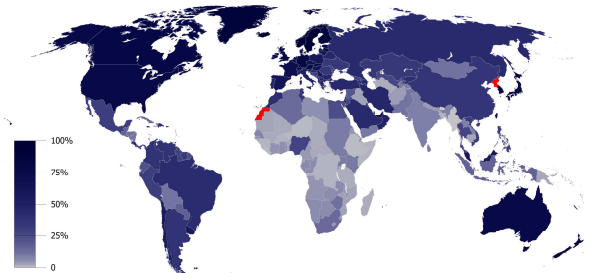

Figure 1. Internet penetration by country (% of population); updated Jan. 2012 (red: no statistics available); source: http://commons.wikimedia.org/wiki/File:Internet_Penetration.png.

Framework: WebDataNet TF19

WebDataNet was created in 2009 thanks to the support of the European Union programme for the Coordination of Science and Technology. It is comprised of a group of researchers who aim to explore **Web-based data Collection methods** for scientific usage and to study their methodological implications. The group grew to become a **multidisciplinary network** comprised of Web-based data collection experts from several institutions and from more than 35 countries (*WebDataNet 2010*; *Steinmetz et al. 2014*).

"**Mobile Research Methods**" is the outcome of **Task Force 19** (**TF19**), a working group within WebDataNet that was established in Mannheim (March, 2013). The TF19 main goal is to study **mobile research** methods systematically, comparing them to other traditional research methods. TF19 was the main actor in the conference on Mobile Research held in Larnaca (Cyprus) in April 2014.

Book: Target and Contribution

New methodological questions arise with the use of mobile devices as survey tools. But the impact of **mobile devices in research** is a relatively recent and still partly unexplored topic.

"**Mobile Research Methods**" explores some of these **new research questions**. These include: their main methodological possibilities and challenges, their integration with more traditional survey modes, the quality of collected data, the characteristics of those who use mobile devices to complete surveys (the so-called "unintended respondents"), the use of mobile in commercial market research, the representativeness of studies based on only the mobile-population, an analysis of the rapid spread of mobile devices in several countries, and so on. The book presents **research findings** from a wide range of countries and contexts.

This book follows the work of others who have published **books** about mobile research in the last few years, for example: *Maxl, Döring & Wallisch (2009)*, *Häder, Häder & Kühne (2012)*, *Poynter, Williams & York (2014)*, and *Appleton (2014)*. With "**Mobile Research Methods**" we aim to provide an **update** to these earlier books and provide a perspective on the issue that will appeal to a **wide audience**. For this reasons, the book involves a **multinational and inter-disciplinary team** that provide a variety of points of view on the topic.

This book is useful for **readers** interested in online research methods and for anybody who plans to use mobile devices for research purposes.

BOOK CONTENT By chapter

1) Use of mobile devices in research

a. "*The Utilisation of Mobile Technology and Approaches in Commercial Market Research*" (by **Ray Poynter**)
   - Focus: mobile technology's importance, main uses and challenges, most common approaches for commercial research.
b. "*Listening to Latin America and the Caribbean*" (by **Amparo Ballivian**, **João Pedro Azevedo**, **Will Durbin**)
   - Focus: quality, reliability and validity of survey data collected by means of mobile phones; main advantages and issues of mobile technology.
c. "*Mobile CATI: An Overview of Issues*" (by **Ana Slavec**, **Daniele Toninelli**)
   - Focus: review of the main challenges of mobile phone usage (mobile-CATI) for survey participation (legal and ethical issues, coverage, sources of error, adjustment procedures).

2) Quality of data collected by mobile devices

a. "*Comparison of response times between desktop and smartphone users*" (by **Ioannis Andreadis**)
   - Focus: survey completion time (item and total response times) comparing mobile methods (smartphones) and fixed-PC surveys.
b. "*A Meta-Analysis of Breakoff Rates in Mobile Web Surveys*" (by **Aigul Mavletova**, **Mick Couper**)
   - Focus: quality of data collected using mobile devices (break-off rates, optimization for mobile participation and survey settings).

3) Mobile Web survey participation

a. "*Who are the Internet users, mobile Internet users, and mobile-mostly Internet users?: demographic differences across Internet-use subgroups in the U.S.s*" (by **Christopher Antoun**)
   - Focus: characteristics of specific groups of respondents (mobile vs non-mobile/mobile-mostly vs PC mostly) and coverage issues.
b. "*Who has access to mobile devices in an online commercial panel? An analysis of potential respondents for mobile surveys*" (by **Melanie Revilla**, **Daniele Toninelli**, **Carlos Ochoa**, **Germán Loewe**)
   - Focus: coverage and availability of mobile devices (smartphones and tablets) in different countries; preferences and characteristics of respondents for devices used participating in Web surveys.
c. "*Willingness of online access panel members to participate in mobile application based research*" (by **Robert Pinter**)
   - Focus: use of smartphone applications in research; characteristics and willingness to participate in application-based research.

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References

❖ Toninelli, D., Pinter, R., de Pedraza, P. (2015). "Mobile Research Methods: Opportunities and challenges of mobile research methodologies". London: Ubiquity Press. DOI: http://dx.doi.org/10.5334/bar
○ Appleton, E. (2014) "In the Moment. Perspectives on Mobile Market Research". Published by Edward Appleton.
○ Häder, S., Häder, M., Kühne, M. (2012) "Telephone Surveys in Europe". Springer.
○ Maxl, E., Döring, N., Wallisch, A. (2009) "Mobile Market Research". Herbert Von Halem Verlag.
○ Poynter, R., Williams, N., York, S. (2014) "The Handbook of Mobile Market Research: Tools and Techniques for Market Researchers". John Wiley & Sons Ltd.
○ Steinmetz, S. et al. (2014). "WEBDATANET: Innovation and Quality in Web-Based Data Collection". International Journal of Internet Science, Vol. 9, Issue 1.
○ WebDataNet (2010). "Memorandum of European Concerted Research Action - COST Action IS1004: WEBDATANET: web based data-collection - methodological challenges, solutions and implementations". Available at: http://webdatanet.cbs.dk/images/presentations/mou%20is1004-webdatanet.pdf.

Contacts

Daniele Toninelli
University of Bergamo
Email: daniele.toninelli@unibg.it
Website: www.unibg.it
Phone: +39.035.20.52.520

Robert Pinter
Corvinus University of Budapest; eNET
Email: robert.pinter@enet.hu
Website: www.enet.hu
Phone: +36.30.999.65.95

Pablo de Pedraza
University of Amsterdam/University of Salamanca
Email: P.dePedraza@uva.nl
Website: http://www.uva.nl/en/home
Phone: +31.(0)2.05.257.147