Chapter 19
Fieldwork Monitoring in Telephone Surveys

Patrick Schmich and Franziska Jentsch

19.1 Introduction

In Germany, the telephone as a mode is still most commonly used for collecting quantitative data in empirical market and social research (e.g. www.adm-ev.de). Although a number of problems – such as declining response rates (e.g. Curtin et al. 2005) and a constantly changing telecommunications market – make it necessary to try out new access routes (e.g. online surveys), and although these are increasingly being used, there is a lack of methods for generating samples for representative online surveys (Faas 2003, Couper and Coutts 2006, AAPOR 2010). While online surveys are a quick and inexpensive instrument (for example, for questioning the members of an access panel), telephone and randomly generated samples for telephone surveys still play an important role for low-cost, population-based representative surveys.

CATI management comprises many different areas, such as drawing a sample that represents the respective population, constant monitoring of fieldwork and the recruitment and supervision of interviewers. Good CATI management thus forms the foundation for valid data.

There are currently few analyses based on methodological data collected during fieldwork in telephone studies. This is partly due to the fact that only a limited amount of data is made available to the users. For example, practice-oriented analyses of large samples are often relatively old (Glemser 2002), since those who commission such studies are primarily interested in the outcome rather than the method used to obtain it. In addition, it is necessary to constantly evaluate the knowledge gained to date because of the highly dynamic developments in the field of telecommunications.

The aim of this study is to, on the one hand, present data and analyses and, on the other hand, to update and review existing knowledge. For this purpose, we will describe selected methodological parameters from the survey “German Health Update” (GEDA) 2010. GEDA is conducted in regular “waves” by the Robert Koch Institute (RKI) on behalf of the German Federal Ministry of Health (BMG).
This chapter presents the framework conditions and broad parameters of fieldwork management on the basis of the methods developed by Gabler and Häder (Häder and Gabler 1998) and compares these with respective results from the literature. In addition, the study aims to put forward ideas for further analyses and practical instructions for conducting similarly designed studies.

### 19.2 Key Data on the Study

The GEDA 2010 study complements the examination surveys – “German Health Interview and Examination Survey for Adults (DEGS)” and the “National Health Interview and Examination Survey for Children and Adolescents (KiGGS)” – which are conducted by the RKI within the context of health monitoring. Data from the regularly repeated GEDA study are used to continuously observe developments related to certain diseases as well as the population's health- and risk-related behavior. This information forms the basis for quickly identifying health trends in the population or in population groups for both health reporting and government health policy. The size of the sample also allows regionalized or deeply structured context analyses (Kurth et al. 2009).

The study “German Health Update” (GEDA 2010) is a representative survey of the resident German-speaking adult population living in private households who have a fixed telephone line. The survey is conducted as a computer-assisted telephone interview (CATI). The telephone-number sample is created using the Gabler-Häder Design (Häder and Gabler 1999); it is based on phone numbers taken from public telephone books. In order to include in the generated number pool also people whose numbers cannot be found in any of these directories, the Waksberg method (Waksberg 1978), which is primarily used for telephone interviews in the USA, was adapted to the situation in Germany. This makes it possible to obtain a randomly generated number pool consisting of both published and non-published phone numbers. In order to give each element of the population the same theoretical likelihood of being interviewed, an additional selection of target persons is carried out at the household level, using the “last-birthday method”. Attempts are also made to avoid distortions caused, for example, by the different accessibility of individual household members.

During GEDA 2010's 10-month field period, 138 interviewers conducted a total of 22,076 interviews in 353 shifts (each shift lasting about four hours) on 223 days based on a total of 215,513 gross telephone numbers (see Table 19.1).

The data were collected in the Robert Koch Institute's telephone laboratory, which has a total of 40 interviewer and three supervisor workstations. Calls were made six days a week (Monday to Saturday) in a total of ten shifts (see section 19.3.4). The methodology used in GEDA 2010 builds on experience gathered in previous telephone health surveys (Kohler et al. 2005, RKI 2011).