

# Chapter 7

## The Roles of Quantitative and Qualitative Data Gathering in Survey Research

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### ABSTRACT

*This chapter critically explores the tendency of research methods books to discuss survey research under the header of quantitative research approaches. It starts by providing a brief history on survey research, sets out core definitions, and situates survey research in the current methodological literature. It explains the difference between cross-sectional and longitudinal data and provides insight on the steps to undertake when designing a research project. The chapter then explores the nature of specific survey questions and the differences in format based on whether one is gathering qualitative versus quantitative data. Finally, the chapter explores the impact of survey methodologies and provides insight in the format of questions to be used during telephone, face-to-face, or self-completing surveys.*

### INTRODUCTION

This chapter explores the extent to which social sciences surveys can be used to measure quantitative as well as qualitative data. This chapter begins by focussing on the history and definitions of surveys and on the predominantly quantitative nature of the survey literature. References are made to differences between deductive and inductive reasoning and underpinning philosophical assumptions in order to situate survey research in dominant methodological discourses. Secondly, a discussion is introduced on how to write survey questions and on the quantitative versus qualitative nature of the specific questions being asked. Special attention is given to when it is appropriate to introduce questions measuring qualitative information. Thirdly, this chapter focuses on the different survey methods such as self-completion, telephone or face-to-face, and the implications these methods have on the format of the questions that can be asked. This chapter ends with a set of overarching conclusions.

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## **WHAT IS A SURVEY?**

### **The History of Survey Research**

It is difficult to provide one straightforward definition of the term ‘survey’ and the meaning of term has been shifting during the previous decades (Ornstein, 2013; Andres, 2014). Charles Booth has been named as the founding father of empiricism in the social sciences, and his work on poverty and unemployment in London in the late 1800s has informed the notion of survey research in the previous centuries (O’Day & Englander, 1993). Census data have been collected, mainly in the Scandinavian countries, the USA and Canada since around 1800 (Anderson, 1988). Booth wanted to know ‘exactly how the poor lived, exactly how disconnected they were, how concretely they might be helped’ (Fried & Elman, 1968, xvi, in Andres, 2014). The way in which Booth conducted his survey research would nowadays be described in terms of ‘methodological triangulation’. Not only did he explore and analyse Census data, he engaged in qualitative analysis of participants’ behaviour, worked with maps and topographical information, and interacted with poor people to which he rented a room in his house. The way in which he ‘surveyed’ the social problem of poverty and unemployment in the late 19th Century contrasts with the modern definitions of survey research, which are defined in a narrower way. While survey research used to be mainly conducted with the aim to improve social situations, survey research moved from social to professional settings, with the aim to engage in objective scholarly research. The three keywords became ‘observation’, ‘fact-collecting’ and ‘quantification’ (Andres, 2014). Until now, definitions of survey research tend to be dominated by the need for standardised and generalizable information, preferably using a probability sample (Jansen, 2010). While Andres (2014) focuses on the history of survey research going back to the 1800s, Groves (2011) situates survey research in the quantitative tradition and recognises three distinct eras in modern time. The first era, from 1930 – 1960, is what he calls the era of invention, largely based on an article published by Neyman (1934) discussing the use of probability sampling, together with an increasing need to ‘measure’ phenomenon’s and to introduce statistics on top of text quotes (Converse, 2009). It is also in the beginning of this period that the power of measuring variables like attitudes was developed based on scales (Likert, 1929). Monitoring the status of society during the World War has also played an important role in the development of measurement and sampling strategies. During this era, the number of respondents was usually low, and surveys rather small-scale, mainly because data collection had to be undertaken using face-to-face interviews. In general, this era was used to develop the basis of the sample survey, as an efficient way to inform decision-makers on the distributions within and the needs of the population, while surveys were more and more used by business people to gain insight in the needs and desires of consumers. The second era, from 1960 – 1990, is what Groves (2011) calls the era of expansion. This era is characterised by the increase of technology, and the mode of face-to-face interviews widely shifted towards data collection through telephone interviews. Computers were introduced to produce descriptive statistics, based on data collected on punch cards. The private sector was first to make this transition towards technology supported survey research, before it was also introduced in academia and the public sector. Groves (2011) mentions that sample survey research in universities in the United States boomed in the later 1960s, but that by the late 1980s, academic interests had moved from developing methods to simply analysing primary or secondary survey data. One of the major changes that took place during this period was an increasing percentage of non-response or impartially completed questionnaires – e.g. by respondents hanging up the phone – but also the need to reduce the length of questionnaires was recognised, as telephone interviews did not seem to work out with the same

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