Chapter V

Social Issues in the Administration of Information Systems
Survey Research

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ABSTRACT

Survey responses differ between direct paper and pencil (manual) administration and Internet-based (electronic) survey data collection methods. Social dynamics (issues) play an important role in influencing respondent participation. A review of the existing literature suggests that the medium and administration context affect differences in instrument performance parameters, i.e., response rate, participation ease, attractiveness of survey, novelty effect, administrative costs, response flexibility, response time, population size, sample bias, instrument validity, the management of non-response data, and response error. This chapter attempts to identify, describe and map the differences between survey data collection media as a function of selected social variables.
INTRODUCTION

The purpose of this chapter is to compare and contrast survey research administration between direct paper and pencil (manual) and Internet-based (electronic) survey data collection methods (Lippert, 2002). Social dynamics play an important role in influencing respondent participation. A review of the existing literature suggests that the medium and administration context affect differences in survey instrument performance parameters, i.e., response rate, participation ease, attractiveness of survey, novelty effect, administrative costs, response flexibility, response time, population size, sample bias, instrument validity, the management of non-response data, and response error. This chapter attempts to identify, describe and map the differences between survey data collection media as a function of selected social variables.

Differences exist between electronically based and manually administered surveys. Responses to survey questions can be affected by the survey medium (Ayidiya & McClendon, 1990), and can result in response rate differences (Heberlein & Baumgartner, 1978). Response rates by different data collection methods exhibit high variance. Internet-based surveys can produce double-digit response rates (McCooy, 2000). Ease of use, as reported by Cook, Heath and Thompson (2000), is cited as a response enabler when answering Web-based surveys. Novelty effects of Internet-based surveys encourage participant response by attracting users to investigate available features (Dillman, Torora, Conradt & Bowker, 1998). Administrative costs for Internet-based surveys are less than those associated with paper administration (Parker, 1999). Greater response flexibility as a function of respondent options is increased in paper-based administrations (Matz, 1999). Web-based surveys offer reduced response time from initial distribution to time of reply (Oppermann, 1995). Large and geo-spatially dispersed populations of respondents are more efficiently accessed through Web-based surveys (Mehta & Sivadas, 1995; Schmidt, 1997a). Respondents of Web-based surveys exhibit self-selection bias due to participation of only technology-active individuals (Gorman, 2000). Content validity maybe reduced through Internet data collection formats (Dillman & Bowker, 1996). Internet-based data collection permits greater response reliability (Quality Progress, 1999). Higher frequencies of non-response data are found with Web-based formats (Schmidt, 1997a). Response error represents a class of variables that includes various data response problems (Fiske, 1971; Subman & Bradburn, 1974).

Stanton (1998) examined three parameters or problems in Web-based applications of survey research — participant motivation, response consistency and sampling problems. Participant motivation is a series of phenomena that address a respondent’s willingness or rationale for participating in a data collection effort. Response consistency is the internal reliability of responses for a fixed population — e.g., sampling all women with doctorates born after 1962 suggests that there will be similarity among the participants’ responses. Sampling problems include the ability