Chapter 8
Making Sense of the E-Service Quality Literature: Sampling, Undergraduates, and Replications

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ABSTRACT
There is little research that addresses methodological issues in the context of e-service quality. This study content analyzed e-service quality articles published between 2003 and 2013 to assess methodological issues in this field. Sampling methods (probability vs. nonprobability), use of undergraduates (UGs) in research, service context, geographic location, demographic information, research strategy, and justification for the use of UGs were identified as key variables. In addition, the authors argued for the need to conduct replications in research on e-service quality. A total of 72 research articles on e-service and e-service quality were content analyzed. All articles focused primarily on e-service quality in the context of B2C e-retailing. On the basis of the findings the present study provides several suggestions that should receive close attention from e-service quality researchers.

INTRODUCTION
Services are important to the U.S. economy. In 2011 76.7% of the U.S. economy was classified as services (“Service economy growth,” n.d.) and in 2012 service firms employed nearly 90% of the U.S. workforce (“Service sector,” 2012). In this environment, many academics in a variety of disciplines such as marketing, hospitality, information technology, and consumer studies have focused their research on the nature of services and service quality.

Electronic service (e-service) is defined as “interactive services that are delivered on the Internet using advanced telecommunications, information, and multimedia technologies” (Boyer, Hallowell,
Santos (2003) defined e-service quality as “consumers’ overall evaluation and judgment of the excellence and quality of e-service offerings in the virtual marketplace” (p. 235). Service quality began to attract scholarly attention in the late 1970s (Rust, 2004). Following the birth of Amazon.com and the subsequent growth of e-commerce, service quality researchers turned their research efforts to assessing e-service quality (Kim, Kim, & Kandampully, 2011; Loiacano, Watson, & Goodhue, 2002; Wolfinbarger & Gilly, 2003; Zeithaml, Parasuraman, & Malhotra, 2002). Scholars who study e-service quality are from various disciplines such as management, information technology, hospitality, marketing, economics, international business, and consumer studies to name a few (e.g., Barrutia, Charterina, & Gilsanz, 2009; Bilgihan, Sukhu, & Kandampully, 2013; Kim, Kim, & Lennon, 2011; Rolland & Freeman, 2010). Given the diversity of disciplines represented, e-service quality researchers have employed diverse theories, research strategies, data collection techniques, analyses, and participants.

As a result of this diversity of backgrounds, researchers may disagree on aspects of e-service quality research such as the importance of using probability samples. Probability samples are those for which it is possible to specify the likelihood that each participant has of being selected to participate in the research from a larger population (Bailey, 1994). Simple random sampling, cluster sampling, and stratified systematic random sampling are all types of probability sampling. According to Creswell (1994), random (i.e., probability) sampling “is the most rigorous, enabling one to generalize the findings of a study to the entire population” (p. 120). Hence the use of probability sampling provides some assurance to the researcher that the sample is representative of the population from which it is drawn (Touliatos & Compton, 1988).

However, nonprobability samples are widely used in the social sciences (Levy & Lemeshow, 1999). For nonprobability sampling the likelihood that a participant will be selected from a larger population is unknown. Some types of nonprobability sampling include convenience sampling, purposive sampling, snowball sampling, and quota sampling. Sample representativeness is always a concern in social sciences due to wide variation among people. Thus, probability sampling may be an issue to scholars conducting research in e-service quality.

Another issue in the social sciences is the reliance on undergraduates (UGs) as research participants (Bello, Leung, Radebaugh, Tung, & Witteloostuijn, 2009; Bodner, 2006; Gordon, Slade, & Schmitt, 1986; Liyanarachchi, 2007; Ok, Shanklin, & Back, 2008; Ro & Kubickova, 2013). In these studies, typically the UGs have not been randomly selected, so that they comprise nonprobability samples (Johnson, Lennon, Mun, Koo, Choi, & Koo, 2013; Lennon, Burns, & Rowold, 1995). Using UGs as participants has been criticized for many reasons. For example, UGs may be more susceptible to peer influence and have less developed cognitive structures than other adults (Park & Lessig, 1977; Szymanski & Henard, 2001). Since most samples of UGs constitute nonprobability samples, the lack of representativeness is also an issue in research with UGs. Thus, the use of UG research participants may be concerning to researchers of e-service quality.

In this paper we report on a content analysis of research on e-service and e-service quality published between 2003 and 2013. Our research purpose was descriptive and entailed assessing e-service quality research in terms of use of probability sampling, UG participation in the research, service context, and other sample characteristics. Within only those studies utilizing UGs as research participants, our purposes were to assess: the use of probability sampling, service context, sample characteristics, and justification for the use of UG participants. Finally, we argue for the need to conduct replications in research on e-service quality.