Influence of Age and Genders on the Relationship between Computer Self-Efficacy and Information Privacy Concerns

Mohammad A. Awwal, Rider University, USA

ABSTRACT

The Internet and the growth of Information Technology (IT) and their enhanced capabilities to collect personal information have given rise to many privacy issues. This study investigated the differences among different age groups and between genders regarding information privacy concerns and their relationships with computer self-efficacy. The study used a paper-based survey instrument and collected data by using the mall-intercept approach in which individuals were asked to fill out the survey. The target population of this study was the 400 residents of the state of New Jersey, U.S.A. in three age groups: 18-25, 26-50, and 50+. The results show that only male and age group of 26-50 have positive and significant relationship between computer self-efficacy and information privacy concerns. The findings of this study can help corporations to improve e-commerce by targeting privacy policy-making efforts to address the explicit areas of consumer privacy concern.

Keywords: Computer Self-Efficacy, E-Commerce, Information Privacy Concerns, Internet Users’ Privacy Concerns, Self-Efficacy

INTRODUCTION

Consumer privacy has become a “front burner” issue for policy makers (Norberg, Horne, & Horne, 2007). Unauthorized access of personal information may result in identity theft, stalking, harassment, and other invasions of privacy. The consumers are concerned that their personal information will be used for purposes other than those for which it was collected (Turner & Dasgupta, 2003). Pollach (2006) found that users’ privacy concerns were well founded and most of the companies through their privacy policy statements admitted to the very practices (data collection and data sharing) about which consumers were concerned. Information privacy concerns are impediments to broad-scale adoption of the Internet for purchasing decisions. The winning companies in electronic commerce will be those who understand and respond to consumers’ privacy concerns (Luo & Seyedian, 2004).

Many researchers (Zukowski & Brown, 2007; O’Neil, 2001; Sheehan, 1999) investigated relationships between privacy concerns...
and various demographic factors (age, gender, income level, and education). Little published research exists that relates an individual’s computer self-efficacy with information privacy concerns. To date, there is only one study (White, Shah, Cook, & Mendez, 2008) which examined relationship between information privacy concern and computer self-efficacy. This research fills the gap in the academic literature by examining the influence of age and gender on the relationship between computer self-efficacy and information privacy concerns as the public’s, nonprofit, private sectors’, and governments’ interest in information privacy continued to grow. It added new knowledge by investigating the correlation differences between information privacy concerns and computer self-efficacy among different age groups and between genders. The results of this study can help corporations to improve e-commerce by targeting privacy protection tools to address the explicit areas of consumers’ privacy concerns. For researchers, this study addressed the relationships among the antecedents and consequences of information privacy concern and computer self-efficacy.

**PROBLEM STATEMENT**

The purpose of this study is to investigate the differences among different age groups (18-25, 26-50, and 50+) and between genders regarding information privacy concerns and their relationships with computer self-efficacy. Computer self-efficacy has been shown to be an effective predictor of behavioral intention (Ball, 2008) and a critical predictor of an individual’s attitude about information technology and usage behaviors (Marakas, Yi, & Johnson, 1998). Consumers’ privacy concerns are complex and practitioners and researchers need to understand antecedents to consumers’ concerns regarding information privacy (Stewart & Segars, 2002). Several studies (Malhotra, Kim, & Agarwal, 2004; Metzger, 2004; Phelps, Nowak, & Ferrel, 2000; Anton, Earp, He, Stufflebeam, Bolchini, & Jensen, 2004) have shown that if consumers’ privacy concerns are not understood and mitigated, they can have negative consequences on e-commerce growth and Internet purchases. White et al. (2008) studied the relationship between computer self-efficacy and information privacy concerns. Their study focused on computer self-efficacy and its relationship with four information privacy components (collection of data, errors (data integrity), unauthorized secondary use, and improper access to data) as defined by Smith, Milberg, and Burke (1996). They did not study the differences of relationships between information privacy concerns and computer self-efficacy among different age groups and genders. White et al. (2008) stressed the need to extend their work by examining the differences of the relationships among different age groups and between genders. The goal of this study is to extend their work by investigating differences among different age groups and between genders regarding information privacy concerns and their relationships with computer self-efficacy.

**RESEARCH QUESTIONS**

The variables of the research model were: computer self-efficacy (CSE), information privacy concerns (IPC), age group, and gender. The IPC was a dependent variable and the CSE was an independent variable for this study. The age group and gender were the moderator variables. Figure 1 shows the research model depicting this relationship.

The two research questions that this study addressed were:

1. *Is there any difference among different age groups (18-25, 26-50, 50+) with respect to their relationship between computer self-efficacy and information privacy concerns?*
2. *Is there any difference between genders with respect to their relationship between computer self-efficacy and information privacy concerns?*
Open Source and Free E-Learning Tools Useful in LIS Education