Chapter 4
Privacy Perceptions of Older Adults when Using Social Media Technologies

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ABSTRACT
Social media technologies represent an emerging means by which older adults can access health and community information, engage in peer-to-peer information sharing, and also potentially decrease social isolation. Privacy concerns, however, have been consistently identified as a barrier for older adults’ use of the Web and social media technologies. The authors conduct a preliminary study involving 150 older adult participants, investigating their use and perceptions of social media technologies. The trial involved first providing the participants with brief training in three common social media technologies: Facebook, Twitter, and Skype. The authors carried out a quantitative and qualitative analysis of the participant’s use and privacy perceptions of these technologies. Overall, the results are promising as to the potential to address privacy concerns to enable older adults to further utilize these technologies for improved mental, physical, and social health. Implications for future research and usage within the older adult community are also discussed.

INTRODUCTION
Social media technologies, such as Facebook and Twitter, have experienced widespread uptake by users worldwide since their relatively recent introduction as platforms for online peer-to-peer communication and information sharing. More recently, the utilization of social media technologies for health information dissemination has been explored (Steele, 2011) and it has been found that social media postings do refer to many types of health-related information (Dumbrell and Steele, 2013). According to recent reports such as Zickuhr and Madden (2012), there has been a large increase in the proportion of older adults (aged 55 and over) that are adopting social media technologies and...
using them as a means of socially connecting with others. In addition, with the ageing population of the world (and thus Internet users), it can be noted that the use of these media for older adults to access health information can potentially provide benefits in relation to physical and mental health and general well being for individuals.

Whilst there are many potential benefits that could result from the use of social media, there are issues that must be explored that possibly affect older adult’s willingness to use these technologies. One of these major issues is concerns about privacy, which has been consistently identified as a barrier for older adult use of the Internet and social media systems. These privacy concerns have also been investigated with online users and the access and sharing of digital health information (Fink and Beck, 2013; Park, 2013). In addition, the recent revelations of Web-based breaches of privacy, as well as the development of laws in relation to online privacy, can potentially affect the perceptions and uptake of use of these technologies by older adults. Therefore further research must be carried out to uncover the specific reasons for the concerns and barriers affecting use.

In this chapter we describe results from a study that was carried out to identify and analyze the effects of introducing social media technologies to an older adult participant sample group (aged 55 and over). The broader goal of this study was to consider whether or not the use of these technologies had any impact on the levels of social isolation and loneliness of older adults. With this as an underlying context, the purpose of this chapter is to explore and analyze the privacy perceptions of these older adults when using Twitter, Facebook and Skype within this study. The study was carried out involving 150 older adult participants, who were free to use these different technologies during a six-month trial period after they were provided with initial training. Quantitative data was gathered from the pre and post questionnaires, and results such as security perceptions and usage rankings of the respective social media technologies were identified. From the qualitative data collected from both questionnaires and the focus groups, recurring themes were identified, and sub-themes within these themes were also identified. These themes and sub-themes are also compared to the existing literature to assist in analyzing our findings as well as to identify current gaps in knowledge on this area.

**BACKGROUND**

It is believed that technology usage and adoption amongst older adults will continue to grow, as the majority of baby boomers have already used computers (Harkin and Huber 2004), and are also likely to have more exposure and experience with information technologies. However previous studies indicate that the older the individual, the less likely they are to have interest and experience in using computers (Brosnan, 1998; Billipp, 2001; Czaja and Lee, 2001). Moreover, it has been found that older adults are likely to experience fear and anxiety when interacting with computers (Ellis and Allaire 1999). However it is envisioned that the future older generations may not experience the same level of anxiety and fear that current older generations experience as many baby boomers already have experience with technologies before their retirement. For example, many of them have already used computers and email due to the prevalence of technologies in today’s environment, and those below the retirement age and still working are likely to be influenced by the use of new technologies in their workplace (Harkin and Huber, 2004). Recently it has been found that half of adults aged 65 and older are now online, and one in three of these online users are on social networking sites such as Facebook (Zickuhr and Madden, 2012).

A previous qualitative study (Steele, Lo, Secombe and Wong, 2009) was conducted upon a group of senior participants, aged between 65-85 as an exploratory investigation of their perceptions,