Library & Information Science Research 38 (2016) 272–279

Contents lists available at ScienceDirect

Library & Information Science Research

Online health information seeking behaviors among Chinese elderly

Dan Wu *, Yizhe Li

School of Information Management, Wuhan University, 299 Bayi Road, Wuhan, Hubei 430072, China

ARTICLE INFO

Article history:
Received 20 January 2015
Received in revised form 8 November 2015
Accepted 31 August 2016
Available online 7 September 2016

ABSTRACT

The Internet has become an important source of health information for elderly people in China. A controlled user experiment was conducted to understand how Chinese elderly people search for online health information. Twenty elderly people completed three search tasks based on three different health information seeking contexts. Online health information seeking behavior patterns of the elderly were found to include reselecting from results pages, following hyperlinks, and using a query reformulation patter. There was no significant difference with respect to emotion and the three task contexts, as elderly people have positive attitudes regarding the health information seeking process, but cognition within the three task contexts displayed significant differences. There was a significant correlation between education and Internet search proficiency regarding task search performance, while health condition, familiarity with the Internet and credibility of online health information were found to be primary factors that influenced the decision of the elderly to search for online health information.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

The world is increasingly an aging society. The United Nations Population Division (2002) predicted that the total global aging population over 60 years would be nearly 2 billion by 2050, which would account for 21% of the world's population. With the largest elderly population in the world, China will be among the first nations to face the issues that derive from this trend in demographics. According to the statistical report of the people's republic of China on the development of social services in 2012, 14.3% of the total Chinese population, about 194 million, were age 60 or over by the end of 2012 (Li, 2013). Meanwhile, with the global development of information technology, the Internet has become an important information source for the elderly. The 34th statistical report on Internet development in China reported that as of mid-2014, China's Internet penetration had reached 46.9% and users over the age of 50 accounted for 7.3% of all users as the popularity of the Internet has gradually spread to the elderly from the young (China Internet Network Information Center, 2014).

1.1. Problem statement

Health is one of the most important issues affecting the elderly, and thus, it receives the most attention (Agusta, 2012; Williamson, 1995). As elderly people take more initiative to participate in their healthcare decisions, the ability to acquire effectively adequate health information support affects them as they seek to address or solve health problems. Therefore, accessing online health information is becoming increasingly more important for the elderly in China, as it allows them to participate in their own healthcare. However, there are few studies about online health information seeking behaviors (HISBs) of the elderly. Hence, examining how elderly people seek, understand, and assess online health information could enable the development of better services to the elderly for seeking online health information.

2. Literature review

2.1. Health information needs and sources for the elderly

Elderly people need access to health information regarding such issues as special diseases, diagnoses, treatments, drugs, healthcare, and health policies. However, it is important to keep in mind that their needs change over time along with changes in their health conditions (Torp, Hanson, Hauge, Ulstein, & Magnusson, 2008; Washington, Meadows, Elliott, & Koopman, 2011; Xie, Wang, Feldman, & Zhou, 2010). Previous studies have found that the elderly primarily obtain health information from social networks, such as healthcare providers, family members and friends, and from information systems, such as the Internet, broadcasts, and television (Agusta, 2012; Gollop, 1997; Hirakawa, Kuzuya, Enoki, & Uemura, 2011; Niemelä, Huotari, & Kortelainen, 2012). Research indicates that the elderly have greater trust in those with whom they are able to discuss their health actively as opposed to nonliving sources such as the Internet (Chaudhuri, Le, White, Thompson, & Demiris, 2013), thus the design of online healthcare information systems should consider users' real health information seeking behaviors (Johnson, 2014), especially when considering

* Corresponding author.
E-mail address: woodan@whu.edu.cn (D. Wu).

http://dx.doi.org/10.1016/j.lisr.2016.08.011
0740-8188/© 2016 Elsevier Inc. All rights reserved.

that online health information has an impact on people's healthcare outcomes (Xiao, Sharman, Rao, & Upadhyaya, 2014). Elderly people in China are using the Internet at an increasing rate, as it is an easy and useful way for older people to address their health needs and concerns (Wong, Yeung, Ho, Tse, & Lam, 2014). Previous studies have focused on health information needs, information search strategies and influencing factors of online HISBs. However, studies about elderly people's online HISB patterns are relatively few, and the online HISB differences among different health information seeking contexts have not been explored.

2.2. Online health information seeking behaviors among the elderly

Online HISBs include ways in which individuals obtain information about their health, health promoting activities, health risks, and illnesses (Lambert & Loiselle, 2007). Several studies have demonstrated that elderly people's health information seeking abilities are low and that the elderly tend to rely more on their prior experiences (Chin, Fu, & Kannampallil, 2009; Hanson, 2010). However, their success in developing strategies to find health information is also dependent on their experiences, and this may offset disadvantages such as cognitive decline (Curzon, Wilson, & Whitney, 2005). Some researchers have examined behavioral features of query formulation, search strategies, and results evaluations (Huang, Hansen, & Xie, 2012).

Previous studies that have examined the factors that influence online health information seeking behaviors of the elderly can be divided into two types: personal information of the individual, such as age, gender, health information literacy and cognitive ability; and characteristics of the health information itself, such as intelligibility, presentation, and credibility (Anker, Reinhart, & Feeley, 2011; Koch & Hägglund, 2009; Xie & Bugg, 2009; Zamarian, Benke, Buchler, Wenter, & Delazer, 2010). Among these factors, the elderly rely on their cognitive abilities and existing knowledge structures for every search behavior; however, their cognitive abilities tend to decline with age (Sharit, Hernández, Czaja, & Pirolli, 2008; Slegers, Van Boxtel, & Jolles, 2012; Wild et al., 2012). Being equipped with professional domain knowledge and Internet search knowledge could help the elderly choose keywords and search strategies to complete tasks efficiently (Stronge, Rogers, & Fisk, 2006). To date, most health information literacy interventions were founded and developed by public libraries and government agencies. Substantial evidence indicates that interventions could improve elderly health literacy, computer skills, and decision-making skills regarding medical issues (Blažun, Saranto, & Rissanen, 2012; Xie, 2011a, 2011b).

3. Research design

3.1. Research questions

Few works have studied the online health information seeking behaviors of China's elderly population and none of them have looked at the behavioral patterns of HISBs of the elderly population. This leads to the first research question:

RQ1: What are the characteristics and behavior patterns of Chinese elderly's online health information searching behavior?

HISBs occur within three contexts (Lambert & Loiselle, 2007): a) coping with a health-threatening situation, which has become an increasingly central issue; b) participating in medical decision making where obtained information contributes to the individual's identification of possible options, evaluation of various choices, and reduction of uncertainty and doubt about alternatives; and c) behavioral changes and preventive behaviors. Although information alone does not guarantee healthy behavior, acquiring adequate information may motivate individuals to make positive changes with respect to their health practices. However, there are few studies that have focused on online HISBs of the elderly under different health information seeking contexts or that have evaluated the affective or cognitive differences in the elderly under the different contexts. This is addressed in the second research question:

RQ2: What are the differences in Chinese elderly's online health information seeking behaviors with respect to the three health information seeking task contexts?

To improve Chinese elderly's online health information seeking abilities and thus facilitate their active participation in their healthcare decisions, the factors that influence their behaviors as they search for online health information need to be identified. The third research question asks:

RQ3: What factors affect the Chinese elderly's online health information seeking task performance?

3.2. Participants

Twenty elderly people were recruited from a senior activity center at Wuhan University where retired people could participate in group activities or take courses, such as computer and dance. The participants were required to be older than 55 years (China's retirement age is over 60 for males and over 55 for females) and had to have searched for online health information during the past month. The age range of participants was 55 to 81 years ($M = 64$; $SD = 6.93$). Among these participants, 75% were women, 80% had received at least a high school degree, 50% used the Internet every day, and 40% accessed the Internet at least two or three times per week. Almost half, 45%, reported their online information seeking ability to be “general”, 35% reported it to be “not very good” and only 20% reported it to be “relatively good”. With respect to health, 25% of the participants had a chronic health condition, 65% stated that they had a general health condition and 10% stated that they were in good health.

3.3. Procedure

The experiment sessions were conducted in a computer room of a senior activity center. Each session lasted approximately 2.5 h, and an experiment administrator worked with one participant per session. Participants used a laptop in the computer room that was installed with Video Screens Experts; the laptop was running Windows XP, with an external mouse and keyboard. Before each session, experiment administrators explained the goals and procedure of the experiment, and asked the participants to complete a questionnaire asking about their basic demographics, frequency of Internet use, familiarity with online health information searches, and health condition.

Table 1
Search tasks under different health information seeking contexts.

Task contexts	Search tasks
Task context 1: coping with a health-threatening situation	**Task 1**: One of your friends suffers from epilepsy. If he has a seizure, he may faint. You want to use the Internet to find information about reducing physical risk during an epileptic seizure. Please write down 2–3 first aid measures.
Task context 2: participation and involvement in medical decision making	**Task 2:** One of your friends was diagnosed with type II diabetes. The doctor suggested he inject insulin to control his blood sugar. You want to use the Internet determine when a diabetic patient must inject insulin. Please write down 2–3 conditions.
Task context 3: behavior changes and preventive behaviors	**Task 3:** One of your friends has suffered from hypertension for a long time. You want to use the Internet find diet and exercise advice that will to help control blood pressure, in place of medications. Please write down 2–3 websites that contain diet and exercise information for hypertensive patients.

Download English Version:

https://daneshyari.com/en/article/5123939

Download Persian Version:

https://daneshyari.com/article/5123939

Daneshyari.com