



Full length article

## Factors influencing the perceived credibility of diet-nutrition information web sites

Eun Hwa Jung <sup>a,\*</sup>, Kim Walsh-Childers <sup>b</sup>, Hyang-Sook Kim <sup>c</sup><sup>a</sup> College of Communications, Pennsylvania State University, 115 Carnegie Building, University Park, PA 16802-5101, USA<sup>b</sup> College of Journalism and Communications, University of Florida, 3044 Weimer, Gainesville, FL 32611, USA<sup>c</sup> Department of Mass Communication and Communication Studies, Towson University, 8000 York Rd., Towson, MD 21252-0001, USA

### ARTICLE INFO

#### Article history:

Received 29 June 2015

Received in revised form

14 November 2015

Accepted 25 November 2015

Available online xxx

#### Keywords:

Online diet and nutrition information

Source expertise

Message accuracy

Credibility

Information processing

Persuasion

### ABSTRACT

This study investigated the factors that influence the perceived credibility of web sites providing diet and nutrition information. Undergirded by the dual-processing models (i.e., Elaboration Likelihood Model and Heuristic Systematic Model), an online experiment (N = 575) was conducted to examine how perceptions of online diet and nutrition information credibility are influenced by source expertise cues and message accuracy; the effects of prior knowledge and interest in the information also were assessed. Results showed that message accuracy increased perceived credibility of the web site regardless of the level of source expertise. However, source expertise had an important effect on website credibility perceptions among those who exhibited low prior knowledge. Finally, message accuracy had a greater impact on web site credibility among those who were highly involved in the issue compared to those who were less involved. The findings increase our understanding of the factors that impact individuals' processing of online diet and nutrition information and suggest elements practitioners should consider including to create the most effective online sources for diet and nutrition information.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

With the advent of new technology, people are now paying more attention to science-based health information (Thomm & Bromme, 2012). In particular, many people are concerned about diet and nutrition information because the United States is in the midst of what the Centers for Disease Control have called an "obesity epidemic" (Centers for Disease Control, 2011). Because obesity can cause life-threatening diseases, it is regarded as a major problem, typically associated with poor dietary habits (Malik, Willett, & Hu, 2013). Controlling one's dietary habits and caloric intake should be the first move to avoid weight gain and lower the risk of developing obesity-related diseases such as diabetes and cancer. However, Crow (2012) has suggested that one reason many Americans are overweight is that they do not understand what constitutes a healthy diet. Thus, people need access to appropriate diet and nutrition information, which could help diminish the obesity epidemic.

In today's society, the Internet plays a significant role in health information seeking among the public. The Pew Internet and American Life Project survey revealed that, in 2013, 72% of American Internet users had searched for health information online (Fox & Duggan, 2013). These numbers suggest that the convenience of accessing online information supersedes visiting a doctor in terms of satisfying people's desire to obtain information about their health problems. Therefore, the Internet can help users gather health information by providing consumers with useful knowledge about health-related issues (Wang, Wang, Wang, Liang, & Xu, 2012).

However, people are sometimes confused by the information they find online, simply because of the overwhelming volume of data the Internet provides (Goldberg & Sliwa, 2011; Theodosiou & Green, 2003). The volume of information, including often conflicting information, can cause people to wonder whether the information they find online is indeed correct. Consumers' perception of the credibility of online information plays a key role in determining which websites they find useful (Lim & Van Der Heide, 2015). Previous studies have suggested that credibility significant influences users' perceptions of health-related messages and their behavioral responses to those messages (e.g., Harris,

\* Corresponding author.

E-mail addresses: [iamjeh@gmail.com](mailto:iamjeh@gmail.com) (E.H. Jung), [kwchilders@jou.ufl.edu](mailto:kwchilders@jou.ufl.edu) (K. Walsh-Childers), [hkim@towson.edu](mailto:hkim@towson.edu) (H.-S. Kim).

Sillence, & Briggs, 2009; Hu & Sundar, 2010). If health professionals and organizations hope to harness public use of online information as a tool in reducing the rates of overweight and obesity, they need to understand how individuals decide which online information to trust in making decisions about their diet. Although a few studies have investigated participation in online nutrition-related interventions (Colleran & Lovelady, 2012; Robroek, Brouwer, Lindeboom, Oenema, & Burdorf, 2010; Robroek, Lindeboom, & Burdorf, 2012; Thorndike et al., 2012), the relationship of credibility with message features and source cues has not been investigated comprehensively (Hong, 2006). To help fill this gap in online health communication research, this study investigated the impact of two key factors that may influence how people determine the credibility of online health information. Specifically, the present study investigated diet/nutrition information credibility through the lens of the dual-processing models; the purpose was to determine how source expertise and message accuracy affect information credibility in online media platforms.

## 2. Literature review

To obtain diet and nutrition information, people can consult many sources, including individual counseling provided by health professionals, mass media, health education materials, and others (Charlton, Brewitt, & Bourne, 2004). Although interpersonal communication—mostly with health professionals, including dietitians, doctors, and nurses—is considered a reliable source to obtain health information (American Dietetic Association, 2008), there are important limitations on delivering health information to people through interpersonal contact. First, to receive information this way, consumers must take the time to meet with a health professional and must pay for the medical services they receive; this, in turn, will make many consumers unwilling to seek health professionals' advice on diet. For example, qualified professionals have treated fewer than half of obese patients in spite of the tens of billions annually spent on weight loss products (Ayooob, Duyff, & Quagliani, 2002). Instead, people would rather rely on health information available online (Bass et al., 2006; Buntin, Burke, Hoaglin, & Blumenthal, 2011). Indeed, McConnon, Kirk, and Ransley (2009) found that individuals were satisfied with using web sites for information about weight loss.

### 2.1. Why is credibility important for online diet-nutrition information?

Since the Internet era emerged, people with health concerns have been searching online for relevant information (Fox & Jones, 2009). In particular, surveys have shown that one of the most common health-related search topics is diet and nutrition information; in a 2006 survey, 49% of Internet users reported having looked online for such information (Fox, 2006). Wilson (2007) suggested that when people seek diet and nutrition information, they assess source and message factors to determine its trustworthiness. As a consequence, health information providers must ensure that they design messages carefully to address consumers' needs for effective diet and nutrition information (Wei, Rickard, & Brown, 2015). Most of all, messages provided by the media should be considered carefully because the content they provide can have a significant impact on public perceptions and behavior (Tudoran, Olsen, & Dopico, 2009; Wilson, 2007).

Despite the public's desire for diet and health information, the dietary information consumers find in an information-overloaded environment is frequently confusing (Goldberg & Sliwa, 2011; Spiteri Cornish & Moraes, 2015). In particular, the largely unregulated online environment leaves many people doubt the credibility

of online health information (Fahy, Hardikar, Fox, & Mackay, 2014). Consumers often find it difficult to determine the veracity of online health information (Modave, Shokar, Peñaranda, & Nguyen, 2014).

Another reason credibility is so vital to providing consumers with high-quality diet-nutrition information online is that people can easily and quickly access inaccurate health information through a variety of peer-to-peer communication venues. For example, inaccurate advice provided by unqualified individuals can be exchanged in chat rooms, especially since most chat rooms allow users to remain anonymous (Flanagin & Metzger, 2003; Neuhauser & Kreps, 2003). This problem is likely to happen in online health message boards as well. Email exchanges also frequently spread false information about health issues or products (Baker, Wagner, Singer, & Bundorf, 2003). Additionally, social media may provide misleading health information because this information, usually generated by peers or laypersons, may be inaccurate and/or lack source credibility (Rutsaert et al., 2013; Vance, Howe, & Dellavalle, 2009). For example, Tsai, Tsai, Zeng-Treitler, and Liang (2007) found that 54% of health information on social networking sites contained incomplete and inaccurate content. Such misinformation on the Internet causes users to become confused and to change their perceptions and behaviors, which can be harmful (Spiteri Cornish & Moraes, 2015).

### 2.2. Theoretical mechanisms of assessing information online

While the previous section explained the importance of credibility for online diet-nutrition information, a critical question remains unanswered: which aspects of online information contribute to consumers' credibility perceptions? Dual-process models in persuasion research—the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986; Petty & Wegener, 1999) and the Heuristic-Systematic Model (HSM) (Chaiken, 1980; Chen & Chaiken, 1999; Eagly & Chaiken, 1993), argue that when people process messages containing cues, such as a long message, high-quality arguments, and credible and attractive sources, they tend to evaluate the message based on the cursory-judgment rule. As a result, such heuristic cues create favorable attitudes toward the messages and thereby induce persuasive effects. However, message recipients' motivational situation—whether they are highly interested in or knowledgeable about the message—can shift processing from the heuristic mode to systematic processing. When recipients engage in more careful consideration of the message through systematic information processing, both the quality and the source of the message will play a critical role in amplifying or suppressing the persuasive effects (Hallahan, 2000; Kruglanski et al., 2006).

### 2.3. The effects of source expertise and message accuracy on diet-nutrition information processing online

In assessing diet-nutrition information on the Internet, people want to confirm that the information comes from an expert source. Previous research has demonstrated that higher source credibility generates more positive attitudes toward a persuasive message (Metzger, 2007; Reinhard & Sporer, 2010). Expertise (e.g., Center for Disease Control and Prevention, National Institute of Health) is one of the best-known source cues in dual-processing research. For example, Eastin (2001) proposed that knowledge of content and source expertise have a strong influence on users' perceptions of the credibility of health websites, and in particular, source expertise had a main effect on perceived credibility of health information. Walther, Wang, and Loh (2004), using advertisements on health websites, also demonstrated that source expertise is a significant factor in perceptions of website credibility. Hu and Sundar (2010) suggested that source cues related to expertise (i.e., professional

Download English Version:

<https://daneshyari.com/en/article/6837516>

Download Persian Version:

<https://daneshyari.com/article/6837516>

[Daneshyari.com](https://daneshyari.com)