ARTICLE IN PRESS

Telematics and Informatics xxx (2016) xxx-xxx



Contents lists available at ScienceDirect

Telematics and Informatics



journal homepage: www.elsevier.com/locate/tele

User generated content and credibility evaluation of online health information: A meta analytic study

Tao (Jennifer) Ma^a, David Atkin^b

^a Department of Mass Communication, Winona State University, P.O. Box 5838, 175 West Mark Street, Winona, MN 55987, United States ^b Department of Communication, University of Connecticut, Storrs, CT 06269-1259, United States

ARTICLE INFO

Article history: Received 6 June 2016 Received in revised form 9 September 2016 Accepted 9 September 2016 Available online xxxx

Keywords: User-generated content Online health information Source credibility Perceived information credibility

ABSTRACT

The present study provides a meta-analysis of perceived credibility concerns for usergenerated-online-health information. Past work yields inconsistent findings regarding whether high credible versus low credible sources would relate to perceived credibility of online health information. A collection of empirical studies was synthesized to reach an explanation of the conflicting findings. Analysis of 22 effect sizes with 1346 participants indicated that source credibility had no significant overall influence on perceived information credibility (r = 0.03, n.s.). However, the variances across the studies suggest that the platform where the information was posted might be a contingent factor. Specifically, when user-generated health information was posted on a common website, high credible sources were significantly related to high perceived information credibility.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The rapid diffusion of the Internet has significantly changed the health communication landscape (e.g., Chou et al., 2013). Patients have traditionally visited their doctors for health information and advice (Biggs et al., 2013). With healthcare predicted to subsume 20% of America's GDP by 2020, the Internet is emerging as a leading source for health information (e.g., Dobransky and Hargittai, 2012; Lin and Associates, 2015). Millions of consumers go online daily for health information (Freeman and Spyridakis, 2004; Ruppel and Rains, 2012; Sillence et al., 2006) about various health issues (Fox and Duggan, 2013; Pew, 2012). People may search online health information for different reasons, such as to be better informed, talk to a doctor, seek support, or to find reassurance (Sillence et al., 2006; Walther and Boyd, 2002). However, concerns persist about the reliability of online health information (e.g., Lagoe and Atkin, 2015).

Some researchers challenge the notion that the Internet is a reliable source for health information (e.g., Eysenbach, 2008), because users may not know where to find trusted health information online. People may use search engines to browse for health-related information rather than go directly to trusted health portals (e.g., WebMD), but search engines may lead them to any health-related websites (Metzger et al., 2010). A longitudinal study found an increase in unregulated individual sites that contain health-related information – and patients using this information independently – to guide their understanding of personal health concerns (Sillence et al., 2007). Other research reveals that the quality of online health-related information varies across different websites, suggesting that health-oriented online information is harmful if inaccurate (e.g., Adams, 2010b). A key factor used by consumers to judge the quality of online health information is source credibility (Bates et al., 2006; Lin et al., 2015), defined in the persuasion literature as "judgments made by a perceiver concerning the

E-mail addresses: jma@winona.edu (T.J. Ma), david.atkin@uconn.edu (D. Atkin)

http://dx.doi.org/10.1016/j.tele.2016.09.009 0736-5853/© 2016 Elsevier Ltd. All rights reserved.

Please cite this article in press as: Ma, T.J., Atkin, D. User generated content and credibility evaluation of online health information: A meta analytic study. Telemat. Informat. (2016), http://dx.doi.org/10.1016/j.tele.2016.09.009

2

ARTICLE IN PRESS

T.J. Ma, D. Atkin/Telematics and Informatics xxx (2016) xxx-xxx

believability of the communicator" (O'Keefe, 2002, p. 181). Individuals working in isolation may assess information credibility systematically, although they routinely apply short-cuts by using cognitive heuristics (e.g., reputation, endorsement) to evaluate the credibility of online information (Metzger et al., 2010).

With the development of Web 2.0 technology, the credibility concerns governing online health information are renewed by the prevalence of end user-generated-content (Adams, 2010b). Such health-related information can be defined as that which appears in verbal (e.g., web blog) and nonverbal (e.g., video) forms, created either individually (e.g., personal comments) or collectively (e.g., review ratings). These end- user-generated contents are not peer-reviewed, they have no source citations, and therefore it is often difficult to verify the sources or the credibility of the content. It appears that unreliable health information (e.g., anti-vaccine or crash diet information) can be presented (Kata, 2012) and shared (Villiard and Moreno, 2012) by end-users. Many scholars worry that end user- generated contents may lead to potentially misleading or frankly dangerous advice (Biggs et al., 2013). Indeed, some research found that user-generated content encouraged participation and therefore could be applied to attract more people to online health communication, but the ability of a lay person to assess the credibility of health information provided by other end-users was a concern (Chou et al., 2013). Research disagrees about whether user-generated-content introduces more opportunities or challenges as a health information source (e.g., Freeman and Chapman, 2008).

2. Literature review

So far there is neither a systematic review nor meta-analytic evidence focusing on user generated content in the context of online health information. But a cursory review of individual studies points to some variation in findings regarding perceived online health information credibility. For example, some studies suggest that the quality of end-user-generated online health information is unreliable and not useful (Biggs et al., 2013), whereas others identify such contents high in perceived quality (Carroll et al., 2013) and thus patronized more by lay persons (Lo et al., 2010). In terms of the processing of user-generated online health information, some studies found that source attributes (e.g., homophily) drove the evaluation of user-generated online information (Wang et al., 2008), whereas other studies found that source attributions (e.g., expertise and homophily) did not have a significant effect on consumers' evaluation of online health information quality (Bates et al., 2006).

Several key questions remain. What are the factors that influence peoples' evaluation of the user-generated online health information? Do users find health information generated by lay persons to be more reliable than that attributed to experts? How does Internet technology influence people's utilization of user-generated-content across health-oriented topics? As more researchers seek to incorporate user-generated-content into the strategy of health promotions and health campaigns (Chou et al., 2013; Lehto and Oinas-Kukkonen, 2011), research addressing these questions is likely to identify implications for theories about Internet-based communication in general and health marketing in particular. To investigate these questions and to identify an explanation for the inconsistent empirical findings, this paper reviewed the existing empirical literature on user-generated online health information, presenting a meta-analysis of the studies addressing the impact of source credibility on the perceived credibility of user-generated online health information. The present meta-analysis study aims to help synthesize the results across studies addressing credibility concerns for user-generated-online-health information and to help determine meaningful boundary effects of the relationship.

2.1. User-generated content and Web2.0

Unlike Web1.0 – which is defined by one-way communication from the creator of the website (e.g., static health portals) to the user – Web2.0 enables two-way and multi-way communication and defined by both interaction and user-generated content (Betsch et al., 2012). The user-generated content allowed by Web2.0 therefore includes user-created and -uploaded new content, comments on existing content and shared content with other users (Betsch et al., 2012; Kata, 2012). User-generated content is usually present through Web2.0 tools such as personal websites, discussion boards, web blogs, podcasts, and social media networks (such as YouTube, Facebook, Twitter, and Wikipedia).¹

End users may explicitly or implicitly convey health information through these tools. For example, users may share links of various topics which include health-related topics or practices, or users can set up a blog explicitly for a particular health issue in mind (Adams, 2010a). Because of the open nature of Web 2.0 applications, both end users and institutions can create and disseminate content about particular health issues. Research usually looks at these modalities as different original sources of online health information. End users can include experts, lay persons, institutions, public health agents, industry corporations, and activists (Betsch et al., 2012). When people go online for health information, both source factors and media factors may influence their perception of online health information. Some tools may provide informational resources for users to evaluate the credibility of these contents, such as tags, or tag clouds (O'Grady et al., 2012). Most of the tools do

Please cite this article in press as: Ma, T.J., Atkin, D. User generated content and credibility evaluation of online health information: A meta analytic study. Telemat. Informat. (2016), http://dx.doi.org/10.1016/j.tele.2016.09.009

¹ Each of these platforms provides different applications for the end user and therefore user-generated content may vary across the tools (Tenhaven et al., 2013). For instance, discussion boards provide a virtual space to archive user-comments around specific topics and the discussion usually is not in real time. A weblog or blog is a virtual place for end users to post a diary to the public. Social media are a web service for users to log on, connect with others, create and share their content for those with similar interests, and comment on others' online content. A Wiki is an application that allows collective work on web page content through unrestricted editing by individuals from their browser.

Download English Version:

https://daneshyari.com/en/article/4957663

Download Persian Version:

https://daneshyari.com/article/4957663

Daneshyari.com