

Trust and Credibility Perception in E-Health: Interface Contributions



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INTRODUCTION

Over the past few years there has been a significant increase in e-health information consumption, being the Internet, currently, one of the most important sources to search for health information. In this scenario, it is critical *to understand how people assess the credibility of a site, source, or piece of information, it's a key task in the development of any health education or health promotion undertaking and, thus, an important area of research* (Eysenbach, 2008, p. 125). Aware that Interface is not the only factor that influences trust and credibility perception this study focuses on the Interface influence to fulfill a gap mentioned by authors that are developing research in the e-Health field as Eysenbach (2008): *there is a great deal of high-quality information on the Web that is published by trusted organizations. It is important for these organizations to appear credible enough to initiate a behavior change in consumers* (p.125), Robins et al. (2009) presented results *that showed that health information sites that are rated higher for visual design tend also to be rated higher for perceived credibility* (p. 21). In the same study authors suggested that *it will be valuable for visual designers to know more specifically how to employ tools that promote credibility in websites whose health information is worthy of such a presentation* (p. 28). In 2013 in a study about “User evaluation of Websites” conducted by Thielsch et al. confirmed the importance of aesthetics for the first impression of a website and that importance doesn't disappear even when the information gains importance. The interface is the materialization of all the information, and the behavior of a website.

In this context, nowadays Interface dimensions such as visual design, information architecture, social presence, interaction, and user experience are unavoidable concepts when studying information systems. This study aims to deepen knowledge on online information presentation and on the user and Interface relationships processes, proposing the study of a set of design principles for the credibility and trust, based on a proposed set of Interface dimensions.

The knowledge on the impact of the Interface in a credibility assessment is undoubtedly important in the field of e-health, being fundamental to investigate the processes used by e-health users to select information and make decisions.

This online information credibility analysis has been studied especially in the e-Commerce field, and not so deeply in the e-health area. In Stanford, the Persuasive Lab directed by B. J. Fogg et al., (2003) conducted a study that shows the importance of the design's look in credibility assessment. Later, Robins & Holmes (2008) showed that the average time to respond with a credibility judgment is 2.30 seconds,

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proving that the Interface plays an important role in this assessment. Acknowledging the impact of the Interface in a credibility assessment is undoubtedly important in the field of e-health, being fundamental to investigate the processes used by e-health users to select information and make decisions.

BACKGROUND

Interface

The Interface is responsible for the mediation between human relationships and human machine interactions. Considering that the Interface is determinant of the type and quality of interactions in which it is involved, it's not limited to an object or space presentation: it's responsible for defining the interactions that happen between people.

In the words of Sá (2010), *Interface is a hybrid space that synthesizes heterogeneities from the entities placed in relation. Their plastic materiality is constituted by the hybridization between the systems being related, limited by them and limiting them, being effective and taking shape by the action* (Sá, 2010, pp. 209–210). From this broad perspective of the Interface that determines how we experience and define the world in which we live, this study focuses mainly on the Interface between the user and the digital platforms, often called a Graphical User Interface, this designation will not be adopted in this study because, in our view, the use of graphic expression seems too limiting to visual or graphical issues. In this context it's important to clarify that when there is reference to the Interface, in the course of this study, it is about a group of dimensions that comprises it, namely: visual, information architecture, social presence, interaction, and the user experience. This suggested group, based in other studies about online credibility and trust that, as can be seen throughout this chapter, reports that one or more of the Interface dimensions have a key role in the perception of online credibility and trust. As Raskin (2000) defines, the Interface is how one accomplishes tasks with a product and how it responds to one's actions. The contact point between information available on the Web and individuals still is the Interface, and it is through the Interface that the starting point is established for the creation of credibility and trust processes.

Related to this issue Fogg (2003) presented a while ago results of a study entitled “How do users evaluate the Credibility of Web sites?” in which, contrary to what was usual at that moment, the analysis of credibility on websites was not only focused on the information. The analysis of comments made by participants reveals the influence of Interface design issues in the perception of credibility. This study has become an essential reference work in the study of online credibility, proving the relevance of design in its process. Also Robins, Holmes, & Stansbury (2009) isolated the analysis of the credibility of the analysis of the information credibility through visual design, demonstrating that the visual design impacts the perception of credibility.

Despite being the focus of attention of different studies, the problem of online trust still needs more research, as evidenced by the survey related to website design and initial trust studies, developed by Karimov, Brussel, Brengman e Hove (2011). From an extensive literature review (from 1996-2010), and focusing on the e-Commerce area, the authors acknowledge that there is no standard for measuring dimensions of websites and propose a conceptual model for the classification of design dimensions that induce the perception of trust which are: visual design, design of social cues and content design. Based on this organization, they gathered all the results found in the literature, demonstrating that the impact of design dimensions on the initial trust of websites is little investigated. Equally important to frame this issue is the study conducted by Wang & Emurian (2005) in which the authors propose a framework

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