

Guidelines for Developing Trust in Health Websites

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ABSTRACT

How do people decide which health websites to trust and which to reject? Thirteen participants all diagnosed with hypertension were invited to search for information and advice relating to hypertension. Participants took part in a four-week study engaging in both free and directed web searches. A content analysis of the group discussions revealed support for a staged model of trust in which mistrust or rejection of websites is based on design factors and trust or selection of websites is based on content factors such as source credibility and personalization. A number of guidelines for developing trust in health websites are proposed.

Categories and Subject Descriptors

H3.3 [Information storage and retrieval]: *search processes*; K4.1 [Public Policy Issues]: *computer related health issues*.

General Terms: Design, Human Factors

Keywords: Trust, credibility, health, social identity, Internet, computer mediated communication

1. INTRODUCTION

Understanding how and why people use the Internet for health advice is becoming increasingly important. It has been reported that 80% of adult Internet users have accessed it for general health information [1] yet with the increasing proliferation of websites dedicated to health comes increasing worries about the accuracy of such information. Less than half of the medical information available online has been reviewed by doctors and few sites provide sufficient information to support patient decision-making with many also heavily jargon-laden and difficult to read. The large body of research on online health information belies the fact that very little is known about how genuine consumers search for and appraise health information online. Consumers are more likely to make use of general portals and search engines than experts [2] and also pay more attention to the visual design of health websites than experts [3]. As more people go online for health information and advice it becomes increasingly important to identify what makes people choose to trust some sites and reject others. Trust is a complex, multifaceted construct and recent models— derived from e-commerce and e-health contexts – suggest that there are several distinct stages to the build up of trust online.

Briggs et al [4] proposed a model derived from the social psychological literature in which early intentions to trust are

influenced by visual design factors, while subsequent decisions to act are contingent upon careful judgments of the quality of information and advice on offer. Furthermore it has been suggested that genuine consumers viewing information and advice over longer periods of time are less likely to be influenced by the visual appeal of a site, and more likely to be influenced by relationship issues such as the degree of personalisation of a site, and the extent to which the site reflects their own social identity [4]. The current study is part of a longer-term project which aims to fill the gap in our knowledge of the ways in which real-world consumers evaluate information and advice online.

2. METHOD

Thirteen people (7 female, 6 male) with an age range of 33-68 years (mean 52 years) and all diagnosed with hypertension participated in the study. All the participants were interested in finding out more about hypertension and all used the Internet at least once a week. Each participant attended a total of four 2-hour sessions held at Northumbria University, UK. During all four sessions, participants used the Internet to search for information and advice on hypertension, followed by a group discussion with a facilitator. Participants made notes in logbooks and the discussions were recorded.

3. RESULTS

All discussions and verbal protocols were transcribed and subject to content analysis. In this paper we summarise those aspects of discussion relevant to the selection and rejection of sites. A number of themes relating to the first impressions of the website and characteristics of trustworthy sites emerged. The participants made a number of comments relating to the rejection and mistrust of websites. The majority of these comments related to the design features of the websites. In fact 83% of all comments regarding rejection concerned design factors. The look and feel of the website was clearly important. Participants reported that an unfavourable first impression could lead to early rejection of the website often before the content had been explored in any detail. Design factors included poor navigational aids, lack of clear entry points, colour, text size and even the name of the website.

“I think well I was looking at the NHSdirect and I rejected that one fairly quickly yeh cos I thought it became too complicated to locate what you wanted.” (Female, 57)

The participants mentioned a number of features relating to their selection of sites to engage with further. The majority of comments (74%) regarding selected or trusted sites concerned content factors. Most people wanted sites to be owned by well-known and well-respected organizations.

Reputation was important and people felt that they would be more likely to trust a site that they had heard of before rather than one that they simply found through a search engine. The participants

disliked sites with an overly commercial feel or sites where the motivations were unclear. Most people were interested in advice written by medical experts although some were more interested in personal experiences. Participants preferred specific, personalized advice as opposed to general information. Many of the participants were searching for explanations for their condition and wanted an explanation that fitted their particular lifestyle and medical history. They thought that doctors relied too heavily upon stereotypes and thought that the Internet would be less restricted in this respect, for example:

“ But that’s what I liked on the DIPEX one when its talking about patient experiences I quite liked the fact that different people when they found out they had hypertension reacted in different ways.” (Female, 51)

People were searching for information that was congruent with their own social identity. The British participants favoured British sites over American sites, finding American sites less personally relevant to them and containing information about unfamiliar drugs and procedures. They enjoyed sites which were either written by or focused on ‘people like themselves.’

4. DESIGN IMPLICATIONS

Below we outline the key design implications from this research and a previous study examining a different health concern – the menopause [5]. We present them as proposed guidelines for those seeking to create highly trustworthy health websites.

Guideline#1: Make the purpose of the site clear

A related guideline is the issue of making clear and transparent the purpose of the health site. People were far more willing to trust sites in which the impetus behind it was transparent rather than hidden and in particular where they believed that the company had their best interests, rather than their own pockets, at heart.

Guideline#2: Allow personalization, tailored experience

Most of the participants preferred websites which offered a more tailored service with personalized, specific advice. This could be achieved through the use of interactive forms, the ability to ‘ask an expert’, and the presence of discussion boards or at the very least a section on frequently asked questions (FAQs).

Guideline#3: Include markers of social identity

The site should feel inclusive and speak to the social identity of the users. Participants were looking for sites that were written by people similar to themselves, who shared similar interests and experiences. Information and advice should not alienate users through unfamiliar or exclusive references, or use of language. Users liked sites that contained information and advice relevant to themselves and sites which felt as if they had been written directly for them.

5. DISCUSSION AND FUTURE WORK

These guidelines share some similarities with Fogg et al’s [6] credibility guidelines. However within a health domain specifically it appears that personalization, site impetus and social identity are particularly important factors.

Our work provides evidence for a staged model of trust in which visual appeal influences early decisions to reject or mistrust sites, whilst credibility and personalization of information content influences the decision to select or trust them. To investigate the longer-term process of maintaining trust the participants in this study have been given diaries to keep over a number of months and have been invited to take part in follow up interviews. It is anticipated that this data will allow us to examine the process of maintaining trust. It will also allow us to examine the extent to which information and advice sought online is integrated with other sources of advice from friends and family, doctors, and government health campaigns.

6. ACKNOWLEDGMENTS

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