



Examining trust factors in online food risk information: The case of unpasteurized or 'raw' milk



Elizabeth Sillence ^{a,*}, Claire Hardy ^{a,1}, Lydia C. Medeiros ^b, Jeffrey T. LeJeune ^b

^a Psychology and Communication Technology Laboratory, Department of Psychology, Faculty of Health and Life Sciences, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK

^b Food Animal Health Research Program, OARDC, The Ohio State University, Wooster, OH 44691, USA

ARTICLE INFO

Article history:

Received 2 March 2015

Received in revised form

14 November 2015

Accepted 8 January 2016

Available online 12 January 2016

Keywords:

Unpasteurized milk

Trust

Internet

Food safety

Online information

Eye tracking

ABSTRACT

The internet has become an increasingly important way of communicating with consumers about food risk information. However, relatively little is known about how consumers evaluate and come to trust the information they encounter online. Using the example of unpasteurized or raw milk this paper presents two studies exploring the trust factors associated with online information about the risks and benefits of raw milk consumption. In the first study, eye-tracking data was collected from 33 pasteurised milk consumers whilst they viewed six different milk related websites. A descriptive analysis of the eye-tracking data was conducted to explore viewing patterns. Reports revealed the importance of images as a way of capturing initial attention and foregrounding other features and highlighted the significance of introductory text within a homepage. In the second, qualitative study, 41 consumers, some of whom drank raw milk, viewed a selection of milk related websites before participating in either a group discussion or interview. Seventeen of the participants also took part in a follow up telephone interview 2 weeks later. The qualitative data supports the importance of good design whilst noting that balance, authorship agenda, the nature of evidence and personal relevance were also key factors affecting consumers trust judgements. The results of both studies provide support for a staged approach to online trust in which consumers engage in a more rapid, heuristic assessment of a site before moving on to a more in-depth evaluation of the information available. Findings are discussed in relation to the development of trustworthy online food safety resources.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Consumers need to have access to reliable, trustworthy information in order to make informed decisions around food and food safety (Coulson, 2002). Family, friends and peers, food producers, government bodies, consumers' associations, scientists, medical doctors, dieticians and retailers are frequently used sources of information on food risks (Hu, Qi, & Hua, 2007; Kornelis, De Jonge, Frewer, & Dagevos, 2007). These sources, however, are sometimes contradictory and vary in the extent to which they are trusted

generally (Thiede, 2005), with food safety (Liu, Pieniak, & Verbeke, 2014), and in relation certain food types (Jay-Russell, 2010). Furthermore, the credibility of the source can fluctuate in response to specific events, as was the case for the UK government following the BSE crisis (Smith, Young & Gibson, 1999).

The way in which people are accessing food safety information is changing and over the last few years the internet has become an increasingly important way of communicating with consumers about food risk information in the UK and the USA (Jacob, Mathiasen, & Powell, 2010; Redmond & Griffith, 2006). In China, television and the internet are the most frequently used channels for food risk hazard information (Liu et al., 2014) and in the West we are also seeing the emergence of social media as a potential way of communicating information about food risk and benefit especially during times of food crisis (Kuttischreuter et al., 2014). The internet allows more direct communication between organisations and consumers but also gives voice to groups and individuals that might otherwise be unheard. As farmers, merchants, advocacy

* Corresponding author.

E-mail addresses: elizabeth.sillence@northumbria.ac.uk (E. Sillence), claire.hardy@kcl.ac.uk (C. Hardy), medeiros.1@osu.edu (L.C. Medeiros), lejeune.3@osu.edu (J.T. LeJeune).

¹ Present address: Department of Psychology – Health Psychology Section, Institute of Psychiatry, Psychology, and Neuroscience, King's College London (Guy's Campus), 5th Floor, Bermondsey Wing, Guy's Hospital, London SE1 9RT, UK.

groups and individual consumers themselves are now presenting food safety information on the internet, the space becomes more crowded and more confusing for consumers choosing which sources to trust. Information overload and low levels of trust in the internet are frequently cited by consumers within this context (Rutsaert et al., 2014).

How do consumers regard the internet as a channel of information about food risks and benefits and how do they decide whether to trust the information they find online? We already know that ordinary consumers are more likely to adopt a wider range of trust criteria than experts when assessing health information online in general. Whilst health experts suggest evaluation should be based on certain quality criteria such as completeness, authority of providers, currency of information and readability (Eysenbach, Powell, Kuss, & Sa, 2002; Gilardi & Fubini, 2005), literature on consumer trust in online information highlights a range of trust indicators including aesthetics of the site (Cyr, Head, & Larios, 2010; Harris, Sillence, & Briggs, 2009; Riegelsberger, Sasse, & McCarthy, 2005), perceived competence or benevolence of the site (Bhattacharjee, 2002; McKnight & Chervany, 2001), and the sense in which the website is tailored to the user's specific needs (Briggs, Burford, De Angeli, & Lynch, 2002).

In attempting to reconcile these differences in the literature, a key approach has been to propose several distinct stages in the development of consumer trust and engagement online. This so-called 'staged model approach' (Briggs et al., 2002), initially developed within an e-commerce setting, has been tested in several medical health information studies (Sillence, Briggs, Harris, & Fishwick, 2007) and proved useful in explaining how consumers engage with and trust websites over time. The approach recognises that users are initially influenced by the design of the website and its structure. For example, the use of images can influence consumer trust in the site (Steinbrueck, Schaumburg, Duda, & Krueger, 2002). This initial assessment of visual appeal is something that can occur very rapidly with researchers showing an exposure of just 50 ms is enough for users to determine a positive or negative first impression (Lingaard, Fernandes, Dudek, & Brown, 2006). Once an initial trust impression has formed on the basis of this first heuristic or 'rule of thumb' stage, users move to a more systematic evaluation of the website's content and considers, *inter alia*, authorship, currency and personal relevance (Sillence et al., 2007). This strategy is consistent with dual process models, such as those developed in the persuasion literature (e.g. Chaiken, 1980), recognising the role of user motivation and opportunity in selecting an appropriate strategy for processing online information.

Alongside trust, the role of threat or risk perception is pivotal. Research exploring the staged model of trust has recognised the role of risk perception on individual responses to health information online (Sillence et al., 2007). Researchers noted attitude towards risk, as well as individual understanding of risk information, affects people's trust in different health information sources (Harris, Sillence, & Briggs, 2011). At a general level, risk perception is likely to be affected by a mixture of culture, individual differences and beliefs (Bontempo, Bottom, & Weber, 1997). People are not neutral processors of health-risk information preferring information that is congenial and comforting rather than threatening and unwelcome (Good & Abraham, 2007). People also have strong initial preferences and expectations for the sorts of information they are seeking (Joinson & Banyard, 2002) and these may influence which sites they trust.

1.1. The case of raw or unpasteurized milk

For the purposes of this project, we focused on information about the risks and benefits of raw milk consumption. Milk remains

for many people an important part of their diet. The majority of consumed milk is pasteurized to remove the threat of bacterial infection through pathogens such as *Listeria* and *Escherichia coli* O157 (American Academy of Paediatrics, 2014). Despite pasteurization, milk borne disease outbreaks still occur (Lejeune & Rajala-Schultz, 2009) and this may in part relate to increased interest in raw or unpasteurized milk products as part of a return to more locally sourced, traditional foodstuffs (Claeys et al., 2013). Advocates promote the nutritional, taste and health benefits despite little empirical evidence to support such claims (American Academy of Paediatrics, 2014). People choosing to consume raw milk, particularly those living in rural locations, often cite their own positive, illness free experiences and see raw milk consumption as part of maintaining a rural identity (Enticott, 2003). Pasteurised milk consumers present a more varied consumer group comprising both those staunchly opposed to drinking raw milk on the grounds of its perceived risks alongside those drinking pasteurised milk out of convenience with little if any awareness of raw milk products or the raw milk debate. Once again, individual differences in response to risk information and food safety orientation are likely to be important here as consumers encounter food risk communication online. We can assume the way in which individuals reflect upon their own set of circumstances in relation to what they read will influence their perceptions of this information and the extent to which they find it trustworthy.

Food safety experts, clinicians and nutrition experts are in a position to provide reliable information about risks and the health claims associated with raw milk. Whilst these professionals undoubtedly face challenges in terms of trying to change risk perceptions and consumption habits of raw milk consumers, in particular, there is still value to be gained from understanding which sources of online information are seen as most trustworthy, which features are preferred and which types of messages are least likely to be derogated. Web sites and social media are becoming important resources for communicating information about both safety and health benefit claims associated with raw milk (Jay-Russell, 2010). Whilst we know people's information needs increase during a food crisis or scare (Frewer, Raats, & Shepherd, 1994) the ongoing and evolving food safety issues surrounding raw milk pose a different kind of challenge for both communicators and consumers producing and accessing trusted online information. The online setting provides a somewhat unique repository for information about the risks and benefits of raw milk. We know that visual design is important in establishing a preliminary sense of trust in the site. Understanding what people notice and respond to immediately will provide an agenda for examining the structure and content of websites in further detail. In addition to the visual elements the web environment affords opportunities for trust markers above and beyond those offered by more traditional print media. Here we can take the time to gauge the effect of video, interactive elements and tailored information from a range of different sources on the trust perceptions of milk consumers, which may in turn affect their beliefs and behaviours regarding its consumption.

2. The current studies

This paper explores consumers' perceptions of trust and risk in relation to online information about milk and raw milk products. We used a multi-study, multi-method approach to explore this topic. Study 1 aimed to identify features of the websites' design and structure that capture participants' initial attention as we know that rapid judgments are made about websites regarding their perceived trustworthiness based on their appearance and design. Study 2 examines these features in more detail to understand the

Download English Version:

<https://daneshyari.com/en/article/7307815>

Download Persian Version:

<https://daneshyari.com/article/7307815>

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