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Antecedents of Citizen Self-Disclosure on Social Media Health Platforms: Towards an Improved Understanding

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Abstract

Social media platform usage and online community participation has increased to a near ubiquitous level, (Pew Research Centre, 2016). However, to date, much attention has focused on the factors that influence individual's trust and adoption of social media networks and online communities in general. In contrast, research on the factors that influence trust and self-disclosure on social media health platforms and associated online health communities remains remarkably limited. This is particularly surprising as adoption and usage of these health platforms remains comparatively constrained, thereby limiting potential social and health benefits to consumers, whilst also being an issue of concern to those who develop and design these platforms. This paper examines the extant literature on the factors that influence usage and participation in social media platforms and online communities and which are therefore likely to be relevant to examinations of self-disclosure in an online health context. In doing so, it contributes to technology adoption research in the area of user trust and self-disclosure on social media health platforms and online health communities.

Keywords: Self-disclosure, Trust, Technology Adoption, Social Media Health Platforms, Online Communities.

1.0 Introduction

Recent years have seen a rapid growth in the use of social media networks and online communities in both the private and public sectors and user self-disclosure on these platforms has provided great insight and value to businesses (Robertshaw & Marr, 2006; Kozinets 2002; Miller 2009). There is a notable rise in the use of this technological framework in the context of health care. For example, the Mayo Clinic Social Media Network (MCSMN) now boasts over 6,588 registered health related social media networks across the United States, (Mayo Clinic, 2016). In an effort to empower the citizen to take greater control over their health and to more effectively utilize the knowledge sharing capabilities of the Internet, the European Commission (through its H2020 actions) has placed increasing emphasis on e-Health proliferation through the establishment of citizen-centric social media networks and online communities .However the success of such initiatives is predicated on citizen self-disclosure of personal health-related information – information which is private and far more sensitive to the individual than disclosure of opinions on other subjects. It is imperative, therefore, for researchers, practitioners and policy makers to understand the factors that positively influence citizen disclosure of personal health information on social media health platforms.

1.1 Social media health platforms

In this paper, three terms associated with health platforms are of particular interest; social media health platforms, online health information communities and mobile health applications. The term 'social media health platforms' (SMHPs) is an encompassing term that refers to the growing number of online networks and applications, such as the Mayo Clinic Social Media Network, that facilitate the sharing of expert health information and patient experiences, while also allowing users to create

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content and participate in discussion. These platforms allow the creation of user profiles, the creation of support structures, the tracking of personal health data and can act as a response to growing strains on current health services (Mayo Clinic, 2016). The term ‘online health information communities’ refers to platforms that do not facilitate the same level of interaction as a social media health platform, (Vega, 2010). Typically, an online health information community does not require a high level of personally identifiable information for a user to participate, WebMD being an example. The term ‘mobile health application’ refers to mobile applications that track health information, diet and fitness data, appointment reminder systems and self-management systems for chronic illnesses such as hypertension, (Lankton et al., 2015). Growth in this particular sector is evidently fast, with the number of mobile health application downloads expected to exceed 50 billion by 2017 (Statista, 2015).

2.0 Self-disclosure

Information Communication Technology (ICT) has provided a generation with new avenues for interaction and communication. In fact, a broad body of research claims computer mediated communication can afford users an interaction experience that is in certain cases more socially desirable than that which would be experienced in a face to face scenario, (Joinson, 2001; Tidwell & Walther, 2002; Walther, 1996). That is to say that the forms of communication that ICT affords, such as anonymous contributions or community wide broadcasts, allow for people at various points on an extrovert-introvert scale to express themselves more effectively than would be the case in traditional communication environments (Morahan-Martin & Schumacher, 2003; Stritzke, Nguyen, & Durkin, 2004). Whilst the new experiential benefits of technology are undisputed, research into online self-disclosure is at an embryonic stage, (Posey et al., 2010). Consequently, the reasons why some people choose to disclose their personal information on online social platforms, whilst others resist doing so, remains undetermined.

The Oxford Dictionary (2016) defines self-disclosure as relating to an individual’s actions in making new or secret information known. In the literature this is echoed by Posey et al., (2007) who describe self-disclosure as a form of communication relates to an individual imparting personal and private information. Pearce and Sharp, (1973) perceive self-disclosure to refer to individuals’ voluntary and intentional revelations about themselves to others, whilst Greene, Derlega, & Mathews (2006) consider self-disclosure to be the revelation of one’s feelings, thoughts and experiences to others. The literature acknowledges that self-disclosure has both positive and negative consequences with Derlega et al., (1993) positing that self-disclosure can positively add to a person’s social relationships, while, conversely, making an individual feel vulnerable and at risk. The unique nature of social media networks and the ability that it confers to communicate with an unlimited audience influences those consequences. For example, recently, Choi & Bazarova (2015) have shown the semi-public nature of social media networks to influence one’s likelihood to self-disclose online, while Ledbetter et al., (2011) have shown self-disclosure to play a role in the development of online relationships.

2.1 Antecedents of self-disclosure

2.1.1 Perceived Risk

Despite the desire for relationships and interaction, individuals are understandably reluctant to impart with personal, private information, which may render the contributor vulnerable on many levels. Thus the lens of social exchange theory provides a useful framework for understanding the cognitive process of risk evaluation that individuals undertake before engaging in self-disclosure (Altman &

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Taylor, 1973; Poesy et al., 2010). This risk evaluation is consistent with Gefen & Ridings (2002), contention that individuals engage in interactions on the basis of expected, intangible benefits, where perceived benefits are evaluated against perceived costs. That risk evaluation and the factors that can mitigate the perception of risk on the part of the individual are likely to vary according to the sensitivity of information being imparted and the potential consequences of disclosure.

2.1.2 Social Influence

Self-disclosure exists within a social environment context (Deutsch & Gerard 1955). Recognising the influence of the social environment on behavioural outcomes is consistent with the theory of reasoned action (Fishbein & Ajzen, 1975), which proposes that an individual will observe group norms and actions in order to formulate his/her behaviour and degree of engagement in a shared environment. Cialdini, (2001) has also shown that individuals will often replicate the actions of others in a shared environment; those more inclined to social influence have been shown to self-disclose more readily (Venkatesh, 2003). Therefore, the influence of referent others is deserving attention in any examination of self-disclosure in a social media health platform context.

2.1.2 Reciprocity

Reciprocity has been shown to be a key enabler of self-disclosure (Posey et al, 2010; Jourad, 1971). Moreover, research has shown that when reciprocity is perceived to have occurred it helps to alleviate fears of vulnerability, allowing relationships to develop further, which as a result, drives further self-disclosure. In fact, reciprocal self-disclosure can actually build intimate relationships (Nowak & Sigmund, 2005) that enhance social capital (Grabner-Krauter & Bitter, 2013) and quality of life. Previous research (Derlega et al., 1993) has shown that the more that reciprocal self-disclosure occurs over an extended period of time, the more those interactions are inclined to result in divulging of deeper, more intimate information, thereby indicating increased levels of trust.

3.0 Trust in a Social Media Health Context.

Trust has been described as the glue that holds society together (Newton, 2014). In a technology-mediated environment, it assumes even greater importance, particularly in reducing perceptions of risk and enabling more confident interaction behaviour. Whilst this effect has been repeatedly demonstrated in the eCommerce literature, (e.g Connolly & Bannister, 2007; Wang & Benbasat, 2005), far less attention has been paid to examining trust in online health contexts. Nonetheless, the literature provides insights that are likely to be relevant to a social media health context. For example, the dyadic nature of trust as proposed by Mayer et al (1998) applies equally to an online health context. Accepted trust antecedents such as perceptions of ability, benevolence and integrity are also likely to be relevant in an online health context. In fact, Porter & Donthu (2008) have shown that perceived trustworthiness in an online community can reduce perceived risk, resulting in greater levels of interaction and self-disclosure.

A number of studies from the health domain also provide valuable direction. These include the work of Bernhardt & Felter (2004) and Walther et al., (2004) which suggest that domain designations (.org, .com, .gov etc.) can affect a citizen's perception of trust in a health website. Their research suggests when it is possible one should opt for a top level domain for health information sites. Conversely, sites with a .com domain registration frequently elicited low credibility and trust due to findings that imply commercial, self-interest of sponsors with regard to health websites. Those sites affiliated with

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educational entities are advised to invest in the .edu domain registration. Walther et al., (2004) also note that the presence of advertisement in .org domain registered sites can negatively affect a citizen's perception of trust in a health website.

Information convergence across different sources also has potential to influence the individual's trust response. For example, Walther et al. (2004) note that information repetition and convergence elicited user trust in websites as users felt that they could validate information found across sources. Participants in that study remarked on the positive effect of finding health information offline, via a health professional, and being able to corroborate such information on an online health information site. Metzger & Flanagin, (2013) echo this finding, as they posit that the credibility and trustworthiness of digital information is dependent on the availability of information across different sources and different mediums of communication.

In line with this, Information quality and perceived impartiality has also been shown (Harris et al., 2012) to influence the individual's trust response. It is therefore unsurprising that Eysenbach & Kohler's 2002 examination of consumers of online health information found that domain registration, website design layout, and clear and professional writing can influence on a user's perception of trust in health information websites. Similarly, Sillence's (2006) staged model of trust emphasises the influential role of visual design, information credibility and personalisation in citizens' decisions to trust health websites. Finally, the importance of perceived impartiality is unsurprising as it is consistent with the fundamentals of the patient-physician relationship, in which it is assumed that the physician will act with the best interests of the patient.

4.0 Conclusion and future implications

The purpose of this paper is to shed light on factors that facilitate citizen self-disclosure of personal health information on social media health platforms. It highlights the importance of a number of factors such as perceived risk, social influence and reciprocity as well as the influence of trust on self disclosure behaviour. Trust is a complex construct with multiple antecedents that influence behavioural outcomes. There is therefore a need to determine which of these factors exert most influence on self disclosure in an online health context and how these can be most effectively generated. Such insights will contribute not only to our understanding of the factors that influence health social media usage, but will be equally relevant to practitioners seeking to design more effective consumer based e-Health solutions.

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