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Privacy and pleasure: A paradox of the hedonic use of computer-mediated social networks

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E. Mitchell Church [a], [*], Ravi Thambusamy [b], Hamid Nemati [c]

[a] Department of Management and Decision Sciences, Coastal Carolina University, 100 E. Chanticleer Dr, Conway SC 29526, USA
[b] Department of Business Information Systems, University of Arkansas at Little Rock, 2801 S. University Ave, Little Rock AR 72204, USA
[c] Department of Information Systems & Supply Chain Management, The University of North Carolina at Greensboro, 1400 Spring Garden St., Greensboro NC 27412, USA

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ABSTRACT

Despite legitimate privacy concerns regarding their use, hundreds of millions of people still visit online social network sites every day. Although people state that they are concerned about their privacy, they engage in online behaviors that are contrary to this stated belief. This study draws from social capital and social exchange theories to provide a hedonic explanation for this seemingly contradictory stated beliefs and actual behavior. This study proposes that the enjoyment derived from computer-mediated social network (CMSN) sites serves as an incentive for individuals to ignore privacy concerns. Results of our study help explain how people exchange their privacy concerns for hedonic benefits. We found that the enjoyment derived from this social exchange is sufficient to override users' privacy concerns. This reduction in privacy concerns is proposed to explain continued use of online social networks.

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1. Introduction

Computer Mediated Social Networks (CMSN) continue to raise questions about user privacy. CMSN sites, including Facebook, Snapchat, Twitter, and others are always looking for ways to collect large amounts of accurate data about their users' online behavior to fuel targeted advertising efforts. This process often brings with it privacy concerns, as this information may not always be used as intended and is often mishandled (Acquisti & Gross, 2006; Chen, Ping, Xu, & Tan, 2009; Jones & Soltren, 2005). When privacy concerns arise, we would expect that users respond using a number of privacy protective behaviors, most notably reduced usage or abandonment of the CMSN (Smith, Milberg, & Burke, 1996; Son & Kim, 2008). This study is prompted by what appears to be a paradox concerning CMSN usage, particularly the use of Facebook. Although the company has had no dearth of privacy issues in its history, without fail, each change to Facebook's privacy policies and practices is accompanied by an initial outcry, yet adoption of the technology eventually continues unabated, with Facebook now

reporting an active user base of 1.86 billion (Facebook, 2016) with an estimated 45% of Facebook users checking the CMSN at least twice a day (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015) while smartphone users checked the CMSN 14 times a day on an average (Subbaraman, 2013). Researchers have suggested that there is a disconnect between privacy attitudes and privacy behaviors (Acquisti & Gross, 2006; Westin, 1967). Debatin, Lovejoy, Horn, and Hughes (2009) showed that users claim to understand privacy issues, yet behave in ways that are contrary to the protection of their personal information.

We believe that this paradox can be explained by recognizing that CMSN provide powerful hedonic motivations that overwhelm and suppress privacy protective behaviors that we might expect in other contexts (Parameswaran & Whinston, 2007). The powerful social engagement that a person receives from developing and maintaining relationships in a computer-mediated social context changes the way individuals weigh privacy concerns, and may impact the actions that individuals are willing to take when faced with situations that compromise their privacy. For this reason, it is critical to understand the way in which the enjoyment received from these social exchange relationships impacts privacy concerns. This study helps to further our understanding in this area. Specifically, we ask *"How are privacy concerns mitigated by perceptions of*

enjoyment gained through the use of CMSN, and what are the antecedents that contribute to these perceptions?"

Although past research supports the notion of enjoyment causing a decrease in privacy concerns (Dwyer, Hiltz, & Passerini, 2007), there is none that explains the mechanism by which the enjoyment is achieved. We address this gap in literature by empirically testing a model based on the established social network theories of social capital and social exchange. To this end, the theoretical foundations for this study rely on social capital theory (Putnam, 2000) and social exchange theory (Blau, 1964; Cropanzano & Mitchell, 2005; Emerson, 1976; Gefen & Ridings, 2002). According to social capital theory, the connections among individuals in a social network leads to the creation of social capital as a community level resource which adds value to the social network (Putnam, 2000). Social exchange theory states that individuals behave with the expectation that these behaviors will result in the same or similar social responses in return (Emerson, 1976). In the CMSN context, we propose that the hedonic enjoyment received from these social exchanges is sufficient to override the privacy concerns of individuals. This reduction in privacy concerns decreases the likelihood of engaging in privacy protective response behavior (Son & Kim, 2008), and is hypothesized to explain the continued use of CMSN in the presence privacy concerns.

This study makes important contributions to both CMSN theory and practice. On the theory side, researchers continue to look for models to explain the reasons why individuals use CMSN (Hu & Kettinger, 2008). We are not the first to argue that use of these systems should be examined hedonically (Sledgianowski & Kulviwat, 2009; van der Heijden, 2004). However, hedonic explanations for CMSN behavior stand directly at odds with the large body of work that speaks to the value CMSN users place on their privacy. Our study builds a theoretical bridge between these seemingly opposing streams by providing a hedonic explanation for the prevalence of continued CMSN usage in the presence of privacy concerns. At the same time, CMSN practitioners will also benefit from the study through an understanding of how privacy concerns, as obstacles to information sharing and revenue generation, can be overcome in a way that is in fact enjoyable and beneficial to end users. The study therefore offers some suggestions on how to go about obtaining the data that CMSN urgently need, while still preserving positive experiences for the user base. By doing so, we add to extant literature (Fu, Wu, & Cho, 2017) which focuses on how brand marketers can use CMSN to effectively target consumers.

The remainder the paper is organized as follows. In section 2, we examine the extant literature that exists around CMSN usage in the presence of privacy concerns. Section 3 presents our research model and outlines the study's hypotheses. In section 4, we discuss the data collection and our research methods, the results of which are presented in section 5. Section 6 discusses the paper's findings in detail, before concluding with some final thoughts in section 7.

2. Related literature

Our research uses the dual perspectives of social exchange theory and social capital theory to provide a hedonic explanation for the continued use of CMSN despite privacy concerns. First, we describe hedonic information systems and the characteristics that make them different from utilitarian information systems. Then, we explain why CMSN can be characterized as hedonic information systems. Next, we use social exchange theory to identify CMSN-facilitated social exchange behaviors that lead to perceived hedonic benefits of CMSN use. Finally, we use social capital theory to identify the motivations for the identified social exchange behaviors and characterize those behaviors using the social capital dimensions of bridging, bonding, and maintained social capital.

2.1. Hedonic information systems

A hedonic information system is one in which the primary goal is not utilitarian but self-fulfillment and one which allows its users to experience fun while using the system, thereby encouraging prolonged use rather than productive use (van der Heijden, 2004). Li, Liu, Xu, Heikkilä, and van der Heijden (2015) developed and empirically validated a hedonic IS continuance model based on the uses and gratifications theory. They found that three types of gratification, namely hedonic gratification (enjoyment, fantasy, and escapism), social gratification (social interaction and social presence), and utilitarian gratification (achievement and self-presentation) arise from hedonic IS use (Li et al., 2015).

CMSN can be classified as hedonic IS since "they are primarily used for hedonic purposes rather than utilitarian purposes" (Sledgianowski & Kulviwat, 2009, p. 75). Hedonic use of CMSN refers to "the act of sharing, taking pictures, playing games, and other similar activities as well as obtaining information on the Internet" (Luqman, Cao, Ali, Masood, & Yu, 2017, p. 546). CMSN are designed in such a manner that they focus on the interaction between the user and the system as an end unto itself without there being an objective external to the user-system interaction. Past research has shown that the usefulness of hedonic systems is based on the perceived enjoyment inherent in their use (Rosen & Sherman, 2006; van der Heijden, 2004). As such, the perceived enjoyment provided by these sites could be viewed as mediating various forms of social exchange and can serve as a direct antecedent to a person's intention to use the site, even in the presence of privacy concerns. Table 1 presents the definitions and literature sources for all constructs in the theoretical model.

2.2. Social exchange theory

Social exchange involves a series of interactions or exchanges that generate obligations (Emerson, 1976). Meeker (1971) argues that interpersonal interactions can be treated as individual decisions and suggests certain rules and norms of exchange.

Although the decision to engage in a particular type of exchange behavior is an individual act, the fact that both parties are acting in their prospective best interests has the potential to increase the complexity of understanding the relationships (Cropanzano & Mitchell, 2005). One such increased complexity is specifically the result of, and related to, the privacy concerns created by the parties engaging in this exchange. For this reason, we propose that the exchange of personal information facilitated by a social network site may create privacy concerns, paradoxically, it also creates a sense of enjoyment that can serve to override this privacy consideration.

2.3. Social capital

Social capital refers to "network ties of goodwill, mutual support, shared language, shared norms, social trust, and a sense of mutual obligation that people can derive value from" (Huysman & Wulf, 2004, p. 1). Huysman and Wulf (2004) add that social capital is the value a person derives from belonging to a community. There are two historical perspectives of social capital: the *Marxist* and the *Communitarian* perspectives (Huysman & Wulf, 2004). According to the Marxist perspective, social capital is all about the power struggle between classes. The communitarian perspective on the other hand takes a more community-centered view of social capital. In this view, social capital refers to a "variety of entities with