Technology addiction's contribution to mental wellbeing: The positive effect of online social capital

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ABSTRACT

This research examines the effect of online social capital and Internet use on the normally negative effects of technology addiction, especially for individuals prone to self-concealment. Self-concealment is a personality trait that describes individuals who are more likely to withhold personal and private information, inhibiting catharsis and wellbeing. Addiction, in any context, is also typically associated with negative outcomes. However, we investigate the hypothesis that communication technology addiction may positively affect wellbeing for self-concealing individuals when online interaction is positive, builds relationships, or fosters a sense of community. Within these parameters, increased communication through mediated channels (and even addiction) may reverse the otherwise negative effects of self-concealment on wellbeing. Overall, the proposed model offers qualified support for the continued analysis of mediated communication as a potential source for improving the wellbeing for particular individuals. This study is important because we know that healthy communication in relationships, including disclosure, is important to wellbeing. This study recognizes that not all people are comfortable communicating in face-to-face settings. Our findings offer evidence that the presence of computers in human behaviors (e.g., mediated channels of communication and NCTs) enables some individuals to communicate and foster beneficial interpersonal relationships, and improve their wellbeing.

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1. Introduction

For many Americans communication technologies have become an unquestionable aspect of daily life. According to the Pew Research Internet Project over 87% of Americans use the Internet, with an additional 90% owning cellphones and 58% owning smartphones (Fox & Raine, 2014). Not only has technology changed how individuals interact on a daily basis but it has also become a necessary component to successfully managing daily activities for many Americans (e.g., communicating with friends, family members, and colleagues, information seeking online, paying bills, or even contacting health-care providers). In fact, four in ten adults within the U.S. feel that they absolutely need access to the Internet (Fox & Raine, 2014).

For some individuals this need for technological connection has become an addiction. *Internet Addiction* is an increased amount of time spent online in order to induce feelings of pleasure (Goldberg, 1995; Hinic, Mihajlovic, Spiric, Dukic-Dejanvoic, & Jovanovic, 2008). Symptoms of Internet "addiction" range from decreased impulse control to an individual's inability to stop Internet usage (Davis, 2001). Addiction, in any context, is typically associated with negative outcomes. However, we investigate the hypothesis that increased mediated communication (even addiction) may positively affect wellbeing for those prone to self-concealment provided the content of the online communication is positive and develops social interaction, builds relationships, or fosters a sense of community. To better understand how Internet addiction and online social capital can improve wellbeing for some individuals, we begin by establishing a foundational knowledge of self-concealment, wellbeing, technology addiction, and online social capital. We then propose a model that describes the expected interactions of these concepts.

1.1. Self concealment, wellbeing, and technology addiction

Self-concealment, or the tendency to intentionally withhold personal information from others that could be considered

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distressing, personally embarrassing or negative, has negative implications for wellbeing (Larson & Chastain, 1990; Vogel & Armstrong, 2010). It is important to note that self-concealment does not refer to general temperament but describes the active nondisclosure of intimate or distressing information, such as the concealment of a chronic illness (Cepeda-Benito & Short, 1998). Self-concealment negatively affects wellbeing, for example, current research indicates that anxiety, depression, and overall psychological distress are just some of the negative impacts caused by self-concealment (Kawamura & Frost, 2004; Wismeijer & van Assen, 2008). Additionally, research indicates that self-concealment results in lower relationship satisfaction, thereby undermining a crucial source of social capital and support (Impett et al., 2010; Uysal, Lin, Knee, & Bush, 2012). Thus, there is a direct negative association between self-concealment and wellbeing.

The negative ramifications of intentionally withholding personal information inspires an investigation into alternative contexts that can provide individuals opportunities to build social capital, foster interpersonal relationships and self-disclose in what may be perceived "safe" contexts. Individuals who are prone to conceal their personal information from others in face-to-face scenarios may consider mediated communication an attractive alternative (Magsamen-Conrad, Checton, & Venetis, 2013). For example, research indicates that individuals who have more anxiety over self-presentation have a higher preference for interacting online because they feel safer (Burke, Kraut, & Marlow, 2011). The channel of communication is particularly important for self-concealing individuals because communication channels differ in the extent to which they enable control over self-presentation, information sharing, and monitoring (Greene & Magsamen-Conrad, 2010). Additionally, Internet channels that are less media rich (e.g., those without face-to-face chat capabilities, see Media Richness Theory, Suh, 1999) provide users with a sense of anonymity that allows individuals to feel more comfortable disclosing private information (Joinson, 2001). The ability to provide anonymity may be a contributing factor to why individuals who are prone to self-concealment would turn to non face-to-face channels of communication, especially the Internet, to share information. This may be especially true for individuals who view the Internet as a gateway to escape anxiety, depression, or helplessness (Hinic et al., 2008), however, these same factors may escalate the need for technological connection into an addiction.

An investigation into the disparate channel-related information management practices of individuals, especially as they pertain to self-concealment, wellbeing, and Internet addiction, is especially important among the college-aged population. Despite debate over the appropriate terminology to reference Internet "addiction" (as it is not a physiological dependence), excessive or pathological Internet use has widespread implications as access (and channels of access) to the Internet increases providing further gateways to escalating to addiction (Davis, 2001). Currently, 92% of 18–24 year old non-college students and nearly 100% of undergraduate and graduate college students are Internet users (Fox & Raine, 2014). Thus, not only do a majority of college-aged adults use the Internet but additionally, a majority of college-aged adults also have easy home-based access. Users had limited platforms for connection when the concept of Internet addiction was introduced. However, individuals currently have a variety of different mechanisms through which to access the Internet, such as through cell phones. Eighty-nine percent of 18–24 year old non-students, 96% of undergraduate students, and 99% of graduate students own cell phones and of these individuals 61%, 63%, and 52%, respectively, own smartphones that they use for internet or email (Smith, Rainie, & Zickuhr, 2011). At this point, we transition from a narrow focus on Internet addiction to a more inclusive focus on the consumption of and addiction to communication technologies, of which college

students are heavy consumers. For example, college-aged students also use their cellphones to communicate through text message, sending and receiving an average of 109.5 text messages per day (Smith, 2011). Additionally, many of these "active texters" indicate text-messaging as their preferred method of contact (Smith, 2011). As new communication technologies (NCTs) continue to advance, they change how individuals interact and manage their interpersonal relationships. We seek to determine the potential outcomes of increased communication through mediated channels, especially on wellbeing for college students prone to self-concealment. We discuss two potential intervening variables between self-concealment and wellbeing, communication technology addiction and online social capital.

1.2. Communication technology addiction

The negative outcomes of self-concealment (e.g., depression, general psychological poor health, emotional distress, etc.) and the potential to more easily monitor and manage self-presentation through mediated contexts may increase these individuals' likelihood to develop addictive behaviors related to communication technologies and communicating via mediated contexts (Bond & Bunce, 2000; Masuda et al., 2011; Masuda, Anderson, & Sheehan, 2009). If those prone to conceal are driven to communication and interactions through medicated channels this may increase the potential of developing an addiction to communication technologies. Mediated communication can be accomplished through a number of different channels (e.g., email, internet, apps) and technologies (e.g., smartphone, computer, tablet).

Internet Addiction (Goldberg, 1995; Hinic et al., 2008), broadened to communication technology addiction, is a rising potential problem, particularly for younger individuals who are the most at risk to develop the behavioral addiction (Hall & Parsons, 2001). The concept of Internet addiction can become arbitrary if applied to the overall usage of the Internet without analysis of specific components (e.g., motivations and internet behaviors, including communication/relationship building related motivations and behaviors), however, the development of the cognitive model of pathological Internet use by Davis (2001) has helped to explain the potential motivators for this type of addiction. We utilized Davis' (2001) model of pathological Internet use as a frame to expand the analysis to encompass communication technologies more broadly and examine outcomes within the context of information-management related personality traits.

Davis' (2001) cognitive-behavioral model of pathological Internet use suggests that specific maladaptive cognitions, such as low-self efficacy, depression, and negative self-appraisals can lead to Internet addiction. The model of Pathological Internet Use (PIU, Davis, 2001) may inform the explanation of the associations between self-concealment and the broader concept of addiction to communication within mediated environments. The negative cognitions described in the PIU (e.g., depressogenic or ruminative cognitive style, low-self esteem, etc.) are closely linked to negative outcomes of self-concealment, thus bolstering the explanation of how individuals with self-concealing tendencies may become addicted to communicating in mediated contexts. This concept is further validated considering that the Internet often serves as a de-stressor and escape from stress and feelings of stress and depression (Hinic et al., 2008) and impression management (e.g., avoidance of "leakage" of any unintended nonverbal cues and affect due to physical isolation) to increase favorable images in "safe" contexts is enabled by the non face-to-face nature of these communication technologies (Walther, 2007). Thus, we suggest that there is a direct, positive, association between self-concealment and communication technology addiction.