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The Five Factor Model of personality and employees' excessive use of technology

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ABSTRACT

Prior research has stressed the negative effects employee technology addiction, or excessive use, may have in the workplace. This study explored personality, through use of the Five Factor Model (FFM), and problem and pathological technology (Internet and text-messaging) use. Personality was found to predict certain aspects of technology use. Specifically, conscientiousness was negatively related to problem Internet use. However, the FFM did not add to the prediction of pathological Internet use or problem and pathological text-messaging use. These findings suggest that some dimensions of the FFM may be useful in explaining why certain employees may be predisposed to developing problem use tendencies. Implications of the current findings as well as limitations and future directions are discussed.

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1. Introduction

The potential negative impact of technology on individuals, especially the Internet, has garnered considerable attention (e.g., Kraut et al., 1998, 2002; Lu et al., 2011; Young, 2004). Throughout the past decade, there has been a rapid expansion of research focusing on addiction (e.g., Young, 2004), problematic use (Peters & Malesky, 2008), or excessive use (Phillips, 2006) of the Internet and other technologies. The concept of *Internet addiction* was introduced by Young in 1996 as an "impulse-disorder" not involving the ingestion of an intoxicant, making it a 'behavioral addiction' similar to gambling addiction and unlike alcoholism (Young, 2004). This type of addiction has since been extended to incorporate other forms of technology, such as short-message-service (SMS) or text-messaging addiction (Rutland, Sheets, & Young, 2007). These 'addictions' may be detrimental to employees and organizations, leading to reduced employee productivity and exposing organizations to legal liabilities (Davis, Flett, & Besser, 2002; Phillips, 2006; Young, 2010). The use of new technologies can also have unintended negative consequences in the workplace, and may be injurious to employee interactions (Cameron & Webster, 2005). Drawing on Peters and Malesky (2008) who avoided debate regarding the existence of behavioral addictions by utilizing the term 'problematic use', the term *excessive use* is used here rather than 'addiction.'

Research on excessive technology use (i.e., Internet and text-messaging use) has largely examined how individuals' personalities predispose them to engage in certain behaviors. Investigations have typically examined how specific or narrow aspects of an individual's personality make them inclined toward excessive use. For example, research on Internet addiction has predominately focused on narrow traits, such as shyness, need for cognition, impulsivity, and sensation seeking (e.g., Chak & Leung, 2004; Davis et al., 2002; Shi, Chen, & Tian, 2011; Velezmoro, Lacefield, & Roberti, 2010). However, there is little research connecting excessive technology use to broader traits (Engelberg & Sjöberg, 2004; Peters & Malesky, 2008), such as those of the Five Factor Model (FFM) of personality. It is important to examine broad traits of personality because of their enormous bandwidth (John, Naumann, & Soto, 2008); broad traits are inclusive and capture aspects of personality that may be missed by narrow traits. The FFM, examined here, is commonly used and accepted as a comprehensive representation of personality based on five broad dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

While researchers have examined the FFM and technology, the focus has typically been on specific use behaviors. For example, research has focused on the frequency and duration of chat room, social networking site, or email use to communicate with others (Landers & Lounsbury, 2006; McElroy, Hendrickson, Townsend, & DeMarie, 2007; Phillips, 2006; Wilson, Fornasier, & White, 2010) rather than investigating excessive use. While researchers have explored the FFM and technology use (Engelberg & Sjöberg, 2004; Peters & Malesky, 2008; Wilson et al., 2010), research linking the FFM to excessive use is sparse. Further, those examining the FFM have not always examined the complete FFM, opting instead to examine only some of the five factors, such as extraversion or neuroticism (e.g., Hardie & Tee, 2007; Mottram & Fleming, 2009).

Lastly, previous studies have predominantly relied on adolescent or college student samples (e.g., Engelberg & Sjöberg, 2004; Ko, Yen,

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