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TECHNOLOGY OVERDOSE: EXPLORING OBSESSIVE WORK-RELATED EMAIL USE

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Abstract

Email (i.e., electronic mail) is a technology which has wrought deep changes in our lives, with both professional and personal impacts. Despite the far-reaching benefits provided by email, it has had negative ramifications. Problematic behaviors exist among some email users, who lose control over their work-related email use and are jeopardizing effectiveness and well being. Although email use has received considerable attention, our understanding of it based on research evidence is limited. This article attempts to examine obsessive work-related email use and proposes a conceptual model of the antecedents and consequences.

Keywords: Obsessive work-related email use, obsession, well-being, passion.

Introduction

With the notable features of ubiquity and simplicity, email is a killer application which has greatly enriched our lives (Weber, 2004). It enables communication to overcome the barriers of time and space, and distributes huge volume of information cheaply, broadly and quickly. In workplace, email has become an integral part of business operation and has transformed business communications dramatically (Tassabehji and VakolaIt, 2005). However, like other pathological use of technology such as netaholism and onlineaholism (Surratt, 1999; Young, 1998), the phenomenon of problematic email use – uncontrollable, damaging use of this technology which produces negative outcomes – has been brought to the public’s attention. Some problematic behaviors regarding email have been identified, such as obsessive mailbox cleaning (Jeffrey, 2006), excessive email checking (Young, 1998), etc. It should come as no surprise that obsessive email users may look for Internet cafes or postpone personal activities just to eke out a few more minutes for checking and answering emails during vacation or after work. The development of wireless devices further boosts the growth of such obsessive email use. For example, Blackberry, a hand-held computer which enables users to read emails anywhere in real time, has been jokingly referred to as “crackberry”, because of its highly addictive nature¹. Sheraton Chicago has launched a program, which offers to lock the gadgets in the hotel safe in order to help guests realize there is life after emails².

Although considerable attention has been devoted to the rising incidence of obsessive work-related email use and its crippling side effects (Denning, 1982; Whittaker and Sidner, 1996), little research has been conducted to further our understanding of the impacts that obsessive email use has had on our professional and personal lives (Weber, 2004). The purpose of this study is to bridge the void by exploring behaviors of people whose work-related email use seems out of control and identifying the antecedents and consequences of obsessive work-related email use.

¹ <http://en.wikipedia.org/wiki/BlackBerry> (Last accessed on January 5, 2007).

² <http://abcnews.go.com/WNT/Technology/story?id=2348779> (Last accessed on January 5, 2007).

Conceptual model

Obsessive Work-related Email Use

In this study, we distinguish between excessive email use motivated by work or career commitment (a rational, goal-directed activity engagement such as mandated email response beyond office hours) and that driven by obsession, which is the focus of our study. Obsessive work-related email use is conceptualized as a latent construct consisting of two dimensions: the psychological and behavioral dimensions. The psychological dimension refers to the obsession with work-related email use. Adapting the definition of obsession in the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), we define obsession with work-related email use as “recurrent and persistent ideas, thoughts, impulses, or images concerning work-related email use, which are experienced as intrusive and inappropriate and cause marked anxiety or distress”. As in the case of obsessionality in substance dependence (Friedman et al., 2000) or addiction-like behaviors (Leedes, 2001), obsessive users yearn for a return to their secure base which is achieved when they can maintain proximity with email resources when involuntarily separated from the activity engagement, though they attempt to suppress or ignore the obsessive thoughts or impulses or to neutralize them through other action or thoughts (American Psychiatric Association, 1994). The obsessive thoughts or impulses persistently take control of obsessive email users, making them to think and do things which are inconsistent with their intention and leading them to become more obsessive and compulsive (Schaefer, 1987).

The behavioral dimension refers to the continued engagement in work-related email use driven by obsession. When individuals are obsessing about work-related email use, they feel a longing or yearning, which may further lead to actual use. Unable to say no to the “you’ve-got-mail” beep, obsessive users constantly check and answer their emails, and develop a rigid email-now pattern. Paradoxically, obsessive email users are often those whose jobs do not require immediate email reply (Mackay, 1988). Although the users acknowledge their obsessive email checking and fielding, they find it difficult to disconnect themselves (Berghel, 1997). Obsessive email use, as a controlled form of internalized activity, makes people devoted to the unproductive persistence, in spite of the awareness of the undesired or hazardous effects. Under obsession, email users are powerless over the process. Obsessive work-related email use is an excessive behavior, like other pathological behaviors such as substance abuse, compulsive gambling, overeating, alcoholism, and so on (Mulé, 1981).

Taking both psychological and behavioral dimensions into account, we define obsessive work-related email use as “recurrent and persistent ideas, thoughts, impulses, or images concerning work-related email use which are experienced as intrusive and inappropriate and cause marked anxiety or distress, and the continued engagement in work-related email use resulting from such ideas, thoughts, impulses or images”. Obsessive thoughts and compulsion to continue are salient characteristics of obsessive email use.

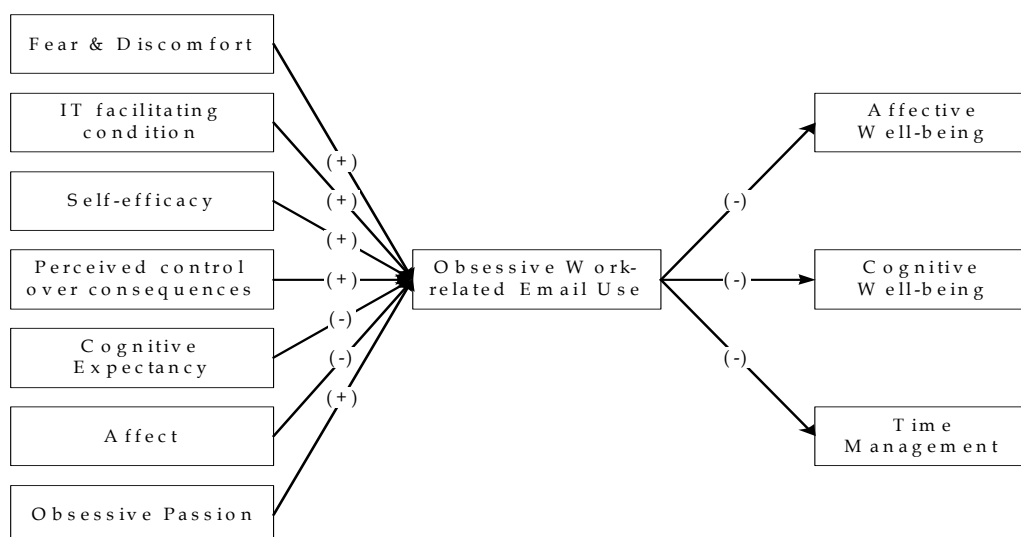


Figure 1. Conceptual model of antecedents and consequences of work-related email addiction

Obsession shares some commonalities with the concept of addiction, which is closely linked with several pathological behaviors with technology, such as Internet Addiction Disorder (Surratt, 1999; Young, 1996). In this study, the term “obsession” is used due to two considerations. First, obsession is less laden with everyday meanings, unlike addiction which is socially defined and whose definition in authoritative texts has changed throughout the years. Second, obsession better describes the problematic work-related email use in this study. The fundamental difference between addiction and obsession lies in the fact that addiction is characterized by a “reward-seeking” (West, 2006) or reality-escaping behavior (Garson, 2005). On the contrary, reward-seeking or reality-escaping can hardly be seen as a driving motive among people who constantly check and handle their emails.

Built upon the conceptual perspectives of addiction and workaholism, a conceptual model is proposed (Figure 1).

Antecedents of Obsessive Work-related Email Use

Fear and discomfort

Work is taking an increasingly central role in personal identity, and individuals’ interpretation of self can be over-reliant on work. The fear of being left behind professionally, loss of control, loss of contact with others, etc. (Porter and Kakabadse, 2006; Korac-Kakabadse and Kakabadse, 1998; Machlowitz, 1980; Oates, 1971; Porter, 1996) all contribute to excessive email use. Email almost dominates business communication and work has become the primary source for relating to others (Ciulla, 2000). Consequently, individuals rely on email to stay connected and updated, keep control of business information, show a continuing and active engagement in professional activities, and maintain contact with others. However, the self-set performance standards, which could be unreasonably high and produce rigid thinking patterns (such as perfectionism and need for control) will result in fear and discomfort (Porter, 1996). The diagnostic reference by World Health Organization (1989) includes relief, comfort or stimulation as motivations for continuing use of an addictive substance; likewise, the obsessive behaviors of email users offer the same outcomes, manifest as relief from specific fears or a temporary discomfort of losing control or being left behind professionally.

H1: Fear and discomfort will positively influence obsessive work-related email use.

Perceived behavioral control

A key construct in the Theory of Planned Behavior (Ajzen, 1985; Ajzen, 1991), perceived behavioral control is “the perceived ease or difficulty in achieving a valued outcome and the perceived ability to overcome constraints, which reflect past experience and anticipated impediments” (Ajzen, 1988). It influences obsessive work-related email use through three factors – IT facilitating condition, self efficacy, and perceived control over the consequences.

IT facilitating condition concerns the user’s perception of the accessibility to IT resources (Limayem and Hirt, 2003). High accessibility to IT resources can be positively associated with technology use (Thompson et al., 1991; Venkatesh et al., 2003), regardless of the outcomes being positive or negative. Griffiths (2003) indicates that an important precursor to Internet abuse is the opportunity to access the Internet. The same argument holds for obsessive email use – perception of a high accessibility can motivate the individual to engage in obsessive email use.

H2: The accessibility of IT resources will positively influence obsessive work-related email use.

Self-efficacy is an individual’s self-confidence in his/her ability to perform a behavior (Bandura 1977, 1982). Email is easy to use – once the user is connected, receiving and sending emails are just at fingertips. Thus, email users will hardly anticipate any impediments in using email, and will very likely develop high self-confidence in their ability to use emails.

H3: Self-efficacy will positively influence obsessive work-related email use.

Each act is expected to have some consequences. A means rather than an end, email use is an indispensable tool of business communication, which leads to other professional activities. Perceived control over the consequences refers to the users’ perception of their control over the subsequent professional activities. Checking and answering email hardly incur any business cost. Furthermore, as an “invisible” work activity (Lantz, 1998), email allows users full discretion as to how to deal with the email, and whether and when to reply to it. Some people often pretend not to

have received emails, which are indeed in their inbox (IEE Engineering Management, 2004). Unlike face-to-face interaction which often demands immediate reaction, reading an email does not necessitate an immediate reply or action when the sender rarely knows whether the message has been received and read or not. With the double-blind processing, email users can procrastinate and respond to organization demands at any time and space they want without the awareness of the sender. Thus there is a high level of perceived control over the outcome of email use, compared to other communication modes (such as face-to-face and phone calls).

H4: Perceived control over the consequences will positively influence obsessive work-related email use.

Personal attitude

Ajzen (1991, p. 188) defines personal attitude as “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question”. Obsessive users are very likely to hold a negative attitude towards their obsessive engagement in work-related email use since they usually attempt to suppress or ignore the obsessive thoughts or impulses or to neutralize them through other action or thoughts (American Psychiatric Association, 1994).

Personal attitude can be formed on the basis of affective and evaluative (or cognitive) responses (Zanna and Rempel, 1988). Thus personal attitude influences obsessive email use in two distinct ways: through cognitive expectancy and affect. Based on the individual’s belief (Verplanken et al., 1998), cognitive expectancy refers to the individual’s outcome expectation of engaging in an activity (Ajzen, 1985; Davis, 1989). Although email using allows people to time-shift and prioritize business communications, people can expect negative outcome emerging from “too much of a good thing” and appreciate use in moderation.

H5: Cognitive expectancy will negatively influence obsessive work-related email use.

Based on the individual’s emotion (Verplanken et al., 1998), affect is another psychological driving force of personal attitude towards a given behavior (Oliver, 1993; Triandis 1971, 1980). Affect captures the emotional worth of obsessive work-related email use, namely, the emotional satisfaction and enjoyment derived from performing a certain behavior. The affective component of personal attitude can be inferred from the presence of positive or negative emotions (Triandis, 1971; Verplanken et al., 1998). Generally, people develop intentions to perform the behaviors towards which they have positive affect (Ajzen and Fishbein 1980).

H6: Affect will negatively influence obsessive work-related email use.

Obsessive passion

Passion is a strong inclination towards an object or activity “that people like, that they find important, and in which they invest time and energy” (Vallerand et al. 2003, p. 757). Taking a dualistic approach to the concept of passion, Vallerand et al. (2003) differentiate between two types of passion: harmonious passion and obsessive passion which differ in how passionate activity has been internalized in individual’s identity (Amiot et al., 2006). Harmonious passion takes place when individuals freely accept the activity as important and autonomously internalize the activity into their identity without any contingencies attached (Sheldon and Kasser, 1995; Vallerand et al., 2003). On the contrary, obsessive passion is a strong inclination towards an activity, which originates from a controlled internalization of the activity into one’s identity (Sheldon and Kasser, 1995; Vallerand et al., 2003). It is the obsessive passion that motivates obsessive work-related email use. When the strong inclination towards email use is driven by obsessive passion which is out of personal control, the user feels compelled to engage in the activity due to certain internal contingencies attached to the activity, such as feelings of social acceptance, feelings of self-esteem, or the uncontrollable comfort generated from activity engagement.

Obsessive passion in email breeds an internal compulsion to engage in the passionate activity (Amiot et al., 2005). Under obsessive passion the individual does not freely accept the activity as important; instead, passion takes control. Progressively, the activity engagement takes disproportionate space in the person’s life and leads to conflict with other activities. Much like pathological gamblers, obsessive email users lose control over work-related email use and no longer willfully choose to do so (Ratelle et al., 2004). For instance, it is not surprising that an obsessive email user on a family vacation gets stuck in an Internet café even though he plans to spend only a few minutes in order not to upset his family.

H7: Obsessive passion will positively influence obsessive work-related email use.

Consequences of Obsessive Work-related Email Use

Subjective well-being

There is growing evidence that the type of involvement with which people engage in a certain activity can lead to psychological effects (e.g. Sheldon and Kasser, 1995; Vallerand, 1997). Obsessive email use can greatly impact the individuals' subjective well-being. Subjective well-being (Diener, 1984) has two aspects: affective well-being which focuses on an individual's feeling of happiness or sadness, and cognitive well-being which refers to an individual's satisfaction with life (Argyle & Martin, 1991). Obsessive work-related email use will lead to negative affective and cognitive experiences over the duration of activity engagement (Vallerand et al., 2003).

Due to the internal compulsion inherent in obsession which leads to the individual's pressured engagement in the activity when he knows he should not, the person may experience negative emotions once the rigid persistence is terminated (e.g. feeling guilty for having performed a task when one should not have done so) (Amiot et al., 2005; Mageau et al., 2005). Additionally, powerless over the strong inclination towards the activity, the person cannot completely disengage from thoughts about the activity and thus experience negative psychological dependence when prevented from engagement. This will result in a low degree of perceived control and self-determination in one's life, which has consistently co-varied with happiness (Eisenberg, 1981; Knippa, 1979; Morganti, Nehrke, & Hulieka, 1980; Reid & Ziegler, 1980). Therefore we expect obsessive work-related email use to be negatively associated with affective well-being, which reflects individuals' instant evaluation of the activity engagement (Lucas, Diener and Suh 1996).

H8: Obsessive work-related email use will negatively influence affective well-being.

The rigid persistence of work-related email use may conflict with the users' other life domains because they feel a strong compulsion to engage in email-related activities even when they should not (Mageau et al., 2005). Common sense has it that engagement in work-related email use often comes at the expense of other life activities. The image of an obsessive user devoting almost all the leisure time to work-related emails would tend to reinforce this perception. However, various daily activities, such as music and reading, sex, sport and exercise, can enhance subjective well-being in general and satisfaction with work and leisure time in particular (Argyle and Martin, 1991). What's more, an obsessive tendency towards email use reflects a person's incapability to appropriately integrate work-related email use with activities in other life domains (such as family life and pursuit of other personal interests) (Seguin-Levesque et al., 2003). Therefore obsessive email users tend to evaluate their activity engagement negatively (Lucas, Diener and Suh 1996).

H9: Obsessive work-related email use will negatively influence cognitive well-being.

Time management

Like other modern communication technologies such as cell phones and instant messaging, email has disruptive impacts (Dabbish and Kraut, 2004). The disruptive impacts of email are twofold: the ever-growing volume of emails and communication intrusion (Kraut and Attewell, 1996).

Dealing with emails and processing information take time. An average business person sends and receives about 90 emails a day; and "power emailers" may spend more than three hours a day on emails and they often deal with their missives after work, on weekends, or even during vacation (Sweetnam, 2006). However, from the perspective of attention economy which views attention as a limited resource, people's attention to "pay" and time to "spend" for information is literally scarce (Thorngate, 1997). Given the limited "personal mental bandwidth" (Denning, 1982) and the long-standing inbox bloat problem, the influx of email messages will easily become a time sink.

H10: Obsessive work-related email use will negatively influence time management through increased volume of email.

Some studies have demonstrated the downside of email as a source of interruption. Majority of the users read email as it arrives whenever possible (Severinson-Eklundh and Macdonald, 1994) and try to answer it all at once (Lantz,

1998). Due to constant interruptions, managers think through important issues in tremendously short blocks of time (Tetard, 1999; Sproull, 1984). Obsessively work-related email use will divert individuals from pre-planned and prioritized work, when people can hardly disconnect themselves and ignore emails (Berghel, 1997).

H11: Obsessive work-related email use will negatively influence time management through communication intrusion.

Methodology

A survey methodology will be adopted to test the research hypotheses through a field study. A survey instrument will be created on the basis of existing measures and validated by researchers in the same area. Where available, previously-validated scales are adopted and slightly modified according to the current study. Each research variable is measured using multi-item scales. A pilot study will be conducted with student subjects enrolled at a large university in the south of US. After fine-tuning study design, the finalized instrument will be administered in a research institution in the south of US. Precautions will be taken to ensure that survey participants have problematic work-related email use driven by obsession rather than organization requirement.

Proposed contributions and future study

In response to the call for an in-depth understanding of the impacts which email has had on our lives (Weber, 2004), this study seeks to shed some light on the phenomenon of obsessive work-related email use through investigating the antecedents and consequences. This study yields implications for both research and practice, and provides some insights for future research which are needed for a better understanding of email – the technology which rules our lives. More empirical work on obsessive work-related email use is necessary, in order to test the applicability of the model in other settings and refine our current understanding. Furthermore, extending our study to non-work-related scenarios will complement the findings of this study.

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