Chapter 9
Self-Regulation in Instant Messaging (IM):
Failures, Strategies, and Negative Consequences

Anabel Quan-Haase
University of Western Ontario, Canada

ABSTRACT
Despite the advantages of using instant messaging (IM) for collaborative work, concerns about negative consequences associated with its disruptive nature have been raised. In this paper, the author investigates the mediating role of self-regulation, using a mixed methods approach consisting of questionnaires, focus groups, and interviews. The findings show that these concerns are warranted: IM is disruptive, and multitasking can lead to losses in productivity. Despite these negative consequences, users are active participants in IM and employ a wide range of self-regulation strategies (SRS) to control their overuse. The study found three key SRS: ignoring incoming messages, denying access, and digital or physical removal. The study also found two different approaches to self-regulation. The preventive approach, consisting of creating routines and practices around IM use that would help regulation, and the recuperative approach, consisting of changing behaviors after overuse had occurred. Communication via IM helps in the development of social capital by strengthening social ties among users, which can be useful for information exchange and cooperation. These positive effects provide a balance to the potential negative impact on productivity. Implications for theories of self-regulation of technology and for managerial practice are also discussed.

INTRODUCTION
Instant messaging (IM) has gained enormous popularity in the past decade, because it allows for real-time collaboration (RTC) with multiple individuals across the globe. It is appealing also because it signals the presence of other users by displaying notification regarding whether a contact has logged on or off. Unlike other RTC technologies, such as the cell phone or smartphones like the BlackBerry, IM is a push technology, in which presence information is automatically transmitted to users. Users can also choose to display availability through the use of status settings (e.g., Busy,
Away, Out to Lunch), or they can leave messages to others about their social accessibility by way of customizable away messages (Baron, Squires, Tench, & Thompson, 2005; Quan-Haase & Collins, 2008). Therefore, IM provides a variety of ways to display a user’s presence and availability in a flexible manner over time. It is not surprising then that IM is a fast growing Internet application, with usage by an estimated 37% and 49% of the American and European online populations in 2006, respectively (comScore, 2006).

The speed of interaction, display of availability information, and support for multiple conversations has made IM an appealing tool for collaboration in work settings (Nardi, Whittaker, & Bradner, 2000; Quan-Haase, Cothrel, & Wellman, 2005). IM provides an informal, spontaneous means of communication that allows workers to ask quick questions and obtain prompt clarifications and to coordinate and schedule meetings. Further advantages include the ability to negotiate social accessibility, conduct intermittent conversations, and maintain a sense of connection with others in the organization, even without necessarily communicating (Nardi et al., 2000). Despite the many advantages of using IM for both colocated and dispersed collaborative work, many enterprises have been reluctant to adopt the technology in the workplace. They are concerned not only about the time that employees might spend chatting with friends and family during work hours, but also about the losses in productivity resulting from the disruptive nature of the technology (Cutrell, Czerwinski, & Horvitz, 2001; Jackson, Dawson, & Wilson, 2003; Rennecker & Godwin, 2003). The social norms of IM induce users to respond quickly, even when responding might not be convenient, because others know they are online and potentially available for communication (Quan-Haase & Collins, 2008; Quan-Haase et al., 2005). The combination of workflow interruptions, shifts in attention, and loss of focus (Cook & Cook, 2003; Cutrell et al., 2001; Rennecker & Godwin, 2003) creates ambivalence in many managers, team leaders, and employees about whether the benefits of adopting IM in the workplace outweigh the detriments, a concern often summarized under the term *productivity paradox* (McCune, 1998).

This study adds to the literature on RTC technologies in the workplace by investigating self-regulation in IM. Although the current literature reports on multitasking (Gonzalez & Mark, 2004; Su & Mark, 2008), problems associated with distraction (Mark, Gudith, & Klocke, 2008), and the disruptive nature of IM (Cook & Cook, 2003; Cutrell et al., 2001; Quan-Haase et al., 2005; Rennecker & Godwin, 2003), little is known about what moderating factors could alleviate some of the problems resulting from IM use. Rennecker and Godwin (2003) concluded that moderating factors such as training, policy statements, and user feedback could mitigate the influence of IM use on productivity. Baron (2008) introduced the concept of “adjusting the volume” to describe the ways in which users evade the overload caused by constant connectivity. In the present study, self-regulation is identified as an important moderating factor that has not received sufficient attention in the IM literature. *Self-regulation* is defined as the sum of regulatory functions that help individuals to guide their intentional behavior over time and contexts (Karoly, 1993). This definition implies the exertion of some form of control by individuals through modulation of thought, affect, behavior, or attention through the use of specific mechanisms or strategies (Karoly, 1993; Muraven & Baumeister, 2000). In the case of IM, users may exert control over their usage patterns by modulating their behavior to help achieve specific goals; in this study these methods will be referred to as *self-regulation strategies* (SRS). Therefore, self-regulation may be an important component of work processes that help users effectively regulate their use of IM, in addition to those already identified by Rennecker and Godwin (2003). The self-regulation framework will allow us to examine four research questions related to RTC technologies:
Related Content

Towards an Affordance-Based Theory of Collaborative Action (CoAct)
www.igi-global.com/chapter/towards-affordance-based-theory-collaborative/68613?camid=4v1a

Human Factors in Four Cases of E-Collaboration in Biomedical Research: A Qualitative Study
www.igi-global.com/article/human-factors-four-cases-collaboration/65588?camid=4v1a

Improved Information Connectivity and Visibility throughout the Global Supply Base
www.igi-global.com/article/improved-information-connectivity-visibility-throughout/46980?camid=4v1a

Reference Architecture for Cross-Company Electronic Collaboration
www.igi-global.com/chapter/reference-architecture-cross-company-electronic/52346?camid=4v1a