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# The extended 'chilling' effect of Facebook: The cold reality of ubiquitous social networking

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## ARTICLE INFO

## ABSTRACT

Prior research has established the phenomenon of the 'Chilling Effect' where people constrain the self they present online due to peer-to-peer surveillance on Social Network Sites (SNS). However currently uninvestigated is the possibility that the threat of such surveillance on these sites might constrain the self presented *offline* in 'reality', known here as 'the *extended* chilling effect'. The purpose of this study is to examine the existence of this '*extended* chilling effect'. Drawing on theories of self-awareness and self-presentation, the impact of surveillance in SNS is theorized to lead to an awareness of online audiences in offline domains, stimulating a self-comparison process that results in impression management. A mixed methods study of semi-structured interviews (n = 28) and a 2 × 2 between-subjects experiment (n = 80), provides support for offline impression management in order to avoid an undesired image being projected to online audiences. The novel finding that the chilling effect has *extended* highlights the potential dangers of online peer-to-peer surveillance for autonomy and freedom of expression in our offline lives.

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## 1. Introduction

Social media, and in particular social network sites (SNS) such as Facebook, are so ubiquitous (Vodanovich, Sundaram, & Myers, 2010) that they have radically altered the nature and scope of social interaction for their users. SNS are hailed as technologies for self-presentation (Chen & Sharma, 2015; Fogues, Such, Espinosa, & Garcia-Fornes, 2015; Rui & Stefanone, 2013; de Vries, 2014), affording users a plethora of different functions to maintain online personas (Chen & Marcus, 2012; Tosun, 2012). However these sites also present challenges. Information is disclosed *publicly* (Joinson, 2008; Taddei & Contena, 2013), at least within the bounded network of connected 'friends', with low levels of *anonymity* (Zhao, Grasmuck and Martin, 2008), to *multiple audiences simultaneously* (e.g., parents, colleagues, family) (Binder, Howes, & Sutcliffe, 2009).

Together these three phenomena of increasingly public behavior and low anonymity in front of multiple audiences via SNS have made users become cautious about how they present themselves. This has led to the online 'Chilling Effect', whereby users carefully manage their online personas, constrained by the expectations of their audiences (see Marwick & Boyd, 2011). Indeed, researchers using Facebook's own data have found that the vast majority of users engage in self-censorship of their posts (Das & Kramer, 2013). Furthermore other research has evidenced wide usage of removal strategies (e.g., deleting or de-tagging) (Lampinen, Tamminen, & Oulasvirta, 2009; Lang & Barton, 2015). These strategies that underpin the chilling effect are forms of impression management, specifically, those aimed at *avoiding an undesired image* rather than approaching one which is desired (Schütz, 1998). This paper refers to the former as *Negatively Directed Impression Management* (NDIM[1]).

The impact of surveillance by audience(s) on constraining behavior (i.e., the Chilling Effect) has been well researched in the offline domain, in such contexts as prisons and the workplace (Foucault, 1977 Pierce, Snow, & McAfee, 2013). As discussed above, the same effect has been seen to impact the maintenance of online personas. The purpose of this research is to examine, based on the pervasive and ubiquitous availability of digital cameras and uploading of photographs, if the Chilling Effect of online audiences

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[1] NDIM: Negatively Directed Impression Management.

has extended *offline*. In other words, do users constrain their behavior offline (i.e., perform NDIM), in 'reality', due to the fear of what may be made viewable to their online audiences. This novel phenomenon is known here as the *Extended Chilling Effect* of SNS, as in essence the Chilling Effect witnessed with selves presented on SNS may indeed have extended offline.

Through the lens of self-awareness (Duval & Wicklund, 1972) and self-presentation theory (Goffman, 1959; Leary, 1995), a behavioral process is theorized. This is that saliency of SNS whilst offline (i.e., a user is not directly engaged with the technologies interface) stimulates awareness of online audiences, starting a self-comparison process with these audiences' standards and if discrepant, NDIM will be enacted. Through the examination of this process the present paper will be able to understand and test the existence of the *extended* Chilling Effect. This research employs mixed methods. First a qualitative phase of interviews is used to provide rich real life examples of this effect, before the behavioral process theorized is tested in the second phase via experimental design. Together, these methods provide increased overall validity, particularly important in the examination of a phenomenon that has yet to be investigated (see Creswell & Clark, 2007; Johnson & Turner, 2003).

### 1.1. Surveillance and behavior

The impact of an audience on people's behavior and psychological state is usually studied in terms of anonymity, identifiability and surveillance. In the late 19th Century, Le Bon (1897) claimed that the anonymity of the crowd led to submersion and loss of individuality and self − a proposal taken up more recently by proponents of deindividuation (e.g., Jiang, Heng, & Choi, 2013; Prentice-Dunn & Rogers, 1982). While the deindividuation explanation for the impact of anonymity on behavior has been strongly questioned (see Reicher, Spears, & Postmes, 1995), the impact of identifiability and surveillance on behavior has been consistently reported. In the main, this work has focused on the impact of surveillance in increasing socially desirable behavior (Becker, 1968) and decreasing socially undesirable behavior (Pierce et al., 2013). For instance, Pierce et al. (2013) studied the theft and sales data of 392 restaurants and reported not only a reduction in employee theft but also an increase in productivity under surveillance. In addition Enzle and Harvey (1977) found that third-party surveillance increased the generosity of charitable donors. Taking a cue from Bentham's Panopticon, Foucault (1977) argued that pervasive surveillance − regardless of whether one is the actual subject of monitoring at any particular time or not − is a method of social control. This results in the subject of the surveillance internalizing the requirements of the powerful and engages in control of their behavior (Foucault, 1977). This is the 'chilling' effect of surveillance.

The term 'chilling' effect was first coined in connection to the American first amendment to describe the action of holding back free speech in the presence of surveillance (Dolich, 1993). Although the term 'chilling' effect has been employed to describe the outcome of surveillance on behavior, it is yet to be explicitly defined beyond the narrow lens of the American legal system. In keeping with the core characteristics of a 'chilling effect' as discussed in law, in the present paper we define a 'chilling' effect as the normalizing of behavior when under surveillance in line with the perceived standards, expectations and values of the perceived surveyor. This effect has been the subject of considerable legal discussion (e.g., Askin, 1972; Kaminski & Witnov, 2015) as well as the topic of popular debate (e.g., Lunden, 2013; Lyon, 2006; Richards, 2012). While there is considerable on-going debate about the necessary pre-cursors necessary for a 'chilling effect' to occur (e.g., the

requirement or not of potential sanction; Richards, 2012), in the present paper we assume that people could respond in a 'chilling' manner for a number of reasons, including fear of external sanctions and social disapproval, regardless of whether or not that threat of sanction is real or not.

Within surveillance studies, more recent work has also come to include discussion of peer-to-peer (or lateral) surveillance (e.g., Andrejevic, 2010). In particular, SNS have been characterized as the location for participatory surveillance (Albrechtslund, 2008), with this used for social surveillance of romantic partners (Helsper & Whitty, 2010; Tokunaga, 2011) and reflecting the 'capillaries of power' embedded in everyday life (Marwick, 2012). Indeed, studies of the main uses of sites such as Facebook have identified social surveillance as a primary motivator for use (Joinson, 2008; Lampe, Ellison, & Steinfield, 2007). This social surveillance through SNS has been found to have a chilling effect on the presentation of online personas.

### 1.2. Chilling effect of SNS

On SNS, users present a digitized persona and endeavor to craft impressions given off to their audience (Chen & Sharma, 2015; Fogues et al., 2015). Management of a user's online image is particularly pressing when they are high in public self-consciousness (Lee-Won, Shim, Joo, & Park, 2014) and neuroticism (Michikyan, Subrahmanyam, & Dennis, 2014). Through SNS users are faced with multiple audiences simultaneously, resulting in what is known as 'context collapse' (Marwick & Boyd, 2011). Multiple audiences are 'collapsed' into a single group, with the usual context cues for audience segregation removed or unavailable (cf. Goffman, 1959). Although self-presentation in the presence of multiple audiences has been associated with some positive effects (see Leonardi, 2014), most authors highlight the negative emotional and relational effects, as people find it difficult to meet the standards of different audiences simultaneously (Binder et al., 2009; Marder, Joinson, & Shankar, 2012; Xie & Kang, 2015). In the face of this visibility and multiplicity in audience expectations, users have been found to manage impressions online (see Lampinen et al., 2009). This creates "a lowest-common denominator effect, as individuals only post things they believe their broadest group of acquaintances will find non-offensive" (Marwick & Boyd, 2011, p.11).

Indeed, Das and Kramer (2013) report that 71% of Facebook users had self-censored by editing at least one post over a period of 17 days when data from 3.9 million users was collected and analyzed, with users with more distinct friendship groups engaging in more self-censorship. Lang and Barton (2015) found that 84 percent of users have experience been tagged in an undesirable photograph and subsequently taken defensive action (e.g., untagging). This is evidence of the chilling effect of SNS occurring when people are engaged with the technology. Through the lens of impression management and self-awareness theory the following section will theorize the behavioral process underpinning 'the chilling effect'.

### 1.3. Impression management and self-awareness

Impression Management is the endeavor to control the image (i.e., self-presentation) that is projected of oneself based on perceived expectations of their audience (Leary & Kowalski, 1990). The aim is to ensure that the image projected is deemed as desirable (or not undesirable) by the audience (Leary & Kowalski, 1990). Self-presentational predicaments occur when there is a threat to an individual's public image, which is associated with the feeling of social anxiety (Leary, 1995). In this case, the threat occurs