Understanding social media use for work

Content, causes, and consequences

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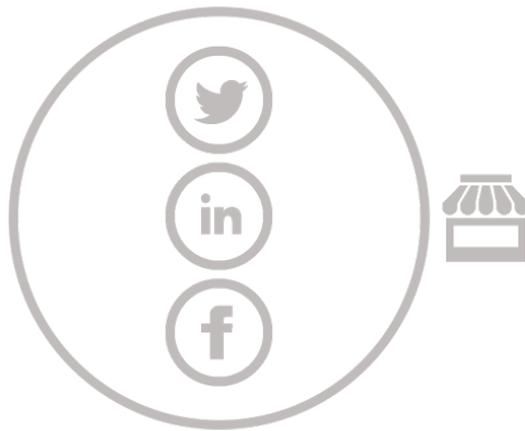
Chapter 5

The Shackles of Freedom: Paradoxical Consequences of Personal Social Media for Work

Abstract

New technology is a paradox: it is both liberating and constraining at the same time. This field study examines the implications of social media use for work for employees' autonomy, work pressure, and exhaustion and engagement. 364 employees of three large multinationals responded to a web-based survey. Results demonstrate the presence of a paradox, as social media for work facilitates autonomy as well as work pressure, both of which in turn relate to well-being (exhaustion and engagement). This study adds to our understanding of technological paradoxes by examining the conditionality of these opposing effects. Overall, employees seem more likely to be burdened by the use of social media for work than benefit from it. However, responsiveness moderates the positive effects of social media use for work, though does not moderate the negative effects.

Keywords: Social Media Paradox: Autonomy: Work pressure: Responsiveness: Well-being.

Introduction

Many scholars have hypothesized that information and communication technologies continue to improve the quality, accuracy, and ease with which people can communicate and organize work (Leonardi, Treem, & Jackson, 2010). Social media is among these communication technologies that have deeply penetrated the workplace (Cao, Vogel, Guo, Liu, & Gu, 2012; Moqbel, Nevo & Kock, 2013), changing and reshaping the nature of the workplace and work itself (Bucher, Fieseler, & Suphan, 2013). The increased use of social media in the workplace – similar to other communication technologies – is likely to be associated with both advantages and disadvantages. These advantages and disadvantages are likely to simultaneously coexist (e.g., Jarvenpaa & Lang, 2005; Ter Hoeven, van Zoonen, & Fonner, 2016). This study takes a paradoxical lens to study the consequences of social media use for work.

The notion that the effects of technology, in general, can be paradoxical has been extensively researched in the context of organizations and communication (e.g., Arnold, 2003; Fonner & Roloff, 2012; Jarvenpaa & Lang, 2005; Leonardi, Treem, & Jackson, 2010; Mazmanian, Orlikowksi, & Yates, 2013; Putnam, Myers, & Gailliard, 2014; Smith & Lewis, 2011; Ter Hoeven et al., 2016). A paradox can be defined as 'contradictory yet interrelated elements that exist simultaneously and persist over time' (Smith & Lewis, 2011, p. 386). Hence, a paradox is the simultaneous existence of two inconsistent states such as between empowerment and enslavement (Javernpaa & Lang, 2005) or connectivity and interruptions (Fonner & Roloff, 2012). In some contexts, the advantages might be more profound while in other contexts the challenges associated with technology use are greater. Although the notion that technologies are paradoxical is widely studied, research on the conditions under which these advantages and challenges exist is limited (Barley, Meyerson, & Grodal, 2011). This study advances our understanding of technological paradoxes by testing conditions under which these advantages and challenges may be stronger or weaker.

A widely held belief is that communication technologies provide employees with more leeway in when, where and how they work (Rice, 2017). In that sense, communication technologies offer employees more autonomy in organizing their work (Mazmanian et al., 2013), for instance, because it becomes easier to stay connected to work (Leonardi et al., 2010), access online information, participate in group discussion, and use organizational resources at

a distance across time zones (Treem & Leonardi, 2012). On the other hand, communication technologies can also result in increased work pressure as employees (whether unwittingly or not) intensify their work effort and time (Chesley, 2005; 2014; Mazmanian et al., 2013). Scholars have proposed that communication technologies are associated with a more intense work experiences because they blur spatial and temporal boundaries and because they increase the total amount of work that people must handle and therefore the time spent working (Barley et al., 2011). This study explores these tensions in the context of personal social media use for work.

The use of social media for work is increasingly institutionalized in organizations. This is not limited to the use of enterprise social media (Leonardi, Huysman, & Steinfeld, 2013); in fact, personal social media are increasingly used by employees to address work demands (Moqbel, Nevo, & Kock, 2013; *Chapter one*; *Chapter six*). Studies on the use of public social media for work show varying usage rates: from 66% to as much as 80% of employees use their personal social media for work (Leftheriotis & Giannakos, 2014; *Chapter one*). This study looks at the consequences of using these personal (not enterprise) social media accounts for work.

This study contributes to the literature by examining the paradoxical consequences of social media use in the workplace. Firstly, this study adopts a paradox lens, which has predominantly been used in the context of telework specifically and communication technology in general. We assess its applicability to examine the consequences of social media use in the workplace. Secondly, technology related paradoxes have primarily been revealed through qualitative findings (e.g., Javernpaa & Lang, 2005; Leonardi et al., 2010; Mazmanian et al., 2013). Here we apply a quantitative perspective, using valid measures and structural modeling. Interestingly, the few quantitative studies in this area often only find support for either positive or negative consequences (e.g., Fonner & Roloff, 2012; Ter Hoeven, Van Zoonen & Fonner, 2016). This study aims to overcome these shortcomings by synthesizing findings on technological paradoxes, developing a model that proposes that social media use for work is linked to exhaustion and engagement of employees, through increased autonomy and work pressure, and paying explicit attention to the potential moderation effect of responsiveness on these opposing relationships.

Hypotheses

A prevalent paradox in the literature is the autonomy-control paradox, which can be understood as the tension between the perception of increased freedom and flexibility facilitated by communication technology on the one hand, and the simultaneous loss of autonomy due to professional commitment to increased demands from work life on the other hand (Mazmanian et al., 2013; Michel, 2011). Jarvenpaa and Lang (2005) discuss similar tensions in what they label the empowerment/enslavement paradox. These tensions boil down to the idea that communication technologies generate a range of desirable capabilities that reaffirm employees' authority, status and sense of self as a successful professional, such as increased flexibility and control over information and interactions (Mazmanian et al., 2013). Simultaneously, these technologies make it more difficult to compartmentalize and prioritize demands from co-workers, and from different life domains, as employees unwittingly intensify their commitment to the organization and reduce their ability to disconnect from work.

Another important paradox in relation to communication technology is the connectivity paradox (Leonardi et al., 2010). The connectivity paradox suggests that communication technology reduces the perception as well as the practical implications of distance, while also creating expectations of constant connectivity and being available to others. Fonner and Roloff (2012) operationalized the connectivity paradox as the tension between social presence and stress from interruption. Their findings could not confirm a connectivity paradox in the context of telework, as technology use was not related to social presence.

Bringing these studies together, communication technologies afford new freedoms of choice across types of technologies and situations (Javernpaa & Lang, 2005). The increased connectivity, often described as being "always on", allows employees to take charge anytime wherever they are, whether it concerns the professional or personal life domain (e.g., Perlow, 2012). Javernpaa and Lang (2005) note that this newly found freedom empowers users. Mazmanian et al. (2013) add that mobile technologies enhance individual autonomy by allowing them to work anywhere and anytime. Additionally, Treem and Leonardi (2012) describe how social media affordances shift employees' resource dependency, making them more autonomous in accessing knowledge and garnering social and professional resources. In

sum, communication technologies ostensibly offer greater flexibility and control over work (e.g., Ter Hoeven et al., 2016; Valcour & Hunter, 2005)

However, communication technologies are also often associated with increased information overload, stress from interruption, expectations of responsiveness, and work-life boundary blurring (Fonner & Roloff, 2012; Mazmanian et al., 2013; Perlow, 2012; *Chapter six*; Wajcman & Rose, 2011). These demands add to work pressure. Indeed, research has identified work pressure as one of the key processes associated with communication technology use (Chesley, 2014). Work pressure occurs when communication technologies promote a more intense work experience, characterized by a sense that one must consistently work harder or faster or that workplace demands are surpassing the resources necessary to meet them (Chesley, 2010; 2014). A more intense work experience can be promoted by communication technologies as they are linked to greater levels of interruption (e.g., Wajcman & Rose, 2011), information overload (*Chapter six*), and increased connectedness to the workplace (Leonardi et al., 2010).

Additionally, mobile devices extend work beyond the workplace, into the places and times normally reserved for families and leisure (Barley et al., 2011; Chesley, 2005). Hence, the use of communication technologies contributes to the pressure and expansion of work (Green, 2005; Ter Hoeven et al., 2016). Communication technologies are mainly associated with increased levels of work pressure because they increase the total amount of work people must handle and blur spatial and temporal boundaries, making it more difficult to compartmentalize work and non-work activities (Barley et al., 2011). This finding should extrapolate to social media, as these technologies also increase perpetual contact (Katz & Aakhus, 2002; *Chapter six*), thereby challenging traditional limitations and work norms of time and space. This, in turn, increases the prospective proliferation of work demands as it extends employment beyond temporal and spatial boundaries (*Chapter one*; *Chapter six*) as well as intensify the pace of work during normal hours of operation (Bittman, Brown & Wajcman, 2009; Chesley, 2014).

Therefore, we argue that the increased individual autonomy that results from social media may also be accompanied by feelings of increased work pressure, creating a social media paradox. Finally, drawing on the job demands and resources model, Ter Hoeven et al. (2016) argue that autonomy and work pressure should be viewed as communication-related resources

and demands, thereby linking them explicitly to engagement and exhaustion. Autonomy has been linked to reduced levels of exhaustion (e.g., Bakker & Demerouti, 2007; Lewig & Dollard, 2003; Ter Hoeven et al., 2016; Thompson & Prottas, 2005) and increased levels of engagement, because greater autonomy is associated with more opportunities to cope with stressful situations. Work pressure is associated with increased levels of exhaustion and reduced levels of engagement because a more intense work experience places additional demands on employees, subtracting from the limited resources they have available to meet work demands, causing increasing levels of exhaustion while diminishing engagement (e.g., Bakker, Demerouti & Sanz-Vegrel, 2014; Demerouti, Bakker & Bulters, 2004; Ter Hoeven et al., 2016).

H1: (a) Work-related social media use is positively related to autonomy, (b) which in turn is negatively related to exhaustion.

H2: (a) Work-related social media use is positively related to work pressure, (b) which in turn is positively related to exhaustion.

H3: (a) Work-related social media use is positively related to autonomy, (b) which in turn is positively related to engagement.

H4: (a) Work-related social media use is positively related to work pressure, (b) which in turn is negatively related to engagement.

The second aim of this study is to advance our understanding of technological paradoxes by investigating the conditionality of opposing effects. In other words, under what conditions are the positive or negative consequences stronger or weaker? Research suggests that the manifestation of technology-related paradoxes might depend on how individuals appropriate communication technologies (Leonardi et al., 2010). For instance, the ubiquitous connectivity associated with communication technology use may, on the one hand, lead employees to use these technologies in ways that promote rapid responses via a need to be responsiveness' (Barley, Meyerson, & Grodal, 2011; Perlow, 2012). On the other hand,

employees may be inclined to use these technologies more strategically to communicatively disengage from work (Gibbs, et al., 2013; Leonardi et al., 2010).

Adopting this line of reasoning, we argue that employees' responsiveness is an important moderator of the relationships between social media use and the perceived advantages of technology (autonomy) and the disadvantages (work pressure). The notion that employees who feel a need to be responsive will experience reduced perceptions of autonomy stemming from technology use. When employees feel, they need to be responsive because the technological infrastructure allows them to do so, it becomes more difficult to reap the benefits of technology use. For instance, the need to respond quickly, wherever and whenever, reduces employees' abilities to segment or compartmentalize work and non-work activities (Leonardi et al., 2010).

Similarly, the feeling that one needs to respond quickly might contribute to a more intense work experience as a result of social media use. In other words, when employees are inclined to address incoming demands immediately they are likely to perceive a more intense work experience. In an attempt to reduce overload and pressure as a result of communication technology, scholars typically advise people to regain control by deploying technology's material features more effectively, such as using email filters or the mute button on a cell phone (Dabbish & Kraut, 2006; Jarvenpaa & Lang, 2005). It has been widely suggested that the ubiquity and features of technologies can lead to patterns of use that produce or intensify feelings of overload (e.g. Barley et al., 2011).

The relationship between technology use and work pressure, however, might be more complex. Prior research on technology shows that social processes are usually important in shaping the consequences of use (Barley et al., 2011; Orlikowski, 2000). We know communication technologies, in general, are perceived as a source of work pressure (e.g., Chesley, 2005; 2014). However, as Barley and colleagues (2011) note, it is less well understood how norms and interpretations of these technologies shape when and why they are perceived as a source of stress or pressure. In attempting to reconcile why some people perceive email and blackberry use as increasing stress, while others claimed they reduced stress, scholars speculate that it is not the technology *an sich* that contributes or alleviates stress but rather how technologies are used that matters (Duxbury, et al., 2006; Mazmanian, Yates & Orlikowski, 2006). Additionally, research suggested that the notion of social dynamics – here,

responsiveness – might at least partially account for why and when individuals perceive technologies as stressful (Barley et al., 2011; Dabbish & Kraut, 2006). Hence, we argue that employees' inclination to respond quickly increases the negative consequences of technology use while reducing the positive consequences. Figure 1 provides a visual representation of the research model.

H5: The relationship between personal social media use for work and (a) autonomy and (b) work pressure is moderated by employees' responsiveness.

Method

Participants and Procedure

Three large multinationals were approached to participate in an Internet-based questionnaire. The survey was distributed by the communication departments of the respective organizations through organizational channels. The survey was active for three weeks in each organization. First, a notification was sent a week prior to data collection. The emailed survey link encouraged employees to participate. A reminder was sent two weeks later. No incentives were offered and the organizations did not have access to individual answers of employees. On average, it took employees nine minutes to fill out the survey.

The first organization is a worldwide Telecom provider; they send out 250 email invitations resulting in 102 completed surveys. The second organization is a large consultancy firm, who returned 112 completed questionnaires out of 230 invitations. Finally, the third organization is an electronics company with their European headquarters located in the Netherlands, 150 completed surveys were returned from 290 email invitations. The final sample was N = 364 and the average response rate was 47%. Employees of these organizations worked 42.4 (SD = 8.83) hours on average per week. Of these respondents, 69% were male and 25% held a managerial position within their organization. The average tenure of employees at these organizations was 13.3 years (SD = 10.87). Most of these employees (64.6%) were highly educated, having earned at least an undergraduate degree.

Measures

The latent constructs in the model were measured with three to five indicators each, measured on a seven-point Likert scale. The scales were anchored 1 (completely disagree) to 7 (completely agree) unless indicated otherwise below. Table 1 includes the means, standard errors, bivariate correlations and alpha coefficients (α range 0.67 - 0.93), and Figure 1 shows all the standardized factor loadings.

Emotional exhaustion was measured using the individual stress dimension of burnout and refers to feeling overextended and depleted of emotional and physical resources (Maslach, Schaufeli, & Leiter, 2001, p. 399). This construct was measured using five items of the Maslach Burnout Inventory (Maslach & Jackson, 1981), including items such as '*I feel exhausted by my work.*' Engagement was measured using five items of the Utrecht Work Engagement Scale were employed (UWES; Schaufeli & Bakker, 2004; Schaufeli et al., 2009; Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 72). This included items such as '*While at work, I am bursting with energy.*' These scales were anchored 1 (never) to 7 (daily).

Autonomy was measured using three items adopted from Morgeson and Humphrey (2006). Autonomy was assessed by using the decision-making autonomy measure from the work design questionnaire (Morgeson & Humphrey, 2006). Sample items include '*The job allows me to make a lot of decisions on my own.*'

The concept *work pressure* was evaluated using three items adopted from the Dutch version of Karasek's (1985) job content scale. This questionnaire has been validated and tested many times (e.g., De Jonge, Janssen, & van Breukelen, 1996; Demerouti et al., 2004). The scale included items that refer to quantitative, demanding aspects of the job (e.g., time pressure, working hard). A sample item is: '*My work requires working very hard*'.

Responsiveness was measured using three items adopted from the communication quality scale (CQS; Ten Brummelhuis, Bakker, Hetland, & Keulemans, 2012). The items included in the scale refer to the pace with which employees respond to incoming messages. A sample item is: '*when colleagues try to reach me, I want to get in touch as soon as possible.*'

Work-related social media use. This measure represents the use of personally owned social media accounts for work-related communication. The scale is derived from *Chapter one* and was anchored 1 (never) 7 (very frequently; multiple times a day). Work-related social media use was measured by asking about the use of Facebook, Twitter, and LinkedIn as three

sub-dimensions of work-related social media use. Each dimension was measured using five items such as: '*I share organizational accomplishments on my personally owned Facebook account.*'

Analysis

Our hypotheses were tested with covariance structure modeling using AMOS 20. Incremental fit indices – i.e., the Tucker-Lewis Index (TLI) and the Comparative Fit Index (CFI) – were used to assess model fit. Model fit indices of > .95 indicate good model fit (Hu & Bentler, 1999). Additionally, two absolute fit indices – i.e., a standardized version of the root mean squared residual (SRMR) and the root mean square of approximation (RMSEA) – are presented, with cut-off values of ≤ 0.08 and ≤ 0.05 (*ibid*), respectively. Indirect effects are measured using bootstrapping. 5,000 bootstrap samples were derived from the data to estimate the model parameters, standard errors and confidence intervals. To model the moderation effects, we followed the procedure recommended by Ping (1995). This specification uses a single indicator for an interaction, XZ, that is the product of the mean-centered sum of the indicators of X and the mean-centered sum of the indicators of Z.

Results

Measurement Model

The measurement model indicates good model fit χ^2 (421)=880.88; CFI= 0.96; TLI=0.96; SRMR= 0.05 and RMSEA= 0.055 (CI: 0.050, 0.060). Factor loadings and squared multiple correlations were examined to determine convergent validity of the model. The factor loadings of the three social media sub-dimensions on the second order construct *work-related social media use* were: Facebook .57, Twitter .68, and LinkedIn .74. The factor loadings of all observed variables on the intended latent construct were significant and sizable, ranging from .65 to .99 (see Figure 1).

Cross- factor correlations were examined to determine discriminant validity. The correlation between the dependent variable exhaustion and work pressure was the highest (-.37). The other correlations between the latent constructs in the model ranged from -.23 to .32 (see Table 1); this demonstrates adequate discriminant validity. These results justify further examination of the structural model.

Table 1 Descriptive Statistics, Reliabilities, and Correlations

Variable	M (SD)	1	2	3	4	5	6	7	8	9	10
1 Social media use	1.92 (0.93)	**.67**									
2 Autonomy	3.87 (0.69)	.14*	**.87**								
3 Work pressure	2.68 (0.70)	.32*	.02	**.78**							
4 Responsiveness	3.67 (0.70)	-.17*	-.03	-.15*	**.72**						
5 Exhaustion	2.65 (1.28)	.03	-.23*	.37*	-.16*	**.93**					
6 Engagement	5.43 (0.98)	.10	.34*	-.04	.12*	-.49*	**.89**				
7 Gender	1.31 (0.47)	.03	-.18*	.09	.07	.08	-.13*	-			
8 Age	42.38 (10.61)	-.36*	.09	-.33*	-.10	-.14*	.08	-.26*	-		
9 Organizational tenure	13.28 (10.87)	-.38*	.02	-.27*	-.02	-.06	-.01	-.23*	.76*	-	
10 Hours a week	37.43 (4.69)	.15*	.15*	.12*	.04	-.02	.20*	-.46*	.00	-.01	-
11 Managerial position	1.26 (0.44)	.15*	.23*	.07	-.16*	.01	.15*	-.13*	.07	.00	.14*

$N = 364$. Values on the diagonal in bold are reliabilities (α). The two dichotomous variables were anchored as follows: gender (1 = male, 2 = female) and managerial position (1 = yes, 2 = no).

* = $p < .05$

Figure 1. Structural regression model with standardized estimates
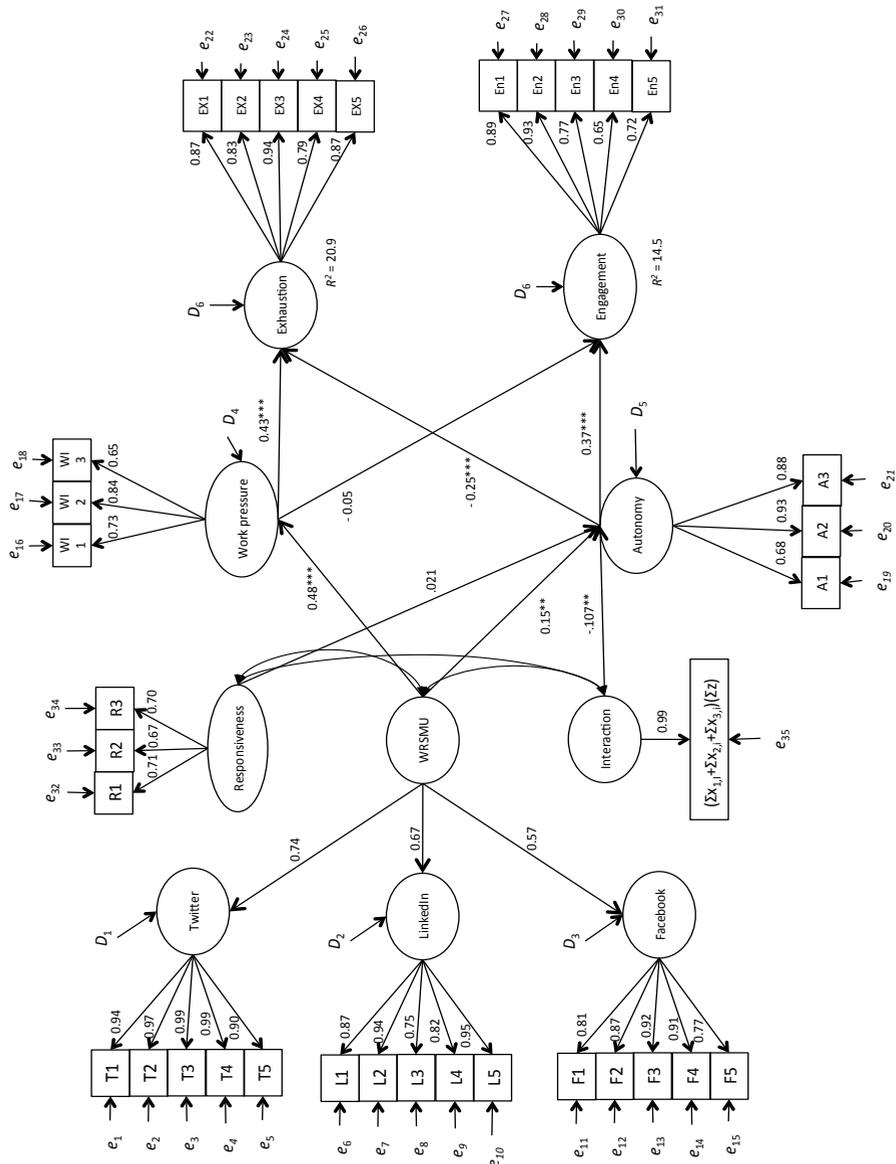
Note: Significance levels of regression weights are flagged *** > .001 ** > .05. All factor loadings were significant at > .001.

Structural Model

The structural model that links work-related social media use to exhaustion through autonomy and work pressure shows good model fit. χ^2 (546) = 1094.52; CFI = 0.95; TLI = 0.95; SRMR = 0.05 and RMSEA = 0.053 (CI: 0.048, 0.057). The hypotheses refer to indirect effects rather than mediation effects between social media use and exhaustion and engagement through autonomy and work pressure. To test this assumption, the direct effect of social media use on exhaustion and engagement was examined. In the model without the mediators the direct effect of social media use on exhaustion b*= 0.058, BC95% [-.211; .305] p = 0.761 and engagement b*= 0.058, BC95% [-.211; .305] p = 0.761 were not significant. In the model with the mediators (i.e., autonomy and work pressure) the direct effect of social media use on exhaustion b*= -0.148, BC95% [-.337; .013] p = 0.075 and engagement b*= 0.078, BC95% [-.061; .229] p = 0.268 were also not significant. The absence of significant direct effects supports the notion of indirect effects (as opposed to mediation) implied by our hypothesized model (Mathieu & Taylor, 2006). The principal difference is that a mediation effect implies that the total effect X → Y was present initially, whereas there is no such assumption in the assessment of indirect effects. More specifically, an indirect effect implies that a variable M *transmits the effect of an independent variable X to a dependent variable Y* [emphasis added]. Whereas, a given variable M is said to function as a mediator *to the extent that it accounts for the relationship between an independent variable X and dependent variable Y* [emphasis added] (Mathieu & Taylor, 2006). This allows the possibility to find a significant indirect effect even when there is no evidence for a significant total effect. Hence, whether an indirect effect also represents mediation should be judged through examination of the total effect (Mathieu & Taylor, 2006; Preacher & Hayes, 2004). A full-fledged discussion of indirect and mediation effects is beyond the scope of this article; for an overview see Hayes (2009) and Mathieu and Taylor (2006).

The results indicate that in line with the hypotheses, all a) X → M and b) M → Y paths were significant, with the exception of H4b, which proposed a link between work pressure and engagement (see Figure 1). These significant *a* and *b* paths represent the indirect effects [of what] through autonomy and work pressure (see Table 2).

Table 2. Effects

		Bootstrapping		BC 95% CI		
		Estimate	SE	Lower	Upper	P
	Indirect effect x → m → y					
H1	WRSMU → Autonomy → Exhaustion	-.050	.022	-.105	-.010	.016
H2	WRSMU → Work Pressure → Exhaustion	.199	.068	.118	.313	.000
H3	WRSMU → Autonomy → Engagement	.056	.025	.010	.112	.018
H4	WRSMU → Work Pressure → Engagement	-.002	.035	-.055	.052	.929
	Direct effects					
a¹	WRSMU → Autonomy	.113	.048	.021	.210	.019
a²	WRSMU → Work pressure	.268	.053	.176	.388	.000
b¹	Autonomy → Exhaustion	-.438	.086	-.613	-.269	.000
b²	Work pressure → Exhaustion	.740	.124	.503	.992	.000
b³	Autonomy → Engagement	.497	.072	.361	.642	.000
b⁴	Work pressure → Engagement	-.008	.098	-.201	.184	.937
	Moderation effects					
H5a	WRSMU – Autonomy moderated by responsiveness	-.082	.041	-.166	-.003	.047
H5b	WRSMU – Work pressure moderated by responsiveness	.015	.032	-.049	.081	.660

WRSMU = Work-related social media use

Specifically, hypothesis 1 reflects the idea that work-related social media use is a) positively related to autonomy, which b) decreases exhaustion. Hypothesis 1 is supported because work-related social media affects exhaustion through increased autonomy (b*= -0.050, CI95% [-.100; -.007], p = 0.023). Hypothesis 2 reflects the assumptions that work-related social media use increases a) work pressure, which b) increases exhaustion. The findings support the reasoning reflected in this hypothesis (b*= 0.199, CI95%[.116; .307], p = 0.000).

Hypotheses 3 and 4 are based on the same rationale but assume the opposite effect to occur for engagement. Hypothesis 3 proposes that a) social media use for work is positively related to autonomy, which b) is positively related to engagement. Hypothesis 3 was supported by a significant positive indirect effect (b*= 0.056, CI95% [.009; .110], p = 0.023). Hypothesis 4 predicts an indirect negative significant effect of social media use on engagement through work pressure. However, the findings could not support hypothesis 4 because the indirect effect was not significant (b*= -0.023, CI95% [-.097; .042], p = 0.467). A closer look at this relationship suggests that the absence of the indirect effect is due to a lack of support for H4b (b*= -0.008, CI95% [-.201; .184], p = 0.934); that is, that work pressure is not (negatively) related to engagement.

Hypothesis 5 in turn, assumes that the effects of social media use on autonomy and work pressure are moderated by employees' responsiveness. This effect was specified with a single indicator: $x*z = (\Sigma x_{1,i} + \Sigma x_{2,i} + \Sigma x_{3,i})(z_1 + z_2 + z_3)$, where the sums in the parentheses represent the result of summing the mean-centered variables in each case, and $\Sigma x_{j,i}$ is the sum of the indicators of X_j (i.e., a sum of sums) (Ping, 1995). This way only one indicator was added to the model. Adding more product variables simply adds more manifest parameters without adding new parameters to be estimated, which could be statistically detrimental as it places additional demands on the data in terms of stable covariance matrix – i.e., the sample size relative to the number of variables may cause an unstable input matrix (Cortina, et al., 2001). The moderation effect on autonomy was significant ($b* = -0.082$, CI95% [-.165; -.004], $p = 0.047$). Figure 2 provides a visual representation of this effect. The findings suggest that employees who are very responsive do not experience autonomy benefits from social media use. Employees who are low in responsiveness and high in work related use, however, benefit the most from social media use in terms of autonomy. However, the moderation effect on work pressure was not significant ($b* = -0.008$, CI95% [-.201; .184], $p = 0.934$), lacking support for H5b.
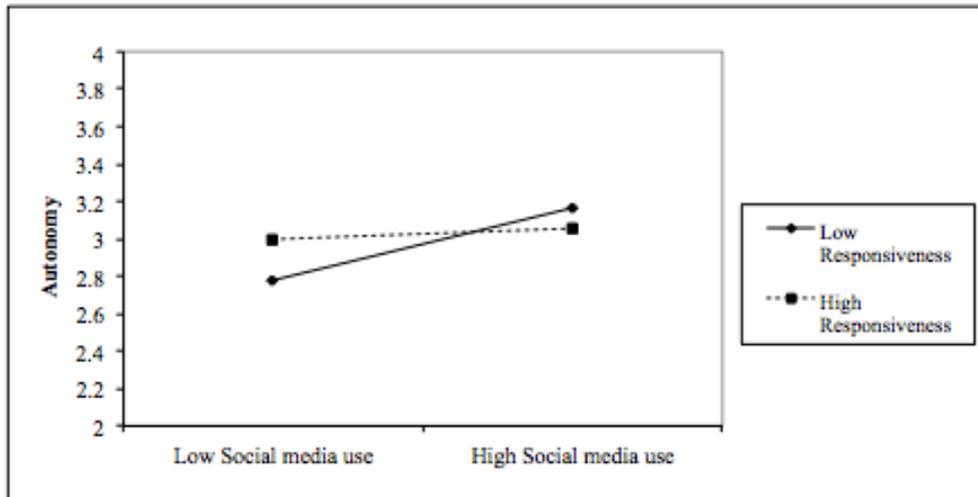

Figure 2. Moderation effect of responsiveness.

Finally, we controlled for potentially confounding factors. The control variables gender, age, organizational tenure, working hours per week, and managerial position were consecutively modeled. Notably, some of these variables yielded significant effects on the outcome variables. For instance, age and organizational tenure were positively related to autonomy and negatively related to work pressure, whereas working hours per week were associated with engagement. However, all the parameters presented in the final model held true when controlling for these variables. This result indicates that the control variables had no influence on the overall findings; therefore, we excluded these variables from the final model for reasons of parsimony.

Discussion

Contributions

This study argues that organizational communication technologies, specifically social media, provide employees with more *autonomy* to organize their work. At the same time, however, use of these social technologies for work increase employees' perceived *work pressure*. Furthermore, the results suggest that the extent to which social media use for work is associated with autonomy is dependent upon employees' responsiveness. The results support the argument underlying these assumptions in three ways.

First, the results show that the use of public social media in the context of work might induce similar consequences as studies have identified from more traditional communication technologies such as e-mail and smartphones (Barley, et al., 2011; Mazmanian et al., 2006; 2013; Ter Hoeven, et al., 2016), such as work pressure. Second, this study brings different paradoxes together – the autonomy paradox (Mazmanian et al., 2013) and the connectivity paradox (Leonardi et al., 2010) – and links these to exhaustion and engagement. Interestingly, these paradoxes lack substantial support from quantitative research findings. For instance, Fonner and Roloff (2012) did not find support for the connectivity paradox in their quantitative study among teleworkers. By the same token, several studies have found mixed results with regard to the association between technology use and stress from interruptions (Fonner and Roloff, 2012), or unpredictability (Ter Hoeven et al., 2016). Although our findings do not test these results directly, they do suggest that social media use is associated with a more intense work experience. The perception of a more intense work experience is often closely related to

concepts such as stress from interruptions, unpredictability and work pacing (Bittman, et al., 2009; Chesley, 2014; Wajcman & Rose, 2011). Importantly, in line with the notion that positive and negative consequences of social media use can be viewed as communication-related resources and demands (Ter Hoeven et al., 2016), our findings suggest that negative consequences are more strongly related to exhaustion, whereas the positive consequences are more strongly related to engagement (Bakker & Demerouti, 2007).

Third, this study adds to our current understanding of technological paradoxes by examining the conditions under which these opposing effects exist. The findings suggest employees' responsiveness moderates the effect between work-related social media use and autonomy. Social media use for work facilitates autonomy to a greater extent for those employees who are less inclined to be very responsive, which makes sense, as they avoid giving up autonomy by feeling they need to respond quickly to everyone. This finding is in line with the tensions described by Gibbs et al. (2013), who suggest employees use their enterprise social media strategically to negotiate tensions between visibility-invisibility and engagement-disengagement. The tension between engagement and disengagement is especially interesting, as this concerns employees' attention allocation. One study found that the rate of checking e-mails caused as much as 96 interruptions in an eight-hour workday (Jackson, Dawson, & Wilson, 2001a). Similarly, Gibbs et al. (2013) suggest that the amount of information that employees receive through social media forces employees to (communicatively) disengage from work, as it is simply too much to handle. Our findings confirm that such a strategic response benefits employees in terms of their autonomy resulting from social media use.

Practical Implications

The workplace and the organization of work are increasingly mediated by a variety of communication technologies. Some of these technologies such as email and intranets are provided by the organization. However, increasingly, employees are starting to use technologies at work that have gained traction outside the workplace, such as Whatsapp and public social media. Some organizations, realizing this, are implementing enterprise social media, to reinforce internal communication and organizational boundaries. Nevertheless, the adoption of personal social media technologies in the workplace will likely continue (Moqbel et al., 2013; Utz, 2015; *Chapter one*). Many managerial efforts from social media guidelines

and policies encouraging employees to bring your own device (BYOD) are primarily directed at legal liabilities (e.g., Dreher, 2014) or the increased costs and complexity of the associated infrastructure (e.g., Rose, 2013). Although these issues warrant continuous attention, research shows that many employees already frequently use their personal social media for work both during and outside regular office hours (*Chapter one*). The findings of this study show that organizations should also direct efforts to mitigate the negative consequences of personal social media use for individual employees.

Importantly, and similar to other communication technologies, social media increase work pressure. One way to alleviate the pressure these technologies impose is to implement restrictions on the use of them. A popular example is how, in 2011, Volkswagen decided to stop its servers sending emails to its employees when they are off-shift (Tsukayama, 2011). BMW and Deutsche Telecom have since implemented similar policies (Strangler, 2015). Managerial efforts could be directed at alleviating intense work experiences that result from feelings of being responsive at all times and the need to address increasing work demands through social media use. Of course, access to public social media cannot be regulated outside the office, but managerial efforts could be directed at creating a healthy environment and countering the normative assumptions of responsiveness and perpetual connectivity during off-time

Furthermore, organizations can help build a social norm that promotes a healthy balance between connectedness and disconnectedness. Employees experience more beneficial consequences for their well-being if they do not feel burdened by the notion of constantly being connected and responsive to incoming messages. This study shows that it is time to acknowledge the widespread use of personal social media technologies in the workplace and the consequences it might have at the individual level.

Limitations and Future Research

A few limitations of this study need to be acknowledged. First, this study relies on cross-sectional data, so cannot make claims about causality. Future research would employ longitudinal research designs to test the proposed causality of the relationships in the model.

Second, this study associated social media use with exhaustion and engagement indirectly through work pressure and autonomy. Although we found a stronger negative

indirect effect, there might be other individual outcomes that may shed a different light on the mechanism presented here. For instance, the positive effect of autonomy might be far greater – relative to work pressure – in relation to individual performance outcomes such as productivity, or in relation to organizational identification. Hence, to better understand the consequences of social media use for work additional research with various outcome measures is needed. Additionally, this study suggested responsiveness functions as a moderator of relationships between social media use and autonomy and work pressure. Arguably, other mechanisms are at play that may influence the nature of the effects. For instance, it is quite possible that employees who are in general more satisfied with their jobs are less affected by the demands that work places on them.

Finally, as mentioned above, this study provides evidence for one of the most prevalent social media paradoxes: autonomy. However, we do not claim to be exhaustive. Social media exhibit several affordances that can be associated with different advantages and challenges. Much like Heidegger once argued, (communication) technology, *and by extension social media*, destroyed distance by destroying closeness; technology didn't bring people closer together but merely created a condition wherein everyone is at the same time close and far, independent of geographical distance (Arnold, 2003; Javernpaa & Lang, 2005). This very notion led Javernpaa and Lang (2005) to identify eight different paradoxes associated with mobile technology use. This study shows that adopting a paradox lens to study the consequences of social media use in the workplace is worthwhile. Future studies should not only direct attention to identifying other social media related paradoxes, but especially focus on the conditions under which these paradoxes may exist.

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