

Relationships Between Work-Home Segmentation and Psychological Detachment From Work: The Role of Communication Technology Use at Home

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Employees can have difficulty mentally distancing themselves from work during off-job time due to increasing use of communication technologies (e.g., e-mail, cell phone, etc.). However, psychological detachment from work during nonwork time is important for employee recovery and health. This study examined several antecedents of psychological detachment: work-home segmentation preference, perceived segmentation norm, and the use of communication technology at home. Results indicate that segmentation preference and segmentation norm were positively associated with psychological detachment. Further, technology use at home partially mediated these relationships. Findings indicate that segmenting work and nonwork roles can help employees detach and recover from work demands. In addition, findings show that the segmentation norm within a work group is associated with employee experiences outside of work.

Keywords: detachment, segmentation preference, perceived segmentation norm, technological boundaries

Due to advances in communication technologies over the last decade, the U.S. white-collar workforce is increasingly characterized by an “always available,” “always on” mentality (Major & Germano, 2006; Middleton, 2007). The use of smart-phones and the availability of wireless Internet access comes along with increasing expectations for faster response times to work-related communications, potentially increasing employees’ hours in the office and time spent working once they leave (Milliken & Dunn-Jensen, 2005; Towers, Duxbury, Higgins, & Thomas, 2006). With this “always on” expectation in many occupations today, do employees ever find the time to mentally detach themselves from work during off-work time? Psychological detachment from work is important for unwinding and recharging energy for the next workday (Sonnentag, Binnewies, & Mojza,

2008). Thus, understanding that individual and organizational factors help employees “switch off” from work demands during nonwork hours is imperative.

Although there is accumulating research evidence for the importance of psychological detachment from work during off-job time in recovery from work stress, less is known about the factors that enable or hinder this process (Sonntag, Binnewies, & Mojza, 2010a). In addition, little is known about the use of work-related communication technologies outside of work and its impact on psychological detachment. Many employees may have difficulty mentally detaching from work during off-job time given the increased access to work through the use of communication technologies (cf. Middleton, 2007). However, due to this lack of a natural separation of the work and nonwork domains, employees today may actively attempt to segment their work and nonwork roles (Towers et al., 2006). This attempt at segmentation is viewed as a strategy for balancing work and personal life (Edwards & Rothbard, 2000). It is particularly relevant to today’s employees because the home and family domain is easily encroached upon by work-related demands (Milliken & Dunn-Jensen, 2005). Accordingly, the current study takes this work-home segmentation perspective to predict psy-

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chological detachment from work during off-job time.

Psychological Detachment From Work During Off-Job Time

The concept of *psychological detachment from work during off-job time* was originally introduced by Etzion, Eden, and Lapidot (1998) as a “sense of being away from the work situation” (p. 579). They found that experiencing psychological detachment from work (hereafter, *detachment*) is important for improving well-being during respites. In other words, individuals not only need to be physically away from work but also need to be mentally “switched off” from work-related thoughts and activities to recover from stress during nonwork time (Etzion et al., 1998). Sonnentag and Fritz (2007) expanded on this research by developing and validating a measure to assess psychological detachment from work. They suggest that detachment means not being occupied by work-related duties such as receiving job-related phone calls at home or actively engaging in job-related activities. In other words, detachment involves mentally disengaging one’s self from work. Sonnentag and Fritz (2007) further argued that psychological detachment from work can be described as a recovery experience that allows employees to unwind from work stress; recovery from work stress refers to the process by which psychological resources drained at work can be replenished. In the context of Conservation of Resources theory (Hobfoll, 1989, 1998)—which assumes that individuals try to gain and maintain psychological and material resources—recovery experiences help employees replenish resources lost due to work demands. In contrast, a lack of recovery from work—especially over a longer period of time—becomes visible in lower levels of individual resources (e.g., increased fatigue). Thus, psychological detachment allows recovery and resource replenishment to occur by psychologically removing employees from work demands (Sonnentag & Fritz, 2007).

Accumulating research evidence has consistently supported the importance of psychological detachment. For example, diary studies showed that psychological detachment in the evening was associated with lower fatigue at bedtime (Sonnentag & Bayer, 2005) and the following morning (Sonnentag et al., 2008). Cross-sectional research has found that detachment during leisure time was positively associated with life satisfaction (Fritz, Yankelevich, Zaru-

bin, & Barger, 2010a) and negatively associated with emotional exhaustion, sleep problems, and depressive symptoms (Sonnentag & Fritz, 2007). Moreover, longitudinal research demonstrated that psychological detachment during the weekend was positively related to positive affective experiences (e.g., joviality, serenity) during the following work week (Fritz, Sonnentag, Spector, & McInroe, 2010b).

Other studies suggested the buffering effects of psychological detachment in the stressor-strain relationships. For example, Moreno-Jiménez and colleagues showed that psychological detachment mitigated the negative impacts of stressors (i.e., work-family conflict, bullying) on well-being outcomes, such as life satisfaction and psychological health (Moreno-Jiménez, Mayo, et al., 2009; Moreno-Jiménez, Rodríguez-Muñoz, Pastro, Sanz-Vergel, & Garrosa, 2009, respectively). Another recent study has indicated that psychological detachment can buffer the negative effects of job demands on well-being outcomes (Sonnentag et al., 2010a). Furthermore, psychological detachment was found to be particularly important for those who were highly engaged in their work (Sonnentag, Mojza, Binnewies, & Scholl, 2008).

In sum, research has shown that psychological detachment from work during nonwork time is critical for replenishing resources and sustaining employees’ well-being and performance capabilities. However, less is known about possible antecedents of psychological detachment (Sonnentag et al., 2010a). The current study on predictors and processes of psychological detachment can contribute to our knowledge of the factors that may help or hinder detachment and unwinding from work stress.

Work-Home Segmentation Preference and Psychological Detachment

Boundary theory posits that individuals create and maintain psychological, physical, or behavioral boundaries around their life domains, such as work and home, and that individuals differ in their preference for segmenting or integrating their work and home domains to fulfill work and personal life roles (Ashforth, Kreiner, & Fugate, 2000; Clark, 2000; Nippert-Eng, 1996). Work-home segmentation preference refers to the degree to which one prefers to separate various aspects of work and home from each other by creating more or less impermeable boundaries around the work and home domains (Kreiner, 2006). Boundary theory further posits that one’s seg-

mentation preference affects individual work-home boundary management through particular rules and practices (Ashforth et al., 2000; Clark, 2000; Nippert-Eng, 1996). In other words, individuals with a high preference for segmentation are more likely to develop impermeable home boundaries so that work aspects (e.g., thoughts, concerns) are prevented from spilling over into the home domain. Self-set boundaries can include behavioral strategies that prevent work-related aspects from invading their home domain. For example, people with a preference for segmentation were less likely to accept a job offer in which work was expected to spill over into the home domain (Methot & LePine, 2009). Another recent study has found that having an office in one's home (permeable physical boundary at home) was negatively related to psychological detachment from work among pastors (Sonnentag, Kuttler, & Fritz, 2010b). In short, in the context of boundary theory, these empirical findings support the notion that people with a high preference for segmentation construct their home boundaries in a way that is conducive to maintaining a clear separation between work and nonwork roles. Taken together, we propose that individuals with a higher preference for segmentation will experience higher levels of psychological detachment from work during nonwork time.

Hypothesis 1: Segmentation preference is positively associated with psychological detachment from work during nonwork time.

Perceived Segmentation Norm and Psychological Detachment

Drawing upon boundary theory (Ashforth et al., 2000; Clark, 2000; Nippert-Eng, 1996), we also propose that an employee's subjective perception of a segmentation norm in their work group can be another predictor of psychological detachment during off-job time. In the context of this study, perceived segmentation norm refers to one's perception of the degree of work-home segmentation practiced by other people at work (e.g., supervisor, coworkers). In other words, employees in a work group with a high norm for segmentation would perceive that other people at work separate work from their personal life domains by keeping work matters at work. Boundary theory posits that individuals' work-home boundary creation and management behaviors are contingent upon their social domains (e.g., workplaces) where a varying degree of segmentation or integration is either valued or discouraged through formal or infor-

mal policies, practices, and demands (Ashforth et al., 2000; Clark, 2000; Nippert-Eng, 1996). Based on social learning theory—which assumes that people tend to mimic the behavior of others in their social group—employees who perceive a strong norm for work-home segmentation will be likely to mimic this behavior by creating stronger boundaries between their work and nonwork roles. Thus, in some workplaces, for example, it may be a norm to freely contact each other outside of regular business hours to address work-related issues, for example via cellular phone or e-mail, whereas initiating work-related contact after work is not desired in other places unless it is an emergency. Likewise, taking work home, for example to finish reviewing materials or writing a report for which the deadline is coming up, may be more common in some organizations than in others. However, no attempt has been made to examine the role of work group members in an employee's experience of psychological detachment from work thus far. This is a serious omission considering that employees do not live and work in a social vacuum but rather influence each other and build social norms based on those interactions (cf. Cialdini & Trost, 1998).

Therefore, we propose that a perceived segmentation norm will be positively related to an employee's experience of psychological detachment. Specifically, employees' actual work-home segmentation behaviors or practices (e.g., not taking work home) are likely to be consistent with the segmentation norm in their work group. Further, under a strong norm for segmentation, there are fewer expectations for work availability or work-related contacts after normal work hours. Accordingly, we expect that employees who perceive a stronger norm for segmentation will be more likely to separate their work from their home domains and will have fewer expectations for work engagement after regular work hours, resulting in higher psychological detachment during nonwork hours. Thus, we hypothesize the following:

Hypothesis 2: Perceived segmentation norm is positively associated with psychological detachment from work during nonwork time.

Technology Use at Home and Psychological Detachment

Research by Sonnentag et al. (2010b) has shown that one's spatial boundaries between work and home are related to psychological detachment from work. Specifically, individuals who reported having an of-

office within their private home—when not required—reported lower levels of psychological detachment during nonwork hours. The study (in a sample of pastors) further examined technological work-home boundaries (i.e., whether using the same phone number for their work and private phone calls) but failed to find the relationship with psychological detachment. One possible reason for this nonsignificant finding is that the specific measurement of technological boundary might have been too narrow to capture the assumed relationship because people today use various kinds of technologies for work and nonwork matters (e.g., e-mails, smart-phones, computers; Towers et al., 2006). Thus, the present study expands on the past research by measuring the overall usage of communication technologies at home for work-related matters to indicate the strength of work-home technological boundaries. Higher (i.e., more frequent) usage represents weaker technological boundaries, whereas lower usage indicates stronger technological boundaries.

Increasing the use of communication technologies (hereinafter, *technologies*) such as Personal Digital Assistants and mobile Internet access blur the boundaries between work and home, enabling employees to stay connected to their work during nonwork hours (e.g., Golden & Geisler, 2007; Valcour & Hunter, 2005). Chesley (2005) found that participants who persistently used technologies reported that job worries or problems distracted them when they were at home. Accordingly, for some individuals, it may be even unfeasible to detach themselves totally from work situations during nonwork time unless they impose deliberate restrictions on the use of technologies for work while at home (Olson-Buchanan & Boswell, 2006; Towers et al., 2006). Therefore, we propose that setting strong technological boundaries between work and home will serve as one of the potential enablers of psychological detachment during off-work time.

Kreiner, Hollensbe, and Sheep (2009) conducted a qualitative study on work-home boundary management among parish priests whose work and nonwork domains are highly interconnected. They found that priests with stronger technological boundaries between work and home reported less perceived invasion of work into the home domain. In other words, individuals with stronger technological boundaries tended to engage less in work-related activities outside of work by screening out work-related incoming messages and calls after work. Accordingly, Boswell and Olson-Buchanan (2007) found that work-related technology use after regular business hours was pos-

itively related to employees' perception of work-family conflict. These findings suggest that work-related technology use at home can easily hamper opportunities for detaching from work by engaging in family or recovery activities. As such, we hypothesize the following:

Hypothesis 3: Technology use at home for work-related matters is negatively associated with psychological detachment from work during nonwork time.

Technology Use at Home as a Mediator

We have proposed that segmentation preference and perceived segmentation norm will be positively related to psychological detachment, while technology use for work purposes should be negatively associated with psychological detachment during nonwork time. Specifically, employees with a high preference for segmentation and a high perceived segmentation norm at work are more likely to create stronger work-home boundaries, resulting in less engagement in work-related thoughts or activities during off-work hours. In this study, we further attempt to directly test this assumption by examining technological boundaries at home (i.e., technology use) as a partial mediator between preference for segmentation and perceived segmentation norm on one hand and the experience of psychological detachment on the other hand.

As such, we first hypothesize that segmentation preference is negatively associated with technology use for work-related matters during nonwork hours, which, in turn, may foster a home environment conducive to psychological detachment. Second, we hypothesize that perceived segmentation norm in the workplace is also negatively related to work-related technology use at home, which in turn is associated with psychological detachment from work. However, we expect a partial mediation to occur because there may be other mechanisms, such as physical boundaries or personal rituals, that help employees create boundaries between their work and home domains. Thus, we hypothesize the following:

Hypothesis 4: Technology use at home for work-related matters partially mediates the relationship between segmentation preference and psychological detachment.

Hypothesis 5: Technology use at home for work-related matters partially mediates the rela-

tionship between perceived segmentation norm and psychological detachment.

Method

Sample and Procedure

We recruited 431 alumni of a U.S. university to complete an online survey. Our sample criteria were that each participant must be a full-time employee who commutes to work. Due to missing data ($n = 29$) and respondents who did not fit the sample criteria ($n = 133$), the final sample was 269. In our sample, the majority of participants were White (96%), male (65.3%), and married (77.4%) with a mean age of 45.92 ($SD = 8.76$). Approximately 50% of participants had more than one dependent under 18 years old. Mean job tenure was 8.1 years ($SD = 8.03$). Participants worked in diverse occupations, ranging from managerial to administrative positions, in industries such as retail, consulting, manufacturing, information technology, and design.

Measures

Segmentation preference. Segmentation preference was measured with Kreiner's (2006) four-item, 7-point segmentation preference scale (1 = *strongly disagree*; 7 = *strongly agree*). Sample items included: "I prefer to keep work life at work," and "I like to be able to leave work behind when I go home." Higher scores indicated a stronger preference for segmenting work and home domains. Cronbach's alpha was .94.

Perceived segmentation norm. This variable was measured with four items adapted from Kreiner's segmentation preference scale. Respondents were asked to indicate the extent to which they agree (1 = *strongly disagree*; 7 = *strongly agree*) with each item describing people in their workplace. Sample items included: "The people I work with prevent work issues from creeping into their home life," and "The people I work with keep work matters at work" ($\alpha = .88$). Because this measure was created for this study by adapting the segmentation preference measure, we found it necessary to confirm that the two measures represent distinct constructs. Results from confirmatory factor analyses indicate that a two-factor model with the four segmentation preference items loading on its latent variable (segmentation preference) and the four perceived segmentation norm items loading on its latent variable (perceived segmentation norm) fit the data better ($\chi^2(19, N =$

269) = 35.77, $p < .05$; RMSEA = .05; NFI = .98; CFI = .99) than a single factor model with all items loading on one factor ($\chi^2(20, N = 269) = 752.47$, $p < .001$; RMSEA = .37; NFI = .61; CFI = .61). The two-factor model was significantly better than the single factor model ($\Delta\chi^2 = 716.7$, $\Delta df = 1$, $p < .001$).

Technology use at home¹. Respondents were asked to indicate how often they use an array of communication technologies for work-related purposes at home during nonwork hours using a 5-point frequency scale (1 = *almost never*; 5 = *very often*). The use of four specific technologies was assessed (i.e., e-mail/the Internet, computers/laptops, cellular phones, Personal Digital Assistants). Higher scores indicated greater technology use at home for work-related purposes (weaker technological boundaries at home).

Psychological detachment from work during off-job time. Sonnentag and Fritz's (2007) four-item, 5-point measure was used to assess psychological detachment (1 = *strongly disagree*; 5 = *strongly agree*). Sample items included: "During my nonwork time, I distance myself from work," and "During my nonwork time, I don't think about work at all" ($\alpha = .84$).

Control variables. Demographic variables (i.e., sex, age, marital status, number of children under 18 years old) were included as control variables as they could potentially be related to psychological detachment or technology use at home. We also controlled for one's level of job involvement to ensure that levels of psychological detachment were not just an indicator of job involvement (Sonnentag & Krueger, 2006). Job involvement was measured with a reduced six-item version of Kanungo's (1982) 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). A sample item included: "I am very much involved personally in my job" ($\alpha = .81$).

Analysis

We conducted a series of hierarchical regression analyses to test the main hypotheses in this study. We followed Baron and Kenny's (1986) approach for mediation. We also used Sobel tests (1982) to conduct an

¹ The coefficient alpha is not an appropriate reliability index for this scale, which we consider to be a causal indicator scale, because the individual items are not parallel forms of the same underlying construct, such as the Socio-economic Status scale (see Bollen & Lennox, 1991 for a review).

approximate significance test for the mediation effects because Baron and Kenny's (1986) approach mainly builds the conditions for mediation rather than statistically tests the indirect effect of an independent variable on a dependent variable via a mediator.

Results

Descriptive statistics and bivariate relationships for all study variables are presented in Table 1. None of the demographic variables was significantly related to our dependent variable, psychological detachment. However, sex ($r = .18, p < .01$) and number of dependent children ($r = .14, p < .05$) had a significant relationship with our mediator, technology use at home for work. Men were more likely to use technology at home, and employees reporting a greater number of dependent children were more likely to use technology at home. In addition, job involvement (a control variable) had a significant relationship with technology use at home and psychological detachment, as expected ($r = .24, p < .01$; $r = -.40, p < .01$, respectively). Employees who reported higher job involvement were more likely to use technology at home, but less likely to experience detachment. We controlled for those demographic variables and job involvement in all of our regression analyses.

We hypothesized that work-home segmentation preference would be positively related to psychological detachment from work during off-work time (Hypothesis 1), when controlling for demographic variables and job involvement. Hypothesis 2 stated

that perceived segmentation norm would be positively related to psychological detachment, when controlling for demographic variables and job involvement. Further, Hypothesis 3 predicted a negative relationship between technology use for work-related matters and psychological detachment. And finally, we further hypothesized that the relationships between segmentation preference and perceived segmentation norm on one hand and psychological detachment on the other hand would be partially mediated by technology use at home (Hypotheses 4 and 5, respectively).

To test Hypotheses 1 and 2, we entered control variables (i.e., sex, age, marital status, number of children, job involvement) in the first step of the regression equation followed by the independent variables (i.e., segmentation preference, perceived segmentation norm) in the second step. Results in Table 2 (step 2) show that segmentation preference was positively related to detachment ($\beta = .34, p < .01$), thereby supporting Hypothesis 1. Perceived segmentation norm was positively related to detachment ($\beta = .23, p < .01$) supporting Hypothesis 2 as well. Results from a separate regression analysis show that technology use at home was negatively related to psychological detachment ($\beta = -.43, p < .01$; $\Delta R^2 = .16, p < .01$) after controlling for the covariates (i.e., sex, age, marital status, number of children, job involvement). Accordingly, Hypothesis 3 was supported.

According to Baron and Kenny (1986), the first condition for mediation to occur is that the independent variables are significantly related to the dependent

Table 1
Descriptive Statistics and Correlations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9
1. Sex ^a									
2. Age	.30**								
3. Marital status ^b	-.12*	-.09							
4. Number of children under 18 years old	.09	-.27**	-.18**						
5. Job involvement	.03	.11	.05	-.10	(.81)				
6. Segmentation preference	-.11	-.16**	-.03	.02	-.44**	(.94)			
7. Perceived segmentation norm	.05	.00	-.09	.09	-.11	.14*	(.88)		
8. Technology use at home ^c	.18**	.03	-.10	.14*	.24**	-.31**	-.26**	(—)	
9. Psychological detachment from work	-.00	-.04	-.00	.02	-.40**	.46**	.30**	-.48**	(.84)
<i>M</i>	—	45.92	—	.84	2.32	5.16	3.74	2.56	2.77
<i>SD</i>	—	8.76	—	1.01	.65	1.42	1.24	.91	.82

Note. $n = 269$. Reliability coefficients are presented in parentheses along the diagonal.

^a coded 1 = Male, 0 = Female. ^b 1 = single, 2 = married, 3 = divorced/separated, 4 = living as married, 5 = widowed; Possible range is 1 to 7 for segmentation preference and perceived segmentation norm, and 1 to 5 for job involvement, use of technology, and psychological detachment. ^c Refer to footnote 1 for reliability information.
* $p < .05$. ** $p < .01$.

Table 2
Hierarchical Regression Analysis Predicting Psychological Detachment

Model	Psychological detachment from work		
	Step 1 β	Step 2 β	Step 3 β
Variable			
Sex ^a	.02	.03	.08
Age	-.01	.03	.02
Marital status ^b	.01	.04	.01
No. of children	-.02	-.02	.02
Job involvement	-.40**	-.23**	-.19**
Segmentation preference		.34**	.27**
Perceived segmentation norm		.23**	.15**
Technology use at home			-.33**
ΔR^2	.16	.15	.09
ΔF	9.96**	29.71**	37.55**
R^2	.16	.31	.40
F	9.96**	17.15**	21.80**

^a coded 1 = Male, 0 = Female. ^b coded 1 = single, 2 = married, 3 = divorced/separated, 4 = living as married, 5 = widowed.

* $p < .05$. ** $p < .01$.

dent variables. Support for both Hypothesis 1 (segmentation preference) and Hypothesis 2 (perceived segmentation norm) met the first condition. Second, the independent variables must be related to the mediator (technology use at home). A separate regression analysis indicates that both segmentation preference ($\beta = -.22$, $p < .01$) and perceived segmentation norm ($\beta = -.25$, $p < .01$) were significantly related to technology use at home ($\Delta R^2 = .11$, $p < .01$) after controlling for the covariates (i.e., sex, age, marital status, number of children, job involvement), thereby satisfying the second condition. The third condition is that the mediating variable should be related to the dependent variable. Support for Hypothesis 3 fulfilled the third condition (technology use at home was negatively related to psychological detachment).

For partial mediation to occur, the beta weight of the independent variable must substantially decrease once the mediator variable is added to the regression equation. Results in Table 2 show that when technology use at home was added into the equation, the beta weight for segmentation preference decreased to $\beta = .27$ (the third step in Table 2) from $\beta = .34$ (the second step in Table 2). In addition, the beta weight for perceived segmentation norm was reduced from $\beta = .23$ (the second step in Table 2) to $\beta = .15$ (the third step in Table 2). Results from Sobel tests confirmed these indirect effects. Specifically, there was a significant indirect relationship between segmentation preference and psychological detachment

through technology use at home ($z = 4.54$, $p < .001$), providing support for Hypothesis 4. Perceived segmentation norm also had a significant indirect relationship with psychological detachment through technology use at home ($z = 4.06$, $p < .001$), lending support for Hypothesis 5.

Discussion

The present study contributes to the growing body of literature on psychological detachment from work by directly addressing the research call for identifying additional antecedents of psychological detachment (Sonnentag et al., 2010a). Furthermore, based on boundary theory, this study proposes a possible mechanism underlying the hypothesized relationships between antecedents and psychological detachment (Ashforth et al., 2000; Clark, 2000; Nippert-Eng, 1996). Our findings indicate that employees with a stronger preference for segmenting the work from the home domain reported experiencing greater psychological detachment from work during non-work time. Second, those who perceived other people at work practicing work-home segmentation reported higher levels of psychological detachment from work outside of regular work hours. Notably, we demonstrate that technology use at home partially mediated these relationships. In summary, segmentation preference and perceived segmentation norm was related to less technology use at home (less permeable tech-

nological boundaries at home), which in turn was associated with higher psychological detachment.

Theoretical Implications

Our findings suggest that boundary theory can be a useful framework to describe the experience of psychological detachment from work. Work-home segmentation preference was a relevant factor associated with psychological detachment—a robust finding even when controlling for an individual's level of job involvement. This relationship was partially mediated by technological home boundaries. These findings suggest that one's work-home segmentation preference is associated with boundary management practices that can create a home environment that supports psychological detachment from work.

Kreiner et al. (2009) further suggest that individuals can employ a variety of “boundary tactics” for achieving balance between work and nonwork roles. For example, they suggest that temporal boundary tactics (e.g., blocking off family time) or communicative boundary tactics (e.g., setting expectations for work-related communications outside of work) could be useful in preventing work invasion into the home domain. Accordingly, based on our findings we suggest that linking the idea of work-home boundary tactics to psychological detachment will enhance more actionable knowledge regarding what employees need to do to recover from the demands of work. In that sense, future research may benefit from using boundary theory as a theoretical framework to examine the roles of other home boundary aspects (e.g., spatial, communicative, temporal) in tandem with technological boundaries and their relationships with psychological detachment.

In addition, through assessing one's perceived segmentation norm, we indirectly examined the potential roles of work domain members in employees' experience of psychological detachment, which have been largely neglected in past research on psychological detachment. Our results indicate that those with a higher perceived segmentation norm tended to maintain stronger home boundaries with regard to technology use after regular work hours, which in turn was associated with higher psychological detachment. This makes intuitive sense as individuals tend to comply with social norms (Cialdini & Trost, 1998). Thus, by including aspects of the social context into the research on psychological detachment, this study aimed at drawing a more comprehensive picture of the antecedents of detachment and helped better understand the phenomenon itself. Based on

these results, future research should further investigate the roles of other domain members (e.g., clients, spouse, children; see Clark, 2000 for more discussion) in order to identify enabling and inhibiting factors of psychological detachment from work. We believe incorporating these social contexts will enrich theory building around the construct of psychological detachment.

The current study results support the notion that segmentation between the work and nonwork domains is conducive to experiencing detachment because our findings suggest that creating a sense of segmentation can help people mentally detach from work and recover from work stress. However, a recent study showed that a segmentation strategy for balancing work and nonwork life could unintentionally reduce positive spillover processes between the work and home domain (Powell & Greenhaus, 2010). Further, research has found that reflecting on the positive aspects of work during off-job time can be beneficial for both work-related and general well-being (Fritz & Sonnentag, 2005). Thus, in order to maximize individual recovery processes during nonwork hours, future research should explore which features of work-home boundary management can selectively allow positive work aspects to spill over into the home domain but still block negative work-related thoughts.

Practical Implications

The current findings are highly relevant in an era in which the communication technologies interconnect the work and home domain more and more tightly (Valcour & Hunter, 2005). Active segmentation by constructing impermeable technological home boundaries may be a helpful strategy for an employee who has difficulty “switching off” from work during nonwork hours. Specifically, employees may want to impose some restrictions on the amount of technology use for work after regular business hours. They may also benefit from utilizing selective features of technologies that are in line with segmentation ideas (e.g., separating e-mail accounts for work and personal use, screening work-related incoming calls during nonwork time; Kreiner et al., 2009).

Furthermore, our findings regarding perceived segmentation norm suggest that employers and managers/supervisors need to be more sensitive to the importance of employees' detachment experience and their segmentation practices. This may contradict, however, the “bring your own computer” program recently launched by some companies in which em-

employees receive a stipend to buy a laptop or smartphone of their choice for both work and personal purposes (Madkour, 2008). Such a program may increase expectations for employees to enact work-related roles at home during off-work hours, which in turn could necessitate time for psychological detachment. In this context, organizations may want to examine the prevalence of their employees' work-related communications or activities outside of regular business hours—when not required by tasks—and ensure that their employees have opportunities to “switch off” from work demands during off-work time.

Limitations and Future Research

One limitation of the study is the use of a cross-sectional design in which causal interpretations are limited. For instance, it may be possible that those who currently hardly detach themselves from work may develop a strong preference for segmenting their work from the home domain in the future. Although this study provides timely findings for psychological detachment from work using a rather simple research design, we recommend the use of a longitudinal design to confirm the current findings in more detail in future research.

A second limitation of our study is its reliance on self-reports, which may raise common method variance (CMV) concerns. However, CMV is especially problematic when studies use scales with poor psychometric properties (Spector, 1987), which does not seem to be the case in our study. Nonetheless, follow-up studies with separate measurement occasions or significant other's report of psychological detachment (e.g., Sonnentag et al., 2010b) could alleviate CMV concerns (Podsakoff, MacKensie, Lee, & Podsakoff, 2003). One could also argue that using university alumni as a sample may raise concerns about generalizability of the findings. However, although the sample was composed predominantly of Caucasians with college degrees, our sample consisted of employees from a wide variety of professions and industries, which supports the generalizability of our findings.

Also, we measured subjective perception of segmentation norm at an individual level to examine the potential roles of work domain members in employees' experience of psychological detachment. We do not consider this to be a major limitation given the meaningful variations of “subjective norms” that are perceived at an individual level (Fishbein & Ajzen, 1975). Future research, however, may use a group or

organizational-level design in which relatively objective norms can be measured, although such research may indicate that employees may vary greatly in their perceptions of such norms. In any case, results from entire work groups could provide further insights into the roles of work-group or organizational-level factors in predicting employees' psychological detachment.

Lastly, the present study tested technology use at home (technological boundaries) as the only mediator. Future research may examine other potential mechanisms that could explain relationships between segmentation preference and/or segmentation norm and psychological detachment. For example, we suggest that other boundary tactics (e.g., temporal, communicative tactics; see Kreiner et al., 2009 for more details) or the strength of home boundaries (see, e.g., Hecht & Allen, 2009) could help further explain these links.

The current study adds to literature on detachment by proposing possible predictors and processes of detachment. There is still a lack of understanding, however, regarding possible occupational differences in detachment experiences and processes, specifically, for example, whether employees in mentally demanding jobs tend to experience less detachment compared to those in physically demanding jobs. Thus, future research should further explore differences in occupations and their relationships with detachment experiences. Second, future researchers may want to examine whether organizational support for technology or type of occupation affects employees' technology use at home for work as well as their psychological detachment. For example, they may want to ask, Are employees with company-sponsored technology (e.g., BlackBerries) more willing to flex their work-home boundaries? or, Do employees with supervisory or managerial responsibilities use more technology at home for work purposes? In other words, future research should examine additional predictors of work-related technology use at home as well as of psychological detachment from work.

Conclusions

Psychological detachment from work during non-work time helps employees unwind from work demands (Sonnentag & Fritz, 2007). Our findings highlight the relevance of boundary theory and the phenomenon of work-home segmentation for experiencing psychological detachment. While we found that the individual difference variable—a preference for segmenting work and home life—is positively

associated with psychological detachment through technological home boundaries, our study also shed light on the potential role of work domain members in one's detachment experience. This social aspect previously has been ignored in the psychological detachment literature given that the detachment experience is considered to be largely under the discretion of the employees themselves (Sonnentag et al., 2010a). It is our hope that these findings help bring further attention to the enablers and inhibitors of psychological detachment from work and create new, worthwhile research questions aimed at better understanding this phenomenon.

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