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ORIGINAL PAPER

Mindfulness Beyond the Individual: Spillover and Crossover Effects in Working Couples

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Abstract

The current daily diary study among 60 dual-earner couples examined whether daily levels of mindfulness at work were associated with both the employees and their partners' well-being. Based on the spillover-crossover model, we hypothesized that on days when the employees' state mindfulness at work was higher, it would spill over to the home domain in the form of an increased state happiness at the end of the day and decreased work to family conflict. Furthermore, we hypothesized a crossover of mindfulness at work between the members of the couple, so that the partners of employees who were highly mindful at work would be more satisfied with their relationship. We examined all our hypotheses from a daily, within-person perspective. Participants filled in an online diary survey during five consecutive working days ($N = 120$ participants and $N = 600$ occasions). The results of the multilevel analyses showed a spillover effect from the employees' state mindfulness at work to their state happiness and their spouses' report of the employees' work-family conflict. Moreover, we also found a crossover effect between mindfulness at work and spouses' relationship satisfaction. Finally, results supported a partial mediation model in which daily mindfulness at work was positively related to the daily spouses' relationship satisfaction and negatively to employees' spouse-reported work-family conflict through the employees' daily happiness levels. Therefore, these findings suggest that mindfulness at work influences not only the employee, but also affects the family domain by reducing strain at home and increasing relationship satisfaction.

Keywords Mindfulness · Happiness · Work-family conflict · Diary research · Relationship satisfaction

Introduction

Mindfulness has been described as the ability to be fully attentive and aware to present experiences and events (Brown et al. 2007). Research has highlighted a wide range of positive work-related outcomes associated to the practice of mindfulness, such as stress reduction, improvements on job performance and team cohesion, and better client-rated relationship quality (see Good et al. 2016). However, although the topic of mindfulness is gaining the attention of both organizations and researchers, little is known empirically about the interpersonal/relational outcomes of mindfulness at work, how this positive experience can spill over to the home domain and affect the outcomes of employees' significant others (i.e., family). In this field, work-family conflict (WFC) is conceptualized as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus and Beutell 1985, p. 77). On the positive side, relationship satisfaction is defined as an interpersonal evaluation of the positivity of feelings for one's partner and attraction to the relationship (Rusbult and Buunk 1993).

Traditionally, mindfulness has been analyzed as a between-person (individual differences) phenomenon. In such between-individual approaches, it is very difficult to explore the day-to-day dynamics through which mindfulness influences employees' outcomes. So far, mindfulness at work has begun to draw attention from a within-person approach. Research has shown that individuals do tend to vary in their mindfulness levels across days, showing that a significant amount of the variance occurs at the within-person level

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(Hülsheger et al. 2013, 2014). Furthermore, within-person investigations are necessary because theorizing at the within-person level frequently provides a deeper understanding of the process under study (e.g., Dalal et al. 2014) and because the size of the relationship among variables may differ across the between- and within-person levels.

Mindfulness is associated with a wide variety of employee's positive outcomes. For example, mindfulness-related meditation training programs have been shown to reduce work-related stress (e.g., Bazarko et al. 2013) and enhance emotional well-being (Weinstein et al. 2009). Similarly, individuals with a disposition to be more mindful have been found to report higher levels of positive affect (Giluk 2009). In fact, positive affect has been argued to be one of the core processes in the mindfulness literature, since being able to regulate one's affective experiences effectively comprises the generation and maintenance of positive affect (Glomb et al. 2011). According to Desbordes et al. (2015), mindfulness may alter the lifecycle of emotional reactions as well as the overall valence of emotional experience. Meta-analytic evidence indicates a positive association between mindfulness and positive mood states (Giluk 2009). In the field of Industrial and Organizational (IO) Psychology, mindfulness has been found to be related to several work-related variables, such as psychological detachment (Hülsheger et al. 2014), recovery (Marzuq and Drach-Zahavy 2012), and emotional exhaustion (Hülsheger et al. 2013). As we mentioned above, only recent research has included the use of alternative designs such as diary or event sampling methodologies for examining state mindfulness from a within-person approach (Sutcliffe et al. 2016). Following this approach, Hülsheger et al. (2013) found that mindfulness at work was positively related to end-of-day job satisfaction at both the within- and between-person levels and Hülsheger et al. (2014) showed that mindfulness at work was positively associated with sleep quality.

Although mindfulness is an individual experience, emerging evidence suggests that it may affect social and relational outcomes (Good et al. 2016). For example, healthcare workers' trait mindfulness was found to be related to patients' higher ratings of happiness (Beach et al. 2013; Singh et al. 2004). In a similar vein, leaders' trait mindfulness was positively associated with their employees' performance and well-being (Reb et al. 2014). These interpersonal effects have also been found in couples. Mindful individuals are better able to create and maintain satisfying relationships (McGill et al. 2016). Additional research showed that an 8-week mindfulness training course improved reports of relationship satisfaction (Carson et al. 2004). Mindfulness has also been linked to greater satisfaction at home and better sleep quality (Crain et al. 2017) and greater work–family balance (Allen and Kiburz 2012). Thus, research has begun to suggest that mindfulness effects may spill over to the home domain, affecting the family life. This process is known as *spillover* effect, which is a within-person, across-domain transmission of experiences, from work to home and from home to work for the same individual (Westman 2001). In contrast, *crossover* is defined as a bidirectional transmission of positive and negative emotions, mood, and dispositions between intimately connected individuals (Westman et al. 2009). However, it is not always a bidirectional relation. In fact, there are studies that demonstrate that it can be asymmetrical, going only from one member to another (e.g., Westman et al. 2001). Crossover and spillover are two ways in which stress or well-being are carried over within and across individuals and domains.

There have been calls during the last few years for increasing the understanding of processes and mechanisms behind the benefits of mindfulness in general (Glomb et al. 2011), and the links between work-family constructs and mindfulness in particular (Allen and Paddock 2015). The relationship between employees' daily levels of mindfulness at work, happiness, and family outcomes can be explained through the Conservation of Resources theory (COR; Hobfoll 1989). The basic tenet of COR theory is that individuals strive to protect (conserve) and acquire resources. Resources are defined as objects, conditions, personal characteristics, and others that are valuable in themselves or as a means to a valuable end. One the assumptions of COR is that resources can generate new resources. Hobfoll (2001) described this phenomenon as *resource caravans*, meaning that resources come in bundles. Once obtained, resources appear to create a gain spiral, in which resources accumulate.

Mindfulness has been considered as a resource-conserving and obtaining variable (Kroon et al. 2015), which has been applied to the work–family context (Allen and Paddock 2015). The propensity to be more mindful has been associated with other resources, such as greater optimism (Brown and Ryan 2003), vigor (Marzuq and Drach-Zahavy 2012), and positive affect (Malinowski and Lim 2015). These effects have been argued to be a result of superior self-regulation (Glomb et al. 2011), allowing for a more skillful use of resources (e.g., Montani et al. 2016). Therefore, mindfulness can be considered a key psychological resource "that facilitates the selection, alteration, and implementation of other resources" (ten Brummelhuis and Bakker 2012, p. 548). These key resources preserve and facilitate the application of lower order, less stable resources such as time, energy, and affect (Halbesleben et al. 2014).

It may be plausible that after being mindful at work, people have already gained a psychological resource like a state of positive affect at home (i.e., happiness). This work-home enrichment process may occur because of the inter-domain resource transfer (Rothbard 2001). Enrichment may occur when resources (e.g., interpersonal skills) gained at work directly facilitate performance improvement at home (i.e., the instrumental path), or indirectly enhance performance at home by first triggering positive affect (i.e., the affective path;

Greenhaus and Powell 2006). The happier employees are during evenings, the more likely they will be to engage in positive behaviors at home. Positive emotional states are associated with enhanced interpersonal relations, including more prosocial behaviors (Fredrickson 2001), better social relations (Lyubomirsky et al. 2005), and increased social connectedness (Reis and Patrick 1996).

Despite the existing research, some important questions remain unclear. How can the daily diary state of mindfulness spill over into employees' family lives? What specific mechanisms explain the daily spillover and crossover of mindfulness? We shed light on these issues by investigating whether mindfulness can transfer into the home domain. Furthermore, we examine within-individual levels of mediating mechanisms which account for how these processes occur. Based on the reasoning above, we expect that on days when employees have higher levels of mindfulness at work, their partner reports better family-related outcomes (i.e., WFC and relationship satisfaction) by an increase in happiness. Therefore, we expect that employees' state mindfulness at work is positively related to their end-of workday happiness within individuals (Hypothesis 1, see Fig. 1). Additionally, we also expect that employees' state mindfulness at work is negatively related to their daily WFC (spouse-reported) (Hypothesis 2a), and positively to the daily relationship satisfaction of their spouses (spouse-reported) (Hypothesis 2b) within individuals. Furthermore, we propose that daily employees' happiness during the evenings is negatively related to their daily WFC (spouse-reported) (Hypothesis 3a), and positively to the daily relationship satisfaction of their spouses (spouse-reported) (Hypothesis 3a) within individuals. Finally, we propose that the within-individual relationship between mindfulness at work and home outcomes (i.e., spouse-reported employees' WFC and spouses' relationship satisfaction) is mediated by employees' state happiness during non-work time.

Method

Participants

Out of the 176 participants who were requested for participation, 122 surveys with self and spouse information (69% response rate) were completed and returned, which according to Ohly et al. (2010) is a good response rate. Two of these were left out of the analyses due to missing data or missing spouse reports. We had a final sample of 120 participants (60 employees and their daily spouse reports), 50.8% of which were female. Employees' mean age was 42.1 years (SD = 9.9), whereas spouses' mean age was 41.0 years (SD = 9.8). Mean job tenure was 20.2 years (SD = 10.7), and on average, they both worked 35.8 h per week (SD = 14.4). All participants worked in the services sector, though there was a broad range in the professions, spanning from school teachers to medical doctors. The majority of the sample had at least one child (57.6%), while 51.5% of the sample had a university degree or postgraduate studies. Regarding their prior experience with mindfulness, half of the sample (52.5%) had never been introduced to mindfulness or meditation in any form; 22.4% of those who had been introduced to it had maintained a daily meditation practice, which consisted of less than 20 min daily (71%) or between 20 and 40 min daily (21%).

Procedure

Participants were recruited using the researchers' social networks and those of their students, who were granted extra course credits for every couple they could provide. The use of student contacts to obtain access to employee samples is quite common in the field of organizational behavior (e.g., Demerouti and Rispens 2014). Specifically, the requisites participants had to fulfill for the study were that (i) they were in a stable romantic relationship, (ii) both members were cohabiting in the same residence, and (iii) both members had a stable job. Participants were then contacted via email explaining the procedure that the diary-based research would follow during the work week. They also filled out a general questionnaire regarding sociodemographic data and trait variables of interest. Informed consent was obtained from all individual participants included in the study. We collected the data via online surveys hosted by Qualtrics.com. In order to guarantee participants' privacy and anonymity, partners' responses were linked by means of anonymous codes provided by the participants.

As recommended by scholars, we used a multi-source daily diary design in order to implement a dynamic process

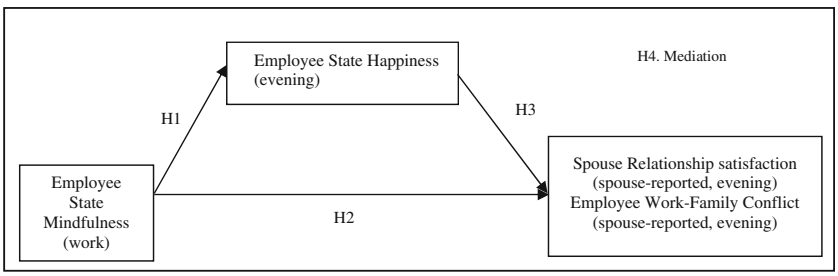

Fig. 1 Summary of the proposed model

perspective in Industrial/Organizational Psychology research (Ohly et al. 2010). The diary survey had to be filled in over five consecutive workdays, twice a day (before leaving the workplace, and before going to bed). Specifically, mindfulness at work was measured at the end of the workday (average response time, 5:00 p.m./17:12), whereas happiness was reported before going to bed. Spouse-reported information about WFC and relationship satisfaction were also measured during the evenings (average response time, 11:00 p.m./23:02).

Measures

Mindfulness State mindfulness at work was measured using the state version (Hülsheger et al. 2013) of the Mindful Awareness Attention Scale (Brown and Ryan 2003). This scale consists of five items evaluating how aware the respondent was of his activities during work time. Items were rated on a 6-point scale, ranging from 1 = not true at all to 6 = totally true. Participants responded to items such as "Today, at work, I've done jobs or tasks automatically, without being aware of what I was doing" and "Today, at work, I found myself preoccupied with the future or the past" (all items are reversed scored). The mean of Cronbach's alpha across the five occasions was .89.

Happiness State happiness was measured using the Subjective Happiness Scale (Lyubomirsky and Lepper 1999). We used three of the four items and selected items with the highest factor loading or item total correlation. We also modified them slightly to capture day-level experience. Items were rated on a 6-point scale, ranging from 1 = not true at all to 6 = totally true. Examples of the items are "Today, during the evening (outside my working hours) I consider myself to have been a happy person" and "Today, during the evening (outside my working hours) I consider myself as a happier person than most of my peers". The mean of Cronbach's alpha across the five occasions was .82.

Work-Family Conflict Spouse-report of daily WFC was measured with three items from the Survey Work-home Interaction – NijmeGen (SWING) (Geurts et al. 2005), modified to measure the daily experience. Each spouse had to report on the daily WFC of his/her partner. Examples of these items are "During today's evening, at home, my partner's work schedule made it difficult for him/her to fulfil his/her domestic obligations" and "During this evening, at home, my partner didn't have the energy to engage in leisure activities with me because of his/her job". Items were rated on a 6-point scale, ranging from 1 = not true at all to 6 = totally true. The mean of Cronbach's alpha across the five occasions was .75.

Relationship Satisfaction Spouse-report of daily relationship satisfaction was measured with a scale based on Kunin (1955). It was measured using a single item at the end of the day (evening questionnaire): "Today, how satisfied are you with your relationship?" We used faces as response options. The scale consists of five faces, ranging from "very unsatisfied" to "very satisfied." A one-item measure of affective states is commonly used in diary designs (e.g., Fisher et al. 2016).

Control Variables To rule out alternative interpretations, we assessed as control variables: gender, number of children, hours worked per week, and years of experience in meditation practice at the person level. We also controlled for the levels of trait of mindfulness using the Mindful Awareness Attention Scale (Brown and Ryan 2003). All of these variables were measured in the sociodemographic questionnaire filled before the onset of the studied work week.

Data Analyses Given the hierarchical structure of the data, with days (Level 1; $N = 300$ observations) nested within individuals (Level 2; $N = 60$ participants), we used multilevel modeling using the MLwiN software (Rashbash et al. 2000). In all of the models, Level 1 predictors (e.g., state mindfulness at work) were centered around each individual's mean score to remove any possible between-individual effects as recommended by Ohly et al. (2010). Level 2 variables (i.e., gender, number of children, worked hours per week, years of experience in meditation practice, and trait mindfulness) were centered around the grand mean. As we were interested in intra-individual processes, hypothesized relationships were investigated at the lower or within-person level, while controlling for variation in the variables at the between-person level (i.e., we also estimated the variances at the between-level).

We followed recommendations by Bauer et al. (2006) for testing mediation in multilevel models. Our model corresponds to a 1–1–1 design where predictor, mediator, and outcome variables are all assessed at Level 1, the day level. For each hypothesized effect, we conducted a Monte Carlo simulation with 20,000 replications. The Monte Carlo approach involves constructing a sampling distribution of the indirect effect using point estimates of mediation paths and the asymptotic covariance matrix of those estimates (Preacher and Selig 2012). If the 95% confidence interval obtained does not include zero, then this provides support for a statistically significant mediation effect.

Results

We calculated means, standard deviations, and correlations among the study variables. These correlations were calculated using the averaged scores over the 5 days for the day-level variables. As it can be seen in Table 1, the pattern of

Table 1 Mean, standard deviations, and correlations

	M (SD)	1	2	3	4	5	6	7	8	9
1. Gender	–	–								
2. Number of children	0.97 (1.04)	.02	–							
3. Worked hours per week	35.8 (14.4)	− .01	− .11**	–						
4. Years of experience in mediation practice	1.34 (0.97)	.17**	.14**	.03	–					
5. Trait mindfulness	4.29 (0.90)	.07	.04	− .12**	.04	–				
6. State mindfulness at work	4.48 (1.74)	− .10*	.08	− .06	.04	.33**	–	.17**	− .13*	.30**
7. State happiness	4.26 (1.29)	− .09*	− .05	− .09*	.05	.18**	.39**	–	− .26**	.51**
8. State work-family conflict (spouse-report)	2.02 (1.09)	.02	.12**	.03	− .12**	− .11**	− .14**	− .20**	–	− .32**
9. State relationship satisfaction (spouse-report)	5.29 (0.87)	.03	− .11**	− .01	.18**	.22**	.26**	.41**	− .32**	–

Correlations below the diagonal are person-level correlations, and above the diagonal are day-level correlations

State refers to daily level variable

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

correlations was in the expected direction. Furthermore, spouse daily report of WFC was associated with number of children ($r = .12$, $p < .01$) and their experience in meditation ($r = -.12$, $p < .01$), whereas state happiness was related to gender ($r = -.09$, $p < .05$) and worked hours per week ($r = -.09$, $p < .05$). In addition, spouse daily report of relationship satisfaction was associated with the number of children ($r = -.11$, $p < .01$) and their experience in meditation ($r = .18$, $p < .01$). Finally, gender also showed a relationship with state mindfulness at work ($r = -.10$, $p < .05$). Therefore, these variables were used as covariates in the following analyses.

Before hypotheses testing, we calculated the intraclass correlation (i.e., intercept-only models) to examine whether variables in the study varied within individuals. Intercept only model, also known as null model or baseline model, contains only intercept and corresponding error terms. The percentage of total variance that resides between and within persons was significant for all day-level variables: day-level state mindfulness at work (59.7% of the total variance is explained by within-person fluctuations), day-level state happiness (62.4% of the total variance is explained by within-person fluctuations), day-level spouse-report of WFC (67.2% of the total variance is explained by within-person fluctuations), and day-level spouse-report of relationship satisfaction (64.6% of the total variance is explained by within-person fluctuations). According to Byrne (2011), when ICC values are larger than .10 and smaller than .90, there is a substantive amount of variance both at the between-person and within-person level. Furthermore, the $-2 \times$ log likelihood difference showed that a two-level model fits much better to the data than a one-level model for spouse-report of daily WFC ($\Delta\chi^2$ (1) = 24.1, $p < .01$), and spouse-report of daily relationship satisfaction ($\Delta\chi^2$ (1) = 88.9, $p < .01$). Therefore, it was appropriate to use a multilevel approach to test our hypotheses.

To test our study hypotheses, we examined a series of nested models. In Model 1, we included the control variables (gender, number of children, worked hours per week, years of experience in meditation, and trait mindfulness). In Model 2, we entered state mindfulness at work. In Model 3, we included the hypothesized mediator, state happiness. We compared the model fit of these models by calculating the difference between the likelihood ratio of one model and the likelihood ratio of the previous one. This difference follows a chi-square distribution (with degrees of freedom being the number of variables added in each model). Model 3 showed a better fit to the data than the rest of the models in the equations. Tables 2 and 3 present unstandardized estimates, standard errors, and t values for all predictors.

Hypothesis 1 stated that employees' state mindfulness at work is positively related to their end-of workday state happiness. Results from multilevel analysis supported our hypothesis, for state mindfulness at work had a significant positive relation with state happiness ($\gamma = 0.339$, SE = 0.037, $t = 9.16$, $p < .001$).

Hypothesis 2 suggested that employees' state mindfulness at work is positively related to daily relationship satisfaction of their spouses, and negatively to daily work-family conflict (spouse-reported) within individuals. Results showed that state mindfulness was positively related to spouse-report of relationship satisfaction ($\gamma = 0.171$, SE = 0.029, $t = 5.89$, $p < .001$) and negatively to spouse-report of employees' WFC ($\gamma = -0.137$, SE = 0.040, $t = -3.42$, $p < .01$). Thus, Hypotheses 2a and 2b were supported.

Hypotheses 3a and 3b stated that employees' state happiness is significantly related to daily home domain spouse-reported outcomes. As can be seen in Tables 2 and 3, employees' state happiness was negatively related to their daily WFC (spouse-reported) ($\gamma = -0.177$, SE = 0.052, $t = -3.40$, $p < .01$) and positively daily to their spouses'relationship satisfaction (spouse-reported) ($\gamma = 0.266$, SE = 0.034, $t = 7.82$, $p < .001$). Thus, Hypotheses 3a and 3b were supported.

Table 2 Multilevel estimates for models predicting daily work-family conflict (Spouse-report)

Variable	Null model			Model 1			Model 2			Model 3		
	Estimate	SE	*t*	Estimate	SE	*t*	Estimate	SE	*t*	Estimate	SE	*t*
Intercept	2.061	0.068	30.3***	2.049	0.063	32.5***	2.112	0.067	31.5***	2.138	0.066	32.3***
Gender				0.073	0.106	0.68	0.152	0.110	1.38	0.177	0.108	1.63
Number of children				0.150	0.061	2.45*	0.164	0.062	2.64*	0.160	0.062	2.58*
Worked hours per week				0.001	0.005	0.20	0.001	0.005	0.20	0.001	0.005	0.20
Years of experience in mediation practice				− 0.158	0.051	− 3.09**	− 0.169	0.055	− 3.07**	− 0.164	0.052	− 3.15**
Trait mindfulness				− 0.149	0.068	− 2.19*	− 0.146	0.071	− 2.05*	− 0.144	0.071	− 2.02*
State mindfulness at work							− 0.137	0.040	− 3.42**	− 0.109	0.040	− 2.72*
State happiness										− 0.182	0.052	− 3.50**
− 2 × Log (lh)	1450.073			1262.559			1190.373			1178.047		
Difference of − 2 × Log				187.51***			72.18***			12.32***		
df				5			1			1		
Level 1 intercept variance (SE)	0.695 (0.074)			0.545 (0.077)			0.529 (0.078)			0.512 (0.075)		
Level 2 intercept variance (SE)	0.338 (0.051)			0.205 (0.042)			0.193 (0.043)			0.187 (0.043)		

*$p < .05$; **$p < .01$; ***$p < .001$

Finally, Hypothesis 4 proposed that employees' daily state happiness mediates the relationship between employees' daily state mindfulness at work and day-level family domain outcomes (WFC and relationship satisfaction). The conditions that should be met in order to support the mediation hypothesis are (a) state mindfulness should be positively related to state happiness, (b) state happiness should be positively related to daily WFC and relationship satisfaction, and after the inclusion of the mediator, (c) the previously significant relationship between daily mindfulness and home domain outcomes either turns into non-significant (full mediation) or becomes significantly weaker (partial mediation; Mathieu and Taylor 2006).

The test of Hypothesis 2 supports the first condition, whereas the test of Hypothesis 3 supports the second condition. Regarding specific mediation effects, the Monte Carlo test showed that employees' daily state mindfulness at work was positively related to spouse-report of employees' daily WFC through employees' state happiness (95% CI = [LB − 0.088, UB − 0.035]). After the inclusion of the mediator, the

Table 3 Multilevel estimates for models predicting daily relationship satisfaction (Spouse-report)

Variable	Null model			Model 1			Model 2			Model 3		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	2.314	0.073	31.6***	2.335	0.068	34.3***	2.272	0.067	33.9***	2.220	0.059	37.6***
Gender				0.042	0.080	0.52	0.013	0.081	0.16	0.072	0.072	1.00
Number of children				−0.080	0.061	−1.31	−0.113	0.059	−1.91	−0.120	0.052	−2.30*
Worked hours per week				−0.005	0.004	−1.25	−0.004	0.004	−1.00	−0.006	0.004	−1.50
Years of experience in mediation practice				0.120	0.043	2.79*	0.147	0.044	3.34**	0.145	0.039	3.71**
Trait mindfulness				0.148	0.056	2.64*	0.070	0.059	1.18	0.059	0.050	1.18
State mindfulness at work							0.171	0.029	5.89***	0.111	0.026	4.23***
State happiness										0.265	0.034	7.79***
−2 X Log (lh)	1172.952			1013.909			942.028			842.816		
Difference of −2 X Log				159.04***			71.88***			99.21***		
df				5			1			1		
Level 1 intercept variance (SE)	0.449 (0.038)			0.432 (0.038)			0.389 (0.048)			0.294 (0.030)		
Level 2 intercept variance (SE)	0.245 (0.058)			0.212 (0.056)			0.164 (0.038)			0.135 (0.037)		

*$p < .05$ **$p < .01$ ***$p < .001$

initial effect of state mindfulness on daily WFC is reduced from ($t = -3.42$, $p < .01$) to ($t = -2.72$, $p < .05$). Therefore, partial mediation exists. Similarly, the Monte Carlo test also showed that state happiness partially mediated (95% CI = [LB 0.0527, UB 0.105]) the relationship between employees' daily state mindfulness and their spouses' daily relationship satisfaction (spouse-reported). As the relationship only becomes weaker, partial mediation exists. Thus, Hypothesis 4 was partially supported.

Discussion

The current multi-source daily diary study predicted that employees' state mindfulness at work spills over to the home domain through an increase in their daily happiness. This increase, in turn, affects family domain outcomes, so that employees are perceived as experiencing lower WFC and partners' are satisfied with their romantic relationship. Mindfulness not only affects employees' outcomes (i.e., happiness and WFC), but also exerts a direct effect on their partners' outcomes (i.e., relationship satisfaction). Results supported our hypotheses, therefore answering the calls for both research on the underlying mechanisms accounting for mindfulness' beneficial effects (Glomb et al. 2011; Good et al. 2016) and on how positive work-related experiences can improve relationships (van Steenbergen et al. 2014).

This study makes several contributions to the ongoing body of research about mindfulness in the workplace. First, our findings add to the emerging line of research on the spillover of mindfulness. Previous research has found that employees' state mindfulness at work was negatively related to lower daily emotional exhaustion during evenings (Hülsheger et al. 2013), but not with daily sleep quality (Hülsheger et al. 2014) at the within-person level. The spillover of mindfulness on happiness adds and complements these findings, showing that daily mindfulness is not limited to decreases in negative outcomes (such as emotional exhaustion) but also to increases in positive ones. In this line, we also found the spillover of state mindfulness at work on employees' WFC (as reported by their partner) during the evenings, so that on days when employees were more mindful, their partners reported that employees had less conflict between work and home. Our results are based on the tenets of COR theory: by being more mindful at work, employees can conserve their resources and acquire new ones, both personal or from the job context, so that they are in a better position to use them during non-working hours, manifesting as increased happiness and lower WFC.

Second, we also contribute to the literature about the crossover of organizational phenomena to the personal sphere, showing that employees' daily mindfulness levels at work were positively related to their partners' relationship satisfaction. This contribution is especially significant to the emerging body of research on mindfulness as an interpersonal phenomenon. Recently, researchers have found that the more mindful the leaders, employees, and even couples, the more benefitted are their subordinates, clients, and partners (Barnes et al. 2007; Reb et al. 2014; Singh et al. 2004). However, our study found that daily state mindfulness in one domain (work) is associated with a state variable of another person (partner at home) who does not share the context in which mindfulness occurred. Specifically, on days when employees' showed higher state mindfulness at work, their spouses' daily relationship satisfaction was higher. Recent meta-analysis showed a positive relationship between a person's trait mindfulness and relationship satisfaction (McGill et al. 2016). Our study complements this finding by showing that daily mindfulness is also related to *the partner's* relationship satisfaction, not only to one's own.

Finally, the partial mediation of daily happiness expands the existing line of research showing that mindfulness is beneficial for couples because of increased positive affect (Malinowski and Lim 2015). Our results show that employees' daily state mindfulness levels at work are associated to their partners via how happy employees are when they are back home. This mediation can be understood through COR theory: the more mindful employees are during working hours, the more resources they will have, preventing them from further losses that are associated with the emotional and cognitive demands of the workplace. Additionally, on days when employees are more mindful, they are more prone to acquire new resources they would not notice with a more distracted mind (Kroon et al. 2015). Both of these strategies (conservation and acquisition) can be used for both personal and interpersonal (the couple's) use: the happier employees are at home, the more likely they are to behave in prosocial ways and have a better relation with their partners (Fredrickson 2001; Lyubomirsky et al. 2005).

Our study extends the current literature about mindfulness in organizations and couples in three ways. First, we found the crossover of mindfulness from employees at work to their partners at home. Previous research has suggested that there is a relationship between individuals mindfulness and significant others' moods (e.g., Barnes et al. 2007), but not that this relationship existed while both partners are in different contexts. In this line, Fowler and Christakis (2008) found that individual's happiness is related to the happiness of others up to the third connection in their social network. Our results suggest that mindfulness could also ripple out from one person into his social network, and thus be related with the well-being of their social network. Second, our results about the spillover of mindfulness on happiness and WFC also add to the growing body of research exploring the complex temporal dynamics of state mindfulness at work. Specifically, our findings provide evidence for the need to conceptualize mindfulness at both the between- and within-person levels of analysis,

for each one is associated with different outcomes. Furthermore, a within-person approach to mindfulness can provide fruitful complementary insights into the existing recovery (e.g., Sonnentag et al. 2008) and occupational health (e.g., Bakker et al. 2009) literatures. Finally, our finding that happiness mediates the relation between mindfulness at work and the family outcomes was based on the tenets of COR theory; namely, that mindfulness works as a personal resource that allows for the acquisition of other related resources. This result complements the findings on the mediational mechanisms of mindfulness at work, such as surface acting and psychological detachment (Hülsheger et al. 2013; Hülsheger et al. 2014).

Limitations and Suggestions for Further Research Despite the strengths of our design (e.g., large number of observations with two different sources), our study has a number of limitations that should be acknowledged. First, our study cannot assess causality between the included variables. Although our multi-level daily diary design provides more reliable information about the within-person relations between variables than other types of designs, conclusions about causality cannot be drawn. Future research about interpersonal effects of mindfulness might overcome this shortcoming by using experimental designs in which couples undergo a mindfulness training program for several weeks and are thoroughly assessed using a daily diary design before, during, and after the intervention. This would allow to shed light on the daily within-person variations in state mindfulness when it is practiced on a regular basis, as well as its influence on employees' and their partners' variables.

A second limitation of the present study is that although our sample size was large enough according to diary design criteria (Ohly et al. 2010) and heterogeneous, all of them worked in the service sector. Therefore, this limits the generalizability of our findings. Future research may address this issue by assessing mindfulness in other job sectors such as the production or the manufacturing sectors, both of which remain understudied in comparison with the services sector.

Finally, we collected self-report data, which raises concerns about common method variance. To minimize such bias, we collected work and family constructs at two different points every day and from two sources. Therefore, we would not expect common method bias to pose a serious threat to our results.

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Author Contribution GMM executed the study and wrote the article. ARM designed the study, analyzed the data, and wrote part of the results. MA designed the study, collaborated with the analysis of the data, and wrote part of the results. FG collaborated in the writing and editing of the final manuscript.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval The procedures involving human participants described in this research were approved by the Universidad Complutense de Madrid's institutional ethical committee and are in accordance with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent All participants in the study provided their informed consent about the nature and procedure of the current study.

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