## RESEARCH REPORT

# Spousal Recovery Support, Recovery Experiences, and Life Satisfaction Crossover Among Dual-Earner Couples

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Research has indicated the importance of recovery from work stress for employee well-being and work engagement. However, very little is known about the specific factors that may support or hinder recovery in the context of dual-earner couples. This study proposes spousal recovery support as a potential resource that dual-earner couples can draw on to enhance their recovery experiences and well-being. It was hypothesized that spousal recovery support would be related to the recipient spouse's life satisfaction via his or her own recovery experiences (i.e., psychological detachment, relaxation, and mastery experiences). The study further investigated the crossover of life satisfaction between working spouses as a potential outcome of recovery processes. Data from 318 full-time employed married couples in South Korea were analyzed using structural equation modeling. Results showed that spousal recovery support was positively related to all 3 recovery experiences of the recipient spouse. Moreover, this recovery support was related to the recipient spouse's life satisfaction via relaxation and mastery experiences. Unexpectedly, psychological detachment was negatively related to life satisfaction, possibly indicating a suppression effect. Life satisfaction crossed over between working spouses. No gender differences were found in the hypothesized paths. Based on these findings, theoretical and practical implications are discussed, and future research directions are presented.

Keywords: spousal recovery support, recovery experiences, life satisfaction, crossover, dual-earner couples

Ensuring recovery from work on a regular basis is essential for employee well-being and work engagement (Fritz, Sonnentag, Spector, & McInroe, 2010; Sonnentag, Mojza, Demerouti, & Bakker, 2012). Previous research has predominantly focused on individual recovery processes, thereby overlooking the social context in which recovery can occur. Because many working individuals reunite with their significant other after work, dual-earner couples represent an important population to consider—and a unique context—within recovery research. Compared with single-earner couples with more divided work and family roles, dual-earner couples may need greater coordination of efforts to recover from work (Saxbe, Repetti, & Graesch, 2011). Moreover, as the number of dual-earner couples has steadily increased (Organization for Economic Co-Operation and Development, 2011), it is important to

understand how these couples successfully unwind from work stress while meeting work and family demands (ten Brummelhuis, Haar, & van der Lippe, 2010). Thus, in this study, we proposed and tested a model of recovery from work in matched dual-earner couples (see Figure 1).

This study contributes to the recovery literature in several ways. First, despite the importance of examining predictors in theory and intervention, little is known about the potential predictors of recovery, especially in the context of dual-earner couples. Drawing on a resource perspective (Hobfoll, 1989, 2002) and a theoretical model of recovery and well-being (Newman, Tay, & Diener, 2013), this study identifies spousal recovery support as a potential enabler of recovery experiences in dual-earner couples. Second, recent research suggests that individual recovery experiences may impact partner life satisfaction (Hahn & Dormann, 2013); however, the specific mechanism by which one's recovery experiences affect the partner's life satisfaction remains unclear. Therefore, we incorporated the crossover of life satisfaction into the present model to better understand recovery processes in working couples. Crossover refers to the transmission of one's psychological states to another person in a close relationship (Westman, 2001). Linking crossover theory to recovery processes provides a useful framework for studies on recovery and its outcomes in dyads, such as dual-earner couples. In short, in this study, we tested a model in which spousal recovery support was related to the recipient

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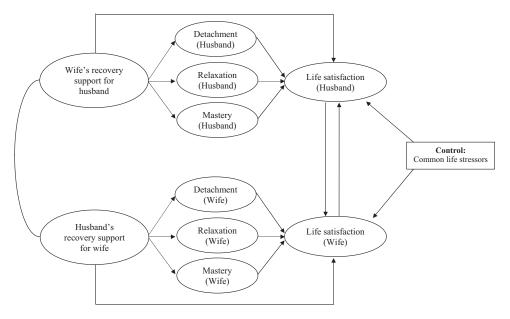


Figure 1. Conceptual model of spousal recovery support, recovery experiences, and crossover of life satisfaction in dual-earner couples. Disturbance terms are omitted in this figure for simplicity but are described in the Model Overview section.

spouse's recovery experiences and life satisfaction which, in turn, crossed over to the other spouse.

#### **Recovery From Work**

Recovery from work refers to the process of temporarily removing oneself from work demands and stressors to restore resources lost while working (Meijman & Mulder, 1998). Conservation of resources theory (COR) posits that people attempt to obtain resources (e.g., energy, conditions, objects) to offset resource loss and prevent future loss, which is critical in dealing with demands in one's environment while maintaining well-being (Hobfoll, 1989). Using this resource perspective, Sonnentag and Fritz (2007) introduced *recovery experiences* as resource-gaining experiences that are commonly reported by employees when they engage in their chosen leisure activities during off-work times.

Recovery experiences can take a variety of forms. Psychological detachment from work (hereinafter detachment) refers to the experience of "mental" disengagement from work-related thoughts during nonwork time (Etzion, Eden, & Lapidot, 1998). This mental separation from work sets the stage for resource replenishment because a mere physical distance from work is not sufficient to reduce strain (Sonnentag, 2012). Relaxation is characterized by low physiological and mental activation associated with decreased heart rate and muscle tension (Smith, 2005). Nonwork activities with little effort and challenge (e.g., taking a walk or bath) can be associated with relaxation, increasing positive affect and decreasing activation (Sonnentag & Fritz, 2007). Mastery experiences represent a unique recovery experience as they may require some self-regulatory effort in order to learn new things or take on a challenge (e.g., engaging in a hobby or sport; Sonnentag & Fritz, 2007). Although mastery experiences are not effortless, they create

new resources such as a sense of achievement and joviality (e.g., Fritz et al., 2010). These recovery experiences can help employees gain resources (e.g., positive affect, energy), translating into increased well-being and decreased strain (see Demerouti, Bakker, Geurts, & Taris, 2009, for a review). These recovery experiences are positively associated with life satisfaction (Newman et al., 2013; Sonnentag & Fritz, 2007).

# Spousal Recovery Support From a Resource Perspective

Recent research has hinted at the potential roles of significant others in employee recovery from work. For example, employees' engagement in joint leisure activities with their partner is related to detachment, relaxation, and mastery during weekends (Hahn, Binnewies, & Haun, 2012). A partner's detachment was further found to be positively associated with the target employee's detachment (Hahn & Dormann, 2013). However, research to date has not examined specifically how a spouse can facilitate the partner's recovery experiences. Thus, we propose that it is *spousal recovery support* that promotes recovery experiences and life satisfaction in the context of dual-earner couples and point to the uniqueness of this context when specifying our hypotheses.

According to COR theory, gaining resources is a key operating mechanism through which one's well-being is promoted and maintained (Hobfoll, 2002). Resources are linked to other resources, suggesting a tendency of resource enrichment among individuals with reliable resources. Therefore, social support is viewed as a critical resource through which individuals can preserve and produce other valued resources (Hobfoll, 2002). COR theory further posits that intimate others (e.g., spouse) are the most salient source of support. Similarly, the work—home resources perspective (ten Brummelhuis & Bakker, 2012a) suggests that spousal support is an

important contextual resource that is more durable than other transient resources (e.g., positive mood). COR theory proposes that social support functions as a resource, especially when it addresses situational needs (Hobfoll, 1989). Similarly, the "matching hypothesis" in stress research suggests that a resource is most useful when it corresponds to the specific type of stress an individual is experiencing (de Jonge & Dormann, 2006).

Accordingly, we "matched" the type of spousal support with the recovery process and proposed *spousal recovery support*—defined as a spouse's behaviors that provide assistance in promoting and creating the other spouse's recovery opportunities and experiences—as a potential enabler of recovery experiences in working couples. Drawing on COR theory, we further conceptualized spousal recovery support as a reliable interpersonal resource that dual-earner couples can use to facilitate recovery experiences for resource replenishment during off-work time.

#### Spousal Recovery Support and Recovery Experiences

According to Newman et al. (2013), there are two necessary conditions for recovery experiences to occur: (a) time set aside for leisure activities and (b) engagement in those activities. COR theory posits that support from intimate others sets the stage for resource creation by addressing situational needs in the environment (Hobfoll, 2002). Therefore, we theorized that spousal recovery support operates as a resource through which dual-earner couples meet those two conditions for recovery experiences. As to the first condition, dual-earner couples may not have enough time for leisure activities due to competing work and home demands (ten Brummelhuis et al., 2010). In that sense, recovery support between employed spouses may help create time to pursue recovery-inducing activities after work. For example, one partner may take over home demands (e.g., preparing meals), thereby enabling his or her spouse to take time to learn meditation for relaxation and mastery. A study on dual-earner couples demonstrated that one's time spent on housework was positively related to the spouse's physiological recovery after work (i.e., reduced cortisol levels; Saxbe et al., 2011). However, given that individuals who spend more time on housework tend to experience lower detachment and relaxation (ten Brummelhuis & Bakker, 2012b), the person offering recovery support may temporarily delay his or her own recovery time for the partner who is in greater need for recovery. In short, creating time for recovery-inducing activities is important, especially for dual-earner couples with increased time constraints; spousal recovery support may be helpful for these couples to ensure leisure time for recovery.

Regarding the second condition, given that dual-earner couples often experience exhaustion due to work–family conflict (Bakker, Demerouti, & Dollard, 2008), there may be times when each partner has fewer psychological resources available to actively engage in leisure activities that provide recovery experiences. In these cases, spousal recovery support may facilitate one's engagement in recovery-providing activities through joint planning and joint pursuit of the activities. For instance, a spouse may hire a babysitter so the couple can engage in leisure activities (e.g., go out for dinner, play tennis together). In addition, when one spouse is inactive or has increased difficulties, the other spouse who is more motivated could provide recovery support. When spouses participate in joint leisure activities, they may reinforce recovery

experiences for one another (e.g., forgetting about work and relaxing together; Hahn et al., 2012). In other words, spousal recovery support may facilitate the other spouse's engagement and immersion in recovery-inducing activities. In sum, we expect spousal recovery support to function as a resource for dual-earner couples that helps satisfy the two conditions for recovery experiences (i.e., time and engagement in leisure activities). Thus, we hypothesize the following:

Hypothesis 1: Spousal recovery support is positively related to detachment (H1a), relaxation (H1b), and mastery experiences (H1c). Specifically, husbands' recovery support for their wives is positively related to wives' recovery experiences, and vice versa.

#### Spousal Recovery Support and Life Satisfaction

Life satisfaction refers to the global evaluation of one's life circumstances and encompasses high positive and low negative affective experiences (Diener, Suh, Lucas, & Smith, 1999). According to COR theory (Hobfoll, 2002), the possession of reliable resources serves as a means to not only address demands in the environment but also gain other resources. Therefore, resources become valuable in their own right, and individuals with more reliable resources (e.g., spousal recovery support) view their life more favorably (Hobfoll, 2002). Given that a spouse is typically the first one who can provide help or assistance (Halbesleben, 2010; van Daalen, Sanders, & Willemsen, 2005), work-family researchers view spousal support as a resource for dual-earner couples' well-being. While recovery experiences are important sources of pleasure and happiness in life (Newman et al., 2013; Sonnentag & Fritz, 2007), dual-earner couples' recovery opportunities may be limited as they may struggle to meet work and home demands, often resulting in time and energy deficits (ten Brummelhuis et al., 2010). Thus, considering the instrumental role of spousal recovery support in gaining recovery experiences, we expect spousal recovery support to be positively associated with the recipient spouse's life satisfaction.

*Hypothesis* 2: Spousal recovery support is positively related to life satisfaction. Specifically, husbands' recovery support for their wives is positively related to wives' life satisfaction, and vice versa.

#### **Recovery Experiences and Life Satisfaction**

According to Newman et al.'s (2013) conceptual model of subjective well-being, life satisfaction is a key well-being outcome of recovery experiences (i.e., detachment, relaxation, and mastery experiences). Newman et al. have posited that gaining recovery experiences from leisure activities is the key to enhancing life satisfaction. Specifically, this model views recovery experiences as a psychological mechanism that links individuals' leisure activities and life satisfaction. Applying Newman et al.'s model to the current context of dual-earner couples, we proposed that spousal recovery support may enable the recipient spouse to engage in valued leisure activities or joint couple activities, thereby allowing for detachment, relaxation, and mastery experiences. In addition, consistent with previous research (Newman et al., 2013; Sonnentag & Fritz, 2007), we expected these recovery experiences to

be associated with life satisfaction. In short, spousal recovery support should help the recipient spouse obtain recovery experiences that are then positively associated with life satisfaction. It is, however, possible that such positive interpersonal resources (i.e., spousal recovery support) could also result in other psychological experiences important to life satisfaction, such as mutual trust and consideration (cf. Greenhaus & Singh, 2012). Thus, we expected to find that recovery experiences *partially* mediate the link between spousal recovery support and life satisfaction in dual-earner couples.

Hypothesis 3: Recovery experiences of detachment (H3a), relaxation (H3b), and mastery (H3c) partially mediate the relationship between spousal recovery support and life satisfaction. Specifically, husbands' recovery experiences partially mediate the relationship between recovery support from their wives and husbands' life satisfaction, and vice versa.

#### Crossover of Life Satisfaction

According to crossover theory (Westman, 2001), crossover within a marital relationship can occur through several mechanisms: (a) through empathetic reactions due to psychological and emotional intimacy; (b) via displays and exchanges of various interaction behaviors (e.g., communication); and (c) due to shared environmental factors (e.g., common stressful life events). A variety of psychological experiences and states can cross over between spouses, such as work-family conflict and negative mood (e.g., Hammer, Allen, & Grigsby, 1997; Song, Foo, & Uy, 2008). As past research has primarily focused on the crossover of negative states and experiences, researchers have called for more investigation on positive crossover that may create a spiral of resource gain among dual-earner couples (Bakker & Demerouti, 2009). Positive crossover is defined as "the process that occurs when the psychological well-being experienced by one person affects the level of well-being of another person" (Bakker & Demerouti, 2009, p. 220). Thus far, only a few studies have found that positive psychological states, such as work engagement and vigor, transfer between working spouses (Bakker, Demerouti, Shimazu, Shimada, & Kawakami, 2011; Westman, Etzion, & Chen, 2009).

Applying the positive crossover concept to the current context of recovery, we proposed that life satisfaction resulting from spousal recovery support and recovery experiences would cross over between both members of a dual-earner couple. Specifically, an individual with high life satisfaction resulting from resourceproviding recovery experiences may communicate this positive evaluation of life with his or her spouse. The spouse may then empathize with the person's feelings and evaluations of life, thereby enhancing his or her own life satisfaction. Furthermore, given that dual-earner couples spend at least some of their nonwork time together, their shared nonwork life may simultaneously influence the life satisfaction of both spouses. Finally, a spouse high in life satisfaction resulting from spousal recovery support may be more likely to display other positive marital behaviors in return, such as displaying affection and initiating high-quality communication (cf. Greenhaus & Singh, 2012). These positive behaviors may, in turn, lead to an increase in the other spouse's life satisfaction. Thus, we hypothesized the following:

*Hypothesis 4:* Life satisfaction crosses over from husbands to wives, and vice versa.

#### Possible Role of Gender

While researchers have pointed to the possible role of gender in work-family dynamics and crossover processes (Powell & Greenhaus, 2010; Westman, 2002), past findings of gender differences are mixed, especially with regard to the directionality of crossover from husbands to wives and vice versa (see Westman, 2002, 2006, for a review). Participants in this study were recruited from Korea, which is based on a more traditional gender-role ideology with employed wives reporting higher home-family demands than their employed husbands (Yoon, 2010). Traditional gender-role perspectives suggest that women tend to be more sensitive to the needs of their family members, often act as providers of comfort or support and are more affected by the experiences of their family members (Westman, Vinokur, Hamilton, & Roziner, 2004). Nevertheless, studies including Korean dual-earner couples have found no substantial gender differences regarding the positive effects of spousal social support on the quality of life or the negative effects of work-family conflict on the quality of life (e.g., Hwang & Shin, 2009). Taken together, it remains difficult to make precise predictions regarding gender effects in the current model. Therefore, we examined the potential role of gender in an exploratory manner.

#### Method

#### Sample and Procedure

The data were collected from South Korean couples who were in a heterosexual cohabiting married relationship in which each spouse had a full-time job. Participants were recruited through the principal investigator's social network (i.e., former colleagues, friends, and family members). The researcher instructed this group of people in person to distribute survey packets to couples they knew personally that matched the sampling criteria. A total of 600 surveys were distributed. The survey packages contained two clearly marked separate subpackets, one for a husband and another for a wife. Each subpacket included a cover letter, the questionnaire, and a return envelope with ready-strip tape to seal responses. Each member of a couple was asked to complete the survey independently and then return it in the sealed envelope. To ensure anonymity and match the responses of spouses, the surveys were code-numbered. Participants returned the sealed envelope to the person who had distributed them, who then submitted them to the researcher.

A total of 360 couples participated (60% response rate); of those, 20 were not included in the analyses because they were not employed full-time. After removal of an additional 22 couples due to missing demographic information (i.e., marriage length, number of children, and work hours), the final sample included 318 matched couples. The average number of years married was 12.56 (SD = 8.39), and about 70% of the couples lived with at least one child under the age of 18 years old. On average, husbands were 41.98 years old (SD = 7.44) and worked 44.66 hr per week (SD = 6.60), while wives were 39.24 years old (SD = 7.24) and worked 42.09 hr per week (SD = 6.74). A variety of occupations were represented, including civil service employees, teachers, techni-

Table 1
Means, Standard Deviations, and Intercorrelations of the Major Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of children	1.14	0.09													
2. Years in marriage	12.56	8.39	16**												
Husbands $(n = 318)$															
3. Work hours	44.66	6.60	06	13*											
4. Spousal recovery support <sup>a</sup>	3.32	0.74	11*	01	05										
5. Psychological detachment	3.11	0.87	.05	.09	20**	.16**									
6. Relaxation	3.31	0.80	05	.14*	20**	.20**	.58**								
7. Mastery	2.74	0.89	09	.23**	07	.18**	.20**	.37**							
8. Life satisfaction	2.83	0.76	18**	.12*	01	.17**	.08	.30**	.36**						
Wives $(n = 318)$															
9. Work hours	42.09	6.74	09	05	.25**	.04	12*	.03	01	.16**					
10. Spousal recovery support <sup>b</sup>	3.18	0.73	19**	.01	06	.13*	.17**	.25**	.28**	.31**	.04				
11. Psychological detachment	3.21	0.87	.01	13*	06	.06	.11*	.02	08	04	03	02			
12. Relaxation	3.26	0.83	18**	.05	07	.26**	.16**	.17**	.17**	.10	14*	.07	.40**		
13. Mastery	2.56	0.90	22**	.09	07	.38**	.05	.02	.19**	.12*	10	.13*	.08	.42**	
14. Life satisfaction	2.83	0.68	19**	.04	07	.34**	.06	.15**	.22**	.39**	.05	.23**	.01	.31**	.32**
Cronbach's alpha						.88	.89	.90	.91	.87		.88	.90	.90	.91

Note. Bolded are the correlations of parallel variables between husbands and wives. Number of children was negatively related to years in marriage as couples in longer marriages tended to have empty nests.

cians, managers, production and clerical workers, and service providers.

#### Measures

Both spouses reported all study variables on a 5-point scale (from 1 = strongly disagree to 5 = strongly agree) unless otherwise noted. All measures showed high reliabilities (Table 1).

**Recovery experiences.** A validated Korean version (Park, Park, Kim, & Hur, 2011) of Sonnentag and Fritz's (2007) Recovery Questionnaire was used to measure three recovery experiences during nonwork time. The questionnaire instructions indicated that nonwork time could include evening hours after work, the weekend, holidays, and off-work days. Each spouse responded to four items assessing psychological detachment from work during nonwork time (e.g., "I don't think about work at all"), four items assessing relaxation (e.g., "I do relaxing things"), and four items assessing mastery experiences (e.g., "I learn new things").

**Spousal recovery support.** We developed a four-item spousal recovery support scale by adding the stem phrase "I provide support or assistance for my spouse . . ." to representative items of the Recovery Questionnaire (Sonnentag & Fritz, 2007): "to relax or do relaxing things," "to forget about work," "to take time for leisure," and "to learn new things." Participants reported to what extent they showed these behaviors in support of their spouse during nonwork time (from 1 = very little/none to 5 = very much). Separate pilot data (n = 141) showed good reliability for the scale ( $\alpha = .85$ ), supporting the idea of a unidimensional construct. Confirmatory factor analyses (CFA) of the pilot data showed that this construct is empirically distinct from the three recovery experiences. Additional CFAs of the current data also supported the idea that spousal recovery support is empirically distinguishable from general spousal social support.

**Life satisfaction.** We used a five-item Life Satisfaction Scale (Diener, Emmons, Larsen, & Griffin, 1985)—a Korean version is

publicly available on Diener's website (http://internal.psychology .illinois.edu/~ediener/SWLS.html). A sample item is "I am satisfied with my life." Higher scores represent a higher level of life satisfaction.

Test of measurement invariance across husbands and wives. To examine if the current measures corresponded between husbands and wives (Vandenberg & Lance, 2000), we examined configural invariance and factor loading invariance models with five factors (spousal recovery support, three recovery experiences, and life satisfaction). Results showed that both models fit the data well—configural model:  $\chi^2(358) = 961.34$ , p < .001, root-mean-square error of approximation (RMSEA) = .07, confirmatory fit index (CFI) = .96, nonnormed fit index (NNFI) = .95; and factor loading invariance:  $\chi^2(379) = 981.34$ , p < .001, RMSEA = .07, CFI = .96, NNFI = .95. The two models were not significantly different,  $\Delta\chi^2(21) = 20.00$ , ns;  $\Delta$ CFI and  $\Delta$ RMSEA < .01, indicating that the constructs had the same meaning for husbands and wives.

**Control variable.** We controlled for common life stress as it can cause spurious crossover between members of a couple (Westman, 2001). Each spouse responded to a checklist of 18 recent life events in the family, such as financial problems and illness or death of a family member (1 = yes, 0 = no; Bolger, DeLongis, Kessler, & Wethington, 1989). Those events that both spouses endorsed with a "yes" were summed up as a single score for that couple.

#### **Data Analysis**

Responses from members of a couple are interdependent due to shared experiences and living environment (Kenny, Kashy, & Cook, 2006). To account for this nonindependence, we used a

<sup>&</sup>lt;sup>a</sup> Husband reported his recovery support behaviors for wife. <sup>b</sup> Wife reported her recovery support behaviors for husband.

<sup>\*</sup> p < .05. \*\* p < .01.

<sup>&</sup>lt;sup>1</sup> Detailed evidence is available from the first author upon request.

dyadic data structure and analysis approach with structural equation modeling (SEM; Kenny et al., 2006) using LISREL Version 8.8 (Jöreskog & Sörbom, 1999). We assessed model fit using Hu and Bentler's (1999) recommended criteria for the CFI, NNFI, and RMSEA. To examine the indirect effect of spousal recovery support on life satisfaction via recovery experiences (partial mediation), we used Anderson and Gerbing's (1988) model comparison approach (constraining the direct path from spousal recovery support to life satisfaction).

#### **Results**

The means, standard deviations, and correlations of all study variables are presented in Table 1. Husbands reported providing more spousal recovery support, t(317) = 2.54, p < .05; d = 0.19, and having more mastery experiences, t(317) = 2.85, p < .01; d = 0.20, than their wives.

#### **Model Overview and Assessment**

We estimated the structural model as displayed in Figure 1, controlling for common life stress by specifying it as an observed variable and estimating its influence on each spouse's life satisfaction. The disturbance terms of parallel endogenous variables (i.e., life satisfaction and three recovery experiences) between husbands and wives were set to covary in order to account for the nonindependence due to shared errors for both spouses (Kenny et al., 2006). For example, the disturbance term for husbands' relaxation was set to correlate with that of wives' relaxation. As exogenous variables, the disturbance terms for husbands' recovery support and wives' recovery support were set to correlate to ensure that both spouses' effects are estimated after controlling for the effects of the other spouse (Krasikova & LeBreton, 2012). We also allowed disturbance terms for three recovery experiences within husbands and wives to correlate with each other because off-work activities (e.g., learning meditation) could induce all three recovery experiences simultaneously (Ragsdale, Beehr, Grebner, & Han, 2011; ten Brummelhuis & Bakker, 2012b). For example, the disturbance terms for husbands' detachment, relaxation, and mastery were set to correlate with each other. This initial model fit the data well—Model 1:  $\chi^2(832) = 1566.38$ , p < .001; ratio of  $\chi^2/df = 1.88$ ; CFI = .96; NNFI = .95; RMSEA = .05, p = .13.

Next, to compare paths coefficients for husbands and wives, we tested a gender-equated model, constraining nine pairs of paths to be equal across husbands and wives: three pairs of paths (spousal recovery support -> three recovery experiences), one pair of paths (spousal recovery support→ life satisfaction), three pairs of paths (three recovery experiences→ life satisfaction), one pair of reciprocal paths of life satisfaction, and one pair of paths (common life stress→ each spouse's life satisfaction). This gender-equated model fit the data well—Model 2:  $\chi^2(841) = 1576.21$ , p < .01; ratio of  $\chi^2/df = 1.87$ ; CFI = .96; NNFI = .95; RMSEA = .05, p = .15. The chi-square difference test—Model 1 vs. Model 2:  $\Delta \chi^2(9) = 9.83$ , ns—showed no significant differences, indicating no gender effects in the paths. Following the parsimony rule in model decision making (Anderson & Gerbing, 1988), we retained the gender-equated model (Model 2) that had the same coefficients for husbands and wives (see Figure 2). Finally, we tested our partial mediation by comparing an alternative model (Model 3; constraining the direct path from spousal recovery support to one's life satisfaction to be zero) against Model 2. The results showed that Model 3 was worse than Model 2,  $\Delta \chi^2(1) = 39.63$ , p < .001; thus, we accepted Model 2 as our final model that contained the direct path from spousal recovery support to life satisfaction (see Table 2). Squared multiple correlations indicate that the final model accounted for variance in each endogenous variable, including .39 and .38 for husband and wife life satisfaction, .02 for husband and wife detachment, .06 and .07 for husband and wife relaxation, and .10 for husband and wife mastery, respectively.

#### **Hypothesized Relationships**

Hypothesis 1 was fully supported such that spousal recovery support was positively related to detachment (.21, SE = 0.06, t = 3.30, p < .001), relaxation (.36, SE = 0.06, t = 5.74, p < .001), and mastery (.48, SE = 0.07, t = 7.27, p < .001). Hypothesis 2 was supported as spousal recovery support was directly and positively associated with life satisfaction (.27, SE = 0.05, t = 5.91, p < .001). Hypotheses 3b and 3c were supported as relaxation (.18, SE = 0.04, t = 4.87, p < .001) and mastery (.14, SE = 0.03, t = 4.59, p < .001) were positively related to life satisfaction, mediating the relationship between spousal recovery support and life satisfaction as indicated by the preceding model comparison test (Model 2 vs. Model 3). However, Hypothesis 3a was not

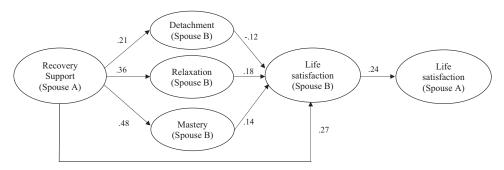


Figure 2. Gender-equated model of recovery and crossover of life satisfaction in dual-earner couples. Unstandardized coefficients are reported. All coefficients are significant. Not shown are the coefficient from common life stress to each life satisfaction (-.08, p < .001) and intercorrelations among the three recovery experiences.

Table 2
Fit Indices for Model Comparisons

Model	$\chi^2$	df	CFI	NNFI	RMSEA	Comparison	$\Delta\chi^2$	$\Delta df$
<ol> <li>Initial model</li> <li>Gender-equated model</li> <li>Constrained model (recovery support → life</li> </ol>	1,566.38 1,576.21	832 841	.96 .96	.95 .95	.053 .052	1 vs. 2	9.83	9
satisfaction)	1,615.84	842	.96	.95	.054	2 vs. 3	39.63***	1

Note. N = 318. df = degrees of freedom; CFI = comparative fit index; NNFI = nonnormed fit index; RMSEA = root-mean-square error of approximation;  $\Delta \chi^2 =$  change in chi-square;  $\Delta df =$  change in degrees of freedom.

\*\*\* p < .001.

supported as detachment had an unexpected negative relationship with life satisfaction (-.12, SE=0.03, t=-3.60, p<.001). Hypothesis 4 was supported as one's life satisfaction was positively related with the spouse's life satisfaction (.24, SE=0.07, t=3.21, p<.01) even when the effect of common life stress was controlled for. Common life stress was negatively associated with life satisfaction (-.08, SE=0.02, t=-4.02, p<.001).

#### Additional Analyses

We conducted additional model tests with and without several demographic variables (i.e., marriage years, number of children, and each spouse's work hours) as observed variables. Specifically, children may reduce the provision of recovery support and divert the couple's attention, thereby reducing crossover (Song et al., 2008). Furthermore, couples in longer marriages might be desensitized by the effects of positive spousal behaviors on life satisfaction. Finally, long work hours might limit recovery support and recovery experiences. In addition, we controlled for general spousal support to exclude an alternative explanation that general spouse support might drive the hypothesized relationships rather than spousal recovery support. Inclusion of these demographic variables and general spousal support, however, did not affect the significance of the hypothesized paths. Thus, we presented the results of the final model without these variables.

#### Discussion

Despite the growing number of dual-earner couples in the work-force, the recovery literature has focused primarily on individual recovery processes while largely neglecting the consideration of recovery mechanisms in couples. Thus, in this study, we proposed a model of recovery from work and life satisfaction in dual-earner couples. Results showed that spousal recovery support was positively related to the recipient spouse's life satisfaction via his or her recovery experiences of relaxation and mastery. In addition, life satisfaction of the recipient spouse crossed over to the spouse who provided recovery support. Further, our data did not indicate any gender effects, suggesting that the relationships were similar across husbands and wives.

#### Theoretical Implications and Future Research

Drawing on COR theory (Hobfoll, 1989, 2002) and Newman et al.'s (2013) model of recovery and well-being, we conceptualized spousal recovery support as an interpersonal resource that promotes recovery experiences in dual-earner couples. The results

indicate that recovery support can be obtained through one's partner in a relationship as a means to ensure recovery experiences for well-being. Additionally, our results support the notion of COR theory that resources (spousal recovery support) set the stage for other resources (recovery experiences) to be gained. Furthermore, the direct path between spousal recovery support and life satisfaction provides empirical support for COR theory's assumption that people with reliable resources maintain positive views of life as resources become valued in their own right (Hobfoll, 2002).

Although not hypothesized, recovery support from husbands and wives was positively related. This might suggest a mutual exchange of recovery support that may reinforce a resource-gain cycle within dual-earner couples (cf. Hobfoll, 1989). This positive relationship implies that provision of recovery support between spouses may not necessarily be a zero-sum game. Rather, the recipient spouse who gains more resources via recovery experiences could return the favor to his or her spouse or both spouses may support each other's recovery by engaging in joint leisure activities. On specific workdays, however, spouses may have to negotiate who pursues recovery opportunities versus who takes care of domestic duties after work. For example, research indicates that on days with high workload, employees tend to withdraw from provision of social support for their spouse (Repetti, 1989) and family activities at home (Ilies et al., 2007). Therefore, future researchers may examine how the potential reciprocity of spousal recovery support unfolds over time. Similarly, it would be beneficial to compare the dynamics of recovery support provision and receipt between members in dual- versus single-earner couples.

Although a spouse may be a great source of support and life satisfaction—as suggested in this study—a spouse may also become a source of conflict and strain (Argyle & Furnham, 1983; Hahn et al., 2012). As such, one's marital dissatisfaction or discord may reduce recovery support for the spouse. It is also noteworthy that the number of children participants had was negatively related to recovery support by both husbands and wives in our data; therefore, childcare demands might have taken time away from providing recovery support. Taken together, we recommend that future researchers explore family and relationship characteristics as possible antecedents of recovery support provision.

<sup>&</sup>lt;sup>2</sup> Even after controlling for general spousal support, spousal recovery support still significantly predicted all three recovery experiences and life satisfaction. The path coefficients of spousal recovery support were greater than those of general spousal support in predicting all recovery experiences. We thank an anonymous reviewer for suggesting this additional analysis.

Our results further show that recovery experiences—specifically, relaxation and mastery-mediated the positive relationship between spousal recovery support and life satisfaction. This finding extends Newman et al.'s (2013) model in the context of dual-earner couples by showing that recovery experiences are an important psychological mechanism linking spousal recovery support and life satisfaction. However, contrary to our expectation, detachment had a zero bivariate correlation with life satisfaction and was actually negatively related to life satisfaction in the path model. Furthermore, when detachment was included in the regression, the magnitude of relaxation as a predictor of life satisfaction increased. This points to a possible suppression effect that may have resulted due to the high correlation between relaxation and detachment in this study (cf. Tzelgov & Henik, 1991). Nevertheless, detachment was retained in the final model as it is a theoretically meaningful predictor of well-being in the literature (Sonnentag, 2012). Thus, future researchers should examine to what extent the present findings can be replicated.

Applying crossover theory (Westman, 2001), we found crossover of life satisfaction as a possible well-being outcome of recovery in dual-earner couples. This finding strengthens the notion that positive psychological experiences—in addition to negative experiences-transfer between spouses (Bakker & Demerouti, 2009). From a resource perspective (Hobfoll, 1989, 2002), the current model suggests an additional way through which resources can be enriched, namely, through the positive crossover between spouses. Moreover, our investigation of recovery and positive crossover in dyads has great potential for integrating and extending recovery, crossover, and work-family research. For example, recovery research has shown that recovery experiences are related to work engagement (ten Brummelhuis & Bakker, 2012b), while crossover research has found that work engagement crosses over between both members of dual-earner couples (Bakker & Demerouti, 2009). Combining these two lines of research, working couples' recovery processes could include positive crossover of workrelated outcomes. In sum, this study provides an important stepping stone for studying recovery and resource-gain mechanisms in the context of dual-earner couples.

Finally, our gender-equated model suggests a lack of gender effects. While dual-earner couples (47%) have recently outnumbered single-earner couples (42%) in married-couple households in Korea (Statistics Korea, 2012), this country still largely adheres to traditional gender norms—though such norms have been dissipating with economic and cultural changes in the last few decades (Yoon, 2010). Contrary to the traditional gender-role hypothesis that women tend to be support providers, husbands in this study provided higher recovery support for their wives. Given the current wives' full-time employment status, we speculate that couples held more egalitarian gender-role attitudes or that husbands provided recovery support to show their appreciation of their wife's dual roles in work and family. Bearing in mind that gender is often confounded with various factors such as employment status (Westman, 2006), we recruited only full-time working couples to minimize theses potential confounding effects. However, future researchers should examine additional factors (e.g., employment status, gender-role ideology) to disentangle sources of potential gender effects in couples' recovery and crossover processes.

### Limitations

Our study is not without limitations. Although the present model is based on a priori theories (i.e., Hobfoll, 1989, 2002; Newman et al., 2013; Westman, 2001), our data were cross-sectional, thus restricting causal inferences. For example, an individual high in life satisfaction might be more willing to provide recovery support for the spouse. We explored this possibility by adding the reverse path from one's life satisfaction to one's own recovery support, but the path was not significant and did not improve model fit. Future research should be conducted to test the direction of pathways longitudinally and further examine how couples create a resource-gain spiral through successful recovery on a daily or weekly basis.

Second, the sample characteristics in this study—married couples in Korea—may limit the generalizability of our findings to working couples in other cultures or employment settings. For example, Newman et al. (2013) have pointed to the possibility that leisure activities and recovery experiences may have different values and meaning for life satisfaction across cultures and subpopulations. Research also indicates that the beneficial effects of spousal social support is greater for couples working in the same organization or career because these couples better understand their partner's work demands and stress (Halbesleben, Zellars, Carlson, Perrewé, & Rotondo, 2010). Thus, future studies should test the generalizability of the current model using cross-cultural samples and couples in different employment settings.

#### **Practical Implications**

The current results suggest that an awareness of the role of spousal recovery support may help dual-earner couples better structure their nonwork time and activities to ensure recovery from job stress. Hahn, Binnewies, Sonnentag, and Mojza (2011) have shown that training programs on recovery can be an effective intervention for employee recovery and well-being. Therefore, organizational training programs may include information pertaining to spousal recovery support and positive crossover of life satisfaction, especially for those employees with working spouses and partners. Furthermore, organizations can go one step further by collaborating with stress management practitioners (e.g., employee assistance program experts) to develop couple-focused recovery interventions. Similarly, health professionals (e.g., family and marriage counselors) could potentially utilize the information to guide and inform their clients of the role of recovery-specific support in life satisfaction.

#### Conclusion

This study shifted the dominant focus in recovery research from individuals' recovery processes to dual-earner couples' recovery. The current findings shed light on spousal recovery support as a possible enabler of recovery experiences and life satisfaction. In addition, by demonstrating the positive crossover of life satisfaction as a potential outcome of recovery, we have provided further insight into the creation of a resource-gain cycle in dual-earner couples. We hope that these findings can serve as a springboard for future research on dual-earner couples' recovery from work and their beneficial outcomes through positive crossover processes.

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