HONEY, I’M HOME: THE PROVISION AND PERCEPTION OF WORK RECOVERY SUPPORT IN WORKING DYADS

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A Dissertation

Submitted to the Graduate College of Bowling Green State University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2017

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ABSTRACT

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Given the psychobiological necessity and work-related benefits associated with achieving recovery, researchers must explore the factors that enable or prohibit employee engagement in recovery enhancing behaviors. Using a resource-based theoretical framework, I considered how dual-earning couples can enhance each other’s work recovery. Specifically, I examined how the adequacy of recovery support received from one’s partner may be particularly important in improving recovery behaviors, and as result, reducing work-related withdrawal. In addition, I used a fully reciprocal design to explore the possibility that mindfulness, as a personal characteristic, has the potential to influence the provision of recovery support, and the extent that such support becomes “silent” or “lost in translation” between partners. For both men and women, the results support the argument that spousal recovery support is a critical interpersonal resource and that the adequacy of support may be even more important than the offering of support in predicting recovery behaviors. Further, at least for men, mindfulness may be an important factor in improving their provision and detection of recovery support. Interestingly though, spousal recovery support and recovery behaviors were not linked to work withdrawal in the hypothesized manner; higher levels of relaxation in women and higher levels of psychological detachment in men were associated with more psychological work withdrawal. However, trait mindfulness was found to be strongly negatively associated with psychological work withdrawal.

Keywords: recovery; dual-earners; mindfulness; dyadic design; psychological work withdrawal
To Dan Ritter, who convinced me to pursue I-O Psychology, and to Deborah Ritter, who never once doubted that I would finish this degree. To Taylor Kessie, thank you for being a self-less and devoted partner…I would not have made it without you.
ACKNOWLEDGMENTS

I am grateful to my committee members, and to my advisor Russell Matthews who have guided me through the last five years of graduate education and this dissertation process. What a journey; thank you for believing in me!
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CHAPTER I: INTRODUCTION

Researchers, practitioners, and the media alike have focused on the relationship between work and well-being. At the core of this relationship is the notion that work naturally causes employees to expend mental, physical, and/or emotional energy. Without some type of break that halts this energy expenditure and allows for recovery, employees can become overloaded, burned out, and physically or even mentally ill. This rather obvious requirement for recovery is the process of returning one’s taxed psychological and biological systems to resting levels (Meijman & Mulder, 1998). Researchers have documented a strong link between successful recovery and a variety of benefits to both employees and organizations (Sonnentag & Fritz, in press) including higher levels of work engagement, proactive behavior, occupational self-efficacy and performance (Binnewies, Sonnentag, & Mojza, 2009b; Sonnentag, 2003). Given the benefits associated with achieving recovery, an important question researchers have sought to answer is why employees are not able to, or chose not to recover from the demands of work.

To answer this question, researchers have mainly focused on employee behaviors outside of work that either help or hinder the recovery process. Relaxation, for example, has been shown to predict indicators of recovery such as next morning serenity—even after controlling for trait affect, daily hassles, and sleep duration (Fritz, Sonnentag, Spector, & McInroe, 2010; Sonnentag, Binnewies, & Mojza, 2008). Other behaviors, such as psychological detachment, mastery experiences, and control of free time are linked to improved recovery levels (e.g., Fritz et al., 2010; Sonnentag et al., 2008; Sonnentag & Fritz, 2007a). When studying recovery behaviors outside of work, scholars must consider the ever-growing number of dual earning couples with children. That is, time outside of work for recovering is likely spent in the presence of family
(Park & Fritz, 2015; Saxbe, Repetti, & Graesch, 2011). Thus, interactions with spouses and children are likely to shape the recovery landscape for many dual-earner couples.

Of the limited research to date, evidence suggests employees’ families do influence their recovery process. For example, when partners engaged in non-work activities together, they were more likely to report engaging in recovery behaviors (Hahn, Binnewies, & Dormann, 2014; Hahn, Binnewies, & Haun, 2012). If the goal is to improve recovery outcomes for employees, more research is needed to understand how the relationship with a partner influences recovery behavior. As family systems theorists suggest, family members are embedded in the social unit of the family (Fingerman & Bermann, 2000). Within fields such as clinical psychology and social work, practitioners have long recognized that when seeking to improve individual outcomes, addressing the family system is often more efficacious than focusing solely on the target (e.g., Bowen, 1961, 1978). Thus, in answering why employees fail to engage in recovery activities, researchers and practitioners must consider that family context likely influences such behavior.

To understand one’s familial social environment, I consider the supportive role of one’s partner in achieving recovery. Spousal support, in a general sense, is thought to improve marital satisfaction and lead to better health (e.g., Dehle, Larsen, & Landers, 2001; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). For example, marital support is associated with better cardiovascular and immune functioning, as well as decreased cellular aging (Barger & Cribbet, 2016; Chen & Feeley, 2014). One mechanism through which spousal support is linked to improved health outcomes may be through the enabling of spousal recovery. Recently, Park and Fritz (2015) identified *spousal recovery support* as an important predictor of employees’ engagement in
recovery activities. Spousal recovery support is the act of enabling one’s spouse to relax, or psychologically detach from work, for example.

Based on conservation of resources theory and the leisure and subjective model of well-being (Hobfoll, 1989; Newman, Tay, & Diener, 2014), my first goal in this dissertation is to further validate spousal recovery support as a critical interpersonal resource for increasing recovery behavior. To do this, I consider both received and provided support in both members of a dyad. I also seek to understand how such support is perceived to be useful, or adequate by the recipient. For instance, partners may provide a lot of support, but it may not be the type of the support the employee desires. Or worse, certain types of support may be perceived as patronizing or superfluous (Brock & Lawrence, 2008, 2014). With the goal of increasing recovery behaviors by way of increasing recovery support, we must understand if there is the potential for support to get “lost in translation.” Based on a family systems perspective, I employ a fully reciprocal dyadic design in which both partners report the support they each give and receive, and whether this support is adequate (Kenny, Kashy, & Cook, 2006). Although researchers have studied dual earners, fully reciprocal dyadic designs (all variables reported by each partner) have been rare (Park & Fritz, 2015), even across the larger organizational psychology literature (Krasikova & LeBreton, 2012). A fully reciprocal design allows for a more complete description of dual earners, which may be key to understanding how to improve recovery behaviors, and ultimately, well-being among working partners.

Fully reciprocal dyadic designs also enable researchers to ask unique questions that cannot be as easily answered in non-reciprocal designs (Krasikova & LeBreton, 2012). In this dissertation, I focused on the trait of mindfulness, the ability to be fully present in each moment and respond without judgment to one’s thoughts and emotions (Brown & Ryan, 2003). Although
the benefits of mindfulness to the individual are myriad (e.g., Aikens et al., 2014; Allen & Kiburz, 2012; Carmody, Reed, Kristeller, & Merriam, 2008; Chambers, Lo, & Allen, 2008), researchers are only beginning to understand how mindfulness might improve interpersonal relationships (Karremans, Schellekens, & Kappen, 2015). Based on self-determination and self-regulation theories (Deci & Ryan, 2008; Vohs & Baumeister, 2011), mindfulness may indirectly contribute to improved recovery outcomes through partners’ successful regulation of their emotions and their ability to act autonomously (consistent with their values). Mindful partners may be more likely to sense a partner’s need for support and to respond appropriately (Williams & Cano, 2014), and further, they may be more sensitive to the efforts of their partners. If mindful partners indeed are more perceptive of support and give more adequate support, mindfulness training represents an opportunity to improve recovery behaviors beyond simply increasing the volume of support given.

My final goal in this dissertation was to identify how giving and receiving spousal recovery support influences work withdrawal behaviors (i.e., daydreaming, avoiding work) in dual earners. Based on both Hobfoll’s (1989) conservation of resources (COR) theory and Newman, Tay, and Diener's (2014) leisure and subjective model of well-being, receiving recovery support leads to employees engaging in behaviors that restore or build up resources and positive feelings (Park & Fritz, 2015). Less supported partners, however, may be burdened with family and home responsibilities and may generally fail to recoup resources and recover. Thus, the employee may withdraw from work to conserve personal resources (Idris, O’Driscoll, & Anderson, 2011). To my knowledge, work withdrawal as a potential consequence of lack of recovery (as predicted by COR theorists) remains untested. I address this by testing the association between spousal recovery support and work withdrawal through the mechanism of
recovery behavior. Such results have the potential to improve the expected return on investment for organizations that lead training programs to help employees improve their recovery skills.

In sum, I contribute to the recovery literature in several ways. First, despite an abundance of research on individual employee recovery, few researchers have considered the process in the context of dual-earners—an ever-growing demographic and important contextual variable. Using a reciprocal dyadic model, I capture this interdependent context in which theories of recovery are presumed to operate (conservation of resources, Hobfoll, 1989; effort-recovery model, Meijman & Mulder, 1998), and therefore provide a better test of hypotheses based on these theories. Second, for people and organizations to reap the benefits of recovery behavior (e.g., meta-analytic evidence shows recovery is correlated with work engagement $\rho = .29$; Crawford, LePine, & Rich, 2010), researchers must better identify predictors of such behaviors (Park & Fritz, 2015). Based on the tenets of self-determination and self-regulation theories, and extending Park and Fritz’s (2015) work on spousal recovery support, I test whether mindfulness may improve both the reported provision and the reception of adequate recovery support. By doing this, I explore mindfulness as a potential boundary condition for predicting recovery behaviors via recovery support. Finally, I explore the implications of spousal recovery support on a previously unexamined construct, work withdrawal. That is, I test the proposition based on conservation of resources theory that spousal recovery support is a vital interpersonal resource that may reduce work withdrawal. Together, these results have the potential to provide evidenced-based support for organizationally sponsored mindfulness or spousal support interventions, as work withdrawal represents a significant cost to organizations. Further, organizations can only eliminate or reduce work demands or stressors to a certain extent;
alternatively, employees may need to build skills (such as self-regulation via mindfulness) and solicit social support to create recovery opportunities (Sonnentag & Fritz, in press).
CHAPTER II: BACKGROUND

Recovery

Recovery is a process wherein taxed or stressed psychophysiological systems can return to resting, baseline levels. Work (or employment) is a widely experienced demand that taxes people’s psychophysiological systems, and as such, recovery from work has remained a focus of the occupational health literature (Meijman & Mulder, 1998). Although recovery from work can occur once no further demands are placed on a taxed system (such as a lunch break), scholars have mainly focused on how time outside of the workplace provides opportunity for recovery (Geurts, 2014). This may be owed to the early assumption that respites from work guaranteed a removal of work-stressors and were especially important for relief from chronic stress: “objectively speaking, workers are exposed to job stressors on their jobs and not exposed to them while on respite from their jobs” (Westman & Eden, 1997, p. 516). This assumption was based both on research showing the effects of vacations on psychological variables such as mood and burnout (Caplan & Jones, 1975; Eden, 1990; Westman & Eden, 1997), and also evidence that a day or two off was successful in improving physiological indicators such as heart rate, epinephrine levels, and blood pressure (Frankenhaeuser et al., 1989; Halberg, Engeli, & Hamburger, 1965).

Researchers have continued to document the importance of achieving rest and recovery from work. For example, lack of recovery has been a major predictor of load reactions such as psychosomatic complaints and emotional exhaustion in coach drivers (Sluiter, van der Beek, & Frings-Dresen, 1999), even after controlling for job demands and control. Further, the need for recovery has predicted sickness absence two years later and has also been associated with less vigor, dedication, focus, and absorption (Kühnel, Sonnentag, & Westman, 2009; Sonnentag &
Kruel, 2006). Those who rarely recovered were found to have higher risk for cardiovascular death after controlling for age, sex, alcohol use, physical inactivity, depressive symptoms, fatigue, lack of energy, and job stress (Kivimäki et al., 2006). Conversely, feelings of having achieved recovery are linked to higher task performance, personal initiative, organizational citizenship behavior, occupational self-efficacy and less compensatory effort, burnout, and psychological distress (Binnewies, Sonnentag, & Mojza, 2009a; Binnewies et al., 2009b; Poulsen, Poulsen, Khan, Poulsen, & Khan, 2015). Thus, drawing on conservation of resources theory and the effort recovery model, respites from work are an opportunity to halt the cycle of resource loss as well as support resource gains (Caldwell & Smith, 1988; Hobfoll, 1989; Meijman & Mulder, 1998).

During non-work time, several behaviors in particular are thought to enhance the recovery process. Having control of one’s free time, relaxation, mastery experiences, and psychological detachment have been found to positively relate to recovery levels (Sonnentag & Fritz, 2007). Relaxation involves resting or doing activities that are simple and stress-free. Mastery experiences arise during learning or when successfully meeting challenges during leisure time, and psychological detachment is detaching mentally, disengaging, or distancing oneself from work (Sonnentag & Fritz, 2007). More generally, pleasant or pleasurable work and non-work activities have been found to positively predict recovery levels, whereas non-pleasant and effortful work and non-work activities have been negatively related to recovery (e.g., Kinnunen, Feldt, Siltaloppi, & Sonnentag, 2011). For example, evening leisure activities predicted higher levels of relaxation and detachment, which predicted next-day vigor (ten Brummelhuis & Bakker, 2012b). Conversely, non-work hassles predicted increased exhaustion and reduced vigor after a two-day respite (Marzuq & Drach-Zahavy, 2012). Other behaviors,
such as exercise and sleep are also thought to be potent in the recovery process (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013; Nägel & Sonnentag, 2013; Poulsen et al., 2015; Rook & Zijlstra, 2006; Sonnentag & Bayer, 2005; Sonnentag et al., 2008). Now that behaviors that promote a successful recovery process have been strongly established, researchers are called to identify factors that predict engagement in these behaviors (Park & Fritz, 2015).

**Recovery in dual earners.** Because of the clear benefits to employees who engage in recovery behavior as well as to their organizations, scholars must consider how the non-work environment may enable or prohibit such behaviors. For most working Americans, time outside of work is likely spent in the presence of family. Although marriage rates have fallen in recent years, about 48% of the population over 15 years old is married, with 54.8% of married men working, and 48.6% of married women participating in the labor force [American Community Survey (ACS), 2014]. Together, 52.8% of all married couples are dual-earning (ACS, 2014). And of married couples with children under 18, 60.2% are dual-earning (BLS, 2014). Another 6% of households in the US are cohabitated by unmarried partners (ACS, 2014). In sum, the majority of Americans live with a partner and of these unions, the majority are dual-earning. This dual-earning environment likely presents employees with different challenges and opportunities than single-earning households (ten Brummelhuis, Haar, & van der Lippe, 2010).

For each partner in a dyad, work demands and strains have the opportunity to spill over into the family domain. This spillover occurs when strain from one domain transfers within a person to another domain (Bolger, DeLongis, Kessler, & Wethington, 1989). A well-studied example of this is work-family conflict, in which strains and behaviors transfer between work and non-work domains (e.g., Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Anxiety over a client meeting, for example, may carry over into the family domain, with the employee
remaining distracted or anxious despite having left work. Thus, negative spillover can make
recovery difficult—employees may not be able to relax or mentally detach from work
(Sonnentag & Fritz, 2015). Further, negative spillover can influence how the spouse interacts
with his/her family. In dual-earning households, time at home must be carefully managed and
coordinated with the spouse to meet the demands of childcare, work, and household
responsibilities (Saxbe et al., 2011; Saxbe, Repetti, & Nishina, 2008; Wang & Repetti, 2014).
For those experiencing negative spillover, they may be less able to successfully coordinate
recovery time with their partner or offer support.

Such negative spillover can also affect the employee’s partner through the process of
crossover. Continuing the previous example, the anxious employee upon returning home has the
potential to negatively impact his/her partner, such that the partner also feels anxious. That is,
psychological states, physical symptoms, and positive or negative affective states can transfer
between partners (e.g., Bakker, Westman, & Hetty van Emmerik, 2009; Gorgievski-Duijvesteijn,
Giesen, & Bakker, 2000; Westman, 2001). Researchers have shown that when one person has a
demanding work day, their partner increases his/her involvement at home in response (Bolger et
al., 1989). In this case, a crossover of negative states from the employee to the partner may
influence the partner’s ability to manage home demands, support the employee, or engage in
recovery activities. For example, according to Saxbe et al. (2011), when husbands spent more
time in leisure activity and their wives spent less time in leisure activity, the husbands had lower
levels of evening cortisol, suggesting better recovery for the husbands. In another case, the non-
deployed spouse’s well-being was shown to fluctuate as a function of the deployed spouse’s job
characteristics (Morrison & Clements, 1997). Recovery activities and patterns do not occur
within a vacuum, but within employees’ greater social system, and thereby require coordination within the dyad (Bakker et al., 2009).

**Social support in dyads.** Coordinating with one’s partner to meet work, home, and personal needs requires giving and receiving of social support, both emotionally and instrumentally. Social support, globally, refers to the “flow of emotional concern, instrumental aid, information, and/or appraisal (information relevant to self-evaluation) between people” (House, 1981, p. 26). Both receiving general social support, such as encouragement or financial help, as well as merely perceiving that such support is available if needed, have been important in predicting health-related outcomes (Cohen, 2004). Within a marriage or partnership, social support can take on the familiar verbiage of love, acceptance, and community. Not surprisingly, spousal support is thought to enhance marital satisfaction (Dehle et al., 2001), however it is possible that more satisfied partners may also be more willing to provide support. As relationships endure, social support and relationship satisfaction become even more strongly related (Logan & Cobb, 2013).

Even with the benefits of receiving general social support and perceiving such support to be available (e.g., improved cardiovascular endocrine, and immune functioning; Uchino et al., 1996), researchers have shown that *spousal support* may actually have the strongest link to individual health benefits compared to other sources of support (e.g., Chen & Feeley, 2014; Li, Ji, & Chen, 2014). For example, Barger and Cribbet (2016) found that spouses who did not receive social support from their spouse, but received support from others, had increased cellular aging (decreased telomere length) as compared to those receiving spousal support. The authors found this risk remained even after controlling for chronic disease, socioeconomic status, and other sources of support.
Scholars have studied the support a person receives from both a global and a more specific approach, such as support in the context of paid employment (Janning, 2006). Both emotional and instrumental work-related family support have been identified (Baruch-Feldman, Brondolo, Ben-Dayan, & Schwartz, 2002; King, Mattimore, King, & Adams, 1995). Emotional support refers to lending a listening ear or offering encouragement or acceptance; an example item is “When something at work is bothering me, members of my family show they understand how I’m feeling” (King et al., 1995). Instrumental support refers to tangible assistance, an example item is “members of my family cooperate with me to get things done around the house” (King et al., 1995). In the case of increasing recovery behavior, one could argue that both emotional and instrumental support can improve an employee’s ability to relax, unwind, or enjoy leisure after work. A supportive spouse (or family) will likely help with childcare duties, household maintenance, improve mood or affect, and encourage or participate in health behaviors. For example, work-related family support is linked to decreased burnout and work-family conflict (Baruch-Feldman et al., 2002; Matthews, Bulger, & Barnes-Farrell, 2010).

Spousal recovery support. Park and Fritz (2015) more directly tested the idea that spouses may be instrumental in their partners’ recovery process. Using a conservation of resources framework (Hobfoll, 1989), the authors identified spousal recovery support as a resource based form of behavioral support that promotes recovery behavior. For example, a spouse may help an employee psychologically detach from the workday by making dinner so that the employee can read a book. When spouses reported giving targets recovery support, targets were more likely to report psychological detachment, relaxation, and mastery—all recovery-promoting behaviors (Park & Fritz, 2015). To summarize, there has been strong evidence for a relationship between
general spousal support and positive health outcomes and preliminary evidence of the influence of spousal recovery support on recovery behaviors.

To understand when spousal recovery support most likely results in increased recovery behavior, I consider the perception of support adequacy. Dehle et al. (2001) examined the extent that behaviors provided by a partner are perceived as adequate, or the “right amount” of support. This idea is similar to the coping style literature, in that not all support is useful and that people differ in their preferences for types of social support (Brock & Lawrence, 2008; Carver, Scheier, & Weintraub, 1989; Dehle et al., 2001). For example, in a sample of newlyweds over three years, when husbands provided adequate support, increases in stress spillover were associated with even less marital decline for wives (Brock & Lawrence, 2008). Perceiving adequate support has also been associated with reduced depressive symptoms, perceived stress, and increased marital quality (Dehle et al., 2001).

Receiving unwanted support could lead to feelings of guilt or a sense of being patronized—adequacy may therefore be more important than quantity (Brock & Lawrence, 2008; Dehle et al., 2001). In fact, overproviding support, especially support that is not desired, was found to be more harmful than underproviding support (Brock & Lawrence, 2009, 2014). Merging the constructs of support adequacy and spousal recovery support, I will examine how recovery support that is perceived as adequate leads to increased recovery behaviors (i.e., psychological detachment, mastery, relaxation, and control).

**Hypothesis 1:** Receiving adequate recovery support positively predicts recovery behavior (psychological detachment, mastery, relaxation, and control), within persons.
Spousal support is an inherently dyadic construct, as it “capture[s] relationships, interactions, and exchanges that occur between two members of a dyad” (Krasikova & LeBreton, 2012, p. 739). Thus, I collect reciprocal data concerning partners’ perceptions of receiving adequate recovery support and their provisions of recovery support (Kenny et al., 2006). For example, a husband may mow the lawn and do the dishes to help his wife relax after work. These efforts may go unnoticed, or perhaps even unwanted by the wife; therefore, she may report the support she received was inadequate. Modeling both partners’ received and provided support allows me to test the extent that partners offer silent, or unnoticed support, and further, which characteristics of the couple strengthen or weaken this relationship.

Hypothesis 2: Partner A’s reported provision of recovery support is positively related to Partner B’s reception of adequate recovery support.

Mindfulness and Recovery

Drawing on self-determination (SDT) and self-regulation theories (Ryan & Deci, 2000; Vohs & Baumeister, 2011), in the following sections I explore the potential for more mindful partners to be better at giving and noticing adequate recovery support. First, Brown and Ryan (2003) define mindfulness as a receptive attention to and awareness of present events and experiences. Others define mindfulness as intentionally “paying attention to present-moment experiences (physical sensations, perceptions, affective states, thoughts, and imagery) in a nonjudgmental, way, thereby cultivating a stable and nonreactive awareness” (Carmody, Reed, Kristeller, & Merriam, 2008, p. 394). The regular practice of mindfulness training or treatment has been shown to improve one’s general tendency to be mindful in daily experiences (Carmody et al., 2008; Chambers et al., 2008). That is, researchers recognize both a state and trait component of the mindfulness construct (Brown et al., 2007). Trait levels of mindfulness vary
person-to-person. Highly mindful people tend to avoid functioning in automatic pilot mode (are more likely to behave in a mindful state) and have patience for events or circumstances to unfold (Brown & Ryan, 2003).

The benefits associated with higher levels of mindfulness are myriad and extend into the personal and organizational domains. Researchers have shown, for example, those with higher levels of mindfulness have lower levels of strain and higher vitality and well-being, (e.g., Allen & Kiburz, 2012; Brown & Ryan, 2003; Brown, Ryan, & Creswell, 2007; Hülsheger, Alberts, Feinholdt, & Lang, 2013; Marzuq & Drach-Zahavy, 2012).

**Self-determination theory.** In general, SDT is a macro theory of human motivation in which two types of motivation have been identified: autonomous and controlled. Self-determination theorists propose that the type of motivation is important for predicting the quality of behavior one engages in. When people act with autonomous motivation, they are acting based on their internal values and self-endorsed behavior. Alternatively, controlled motivation is due to both the external rewards or punishments associated with a behavior and one’s internalization of these rewards or punishments. People may therefore engage in a behavior that is externally rewarded in order to avoid internal shame, to feel self-approval, or to maintain self-esteem (Deci & Ryan, 2008).

Acting with autonomous motivation is thought to be optimal and to result in higher well-being and performance; this proposition has been widely supported (Deci & Ryan, 2008). When acting with autonomous motivation, one is basing his/her behavior on reality, rather than pressures, controlling forces, or “ego-invested preconceived notions” (Hodgins and Knee, 2002). The ability to act with autonomous motivation is thought to heavily depend on awareness (Deci & Ryan, 2008). As previously mentioned, such a sense of awareness is an integral component of
experiencing *mindfulness*. When people are in a mindful state, they have indeed been shown to be more perceptive of cues in their environment (Teper, Segal, & Inzlicht, 2013), and should thus, as Deci and Ryan (2008) suggest, be more capable of autonomous motivation. The theoretical relationship between mindfulness and autonomous motivation has been shown empirically (e.g., Brown & Ryan, 2003; see Brown, Ryan, & Creswell, 2007, for a review).

Based on the tenets of SDT, more mindful partners may more often act with autonomous motivation in behavior toward their partners. If a person’s internal values are to love and cherish his/her partner, acting with autonomous motivation may mean being aware of and putting a partner’s well-being needs ahead of external rewards or shame avoidance for finishing a work project. That is, mindful partners may deliver more adequate recovery support to his/her partner.

**Self-regulation.** In addition to SDT, self-regulation theory may help to explain the tendency for more mindful people to more adequately support their partners. In general, self-regulation theorists propose that people are capable of deliberate and effortful management of their actions, behaviors, and emotions as a result of goals and feedback they receive (Carver & Scheier, 2011). Based on the strength model of self-control, such self-management is thought to be a limited resource, in that people can only persist in effortful control of their actions for a limited time before they fatigue (Baumeister, Vohs, & Tice, 2007). Self-control is often likened to a muscle that can be strengthened over time with practice. People with stronger or more efficient self-control “muscles” may have more self-regulatory resources left at the end of the day to support their partner’s recovery.

Core to the experience of mindfulness, the ability to recognize emotions as temporary, and non-fixed components of reality can help people respond more appropriately (Segal, Williams, & Teasdale, 2002). Practitioners of mindfulness tend to be aware of and accept stimuli
in their environment before they experience a strong emotional response (Goldin & Gross, 2010); they also break free from the tendency to ruminate over negative emotions (e.g., Brown, Goodman, & Inzlicht, 2012). The result is mindful people are better at emotional self-regulation (Farb et al., 2010; Goldin & Gross, 2010; Perlman, Salomons, Davidson, & Lutz, 2010; Remmers, Topolinski, & Koole, 2016).

It is possible that responding without judgment and better self-regulation of emotions may reduce the cost of caring (Kessler, McLeod, & Wethington, 1985), or the burden of supporting one’s partner. Consider, for example, when a wife arrives home late from a demanding workday despite her promise to be in time for dinner, a mindful husband may regulate his emotions to avoid coping in a dysfunctional way, such as ignoring or blaming his wife. The husband may recognize he is feeling disappointment or frustration but he can accept these emotions as temporary. He may therefore be in a better position to recognize that his wife needs recovery support and to respond efficiently.

The idea that mindfulness can influence spousal support has received preliminary empirical support. In a study of patients dealing with chronic pain, when the caregiver reported higher levels of mindfulness, the patient reported fewer punishing responses. Further, when caregivers reported acting with awareness (a component of the mindfulness scale used), the patient reported higher instrumental support and responsiveness from the spouse (Williams & Cano, 2014). Thus, based on both SDT and self-regulation theory, I propose that more mindful partners are more likely to provide recovery support, and thus, their partners are also more likely to report receiving adequate support.
Hypothesis 3: Partner A’s provision of recovery support mediates the effect of Partner A’s trait mindfulness on Partner B’s reception of adequate recovery support.

Reception of adequate support. Mindful partners may also be better recipients of spousal recovery support. As mentioned, when acting with mindfulness, people tend to display less reactivity, are better able to self-regulate emotions, and have better awareness of their environments. Therefore, providing support to a mindful partner may be more enjoyable or rewarding. Some evidence supports this in that Williams and Cano (2014) found that when patients themselves reported being less reactive, they also tended to report their spouses were more responsive. Thus, I expect that highly mindful partners are more likely to be aware of and appreciate the support their partners give. Put another way, less information may be “lost” between support provided and support that is received by a mindful partner. Therefore, I propose:

Hypothesis 4: Partner A’s trait mindfulness moderates the relationship between Partner B’s reported provision of recovery support and Partner A’s reception of adequate recovery support. For more mindful partners, the relationship between their received support and their partner’s provided support is stronger.

Mindfulness and recovery behavior. Given strong support for the role of mindfulness in improving employee well-being, researchers have begun to study the mechanism by which mindfulness influences recovery pathways. For instance, Allen and Kiburz (2012) found that trait mindfulness predicted improved sleep quality and vitality, which then predicted improved work-family balance. Hülsheger et al. (2014) found that trait mindfulness improved psychological detachment, which subsequently improved sleep quality. However, mindfulness has not been
associated with all recovery behaviors. Marzuq and Drach-Zahavy (2012) found mindfulness to predict control, but not relaxation or mastery experiences. Yet, the authors did find that high levels of mindfulness and relaxation together had a synergistic effect on exhaustion and vigor. After engaging in relaxing behavior, those with high trait mindfulness had less exhaustion and higher vigor than those with low mindfulness levels. Further, the behavior of relaxation itself did not appear to improve exhaustion or vigor scores, rather, trait mindfulness appeared to be a necessary catalyst. Given these mixed findings regarding mindfulness and recovery behavior, I propose the following research question.

**Research Question 1:** Will one’s trait mindfulness predict his/her engagement in recovery behaviors (relaxation, mastery, psychological detachment, and control) beyond spousal recovery support?

**Can Recovery Support Prevent Psychological Work Withdrawal?**

My final consideration in this dissertation is the extent that spousal recovery support is related to more distal outcomes, specifically work withdrawal, via its influence on recovery behavior. Psychological work withdrawal has been defined as a type of counterproductive work behavior in which employees limit their work via daydreaming, getting off-task, or chatting with coworkers (Spector et al., 2006). I use a conservation of resources framework and keep with the notion that spousal recovery support is an interpersonal resource that promotes resource gain and positive feelings (Hobfoll, 1989; Newman et al., 2014; Park & Fritz, 2015). That is, in relationships when employees receive recovery support from their spouse, they are more likely to engage in behaviors such as psychological detachment that are linked to positive well-being outcomes. These resource-based theories have been largely supported, as engaging in recovery
behavior has been linked to positive outcomes (e.g., engagement, performance, psychological well-being).

Dual-earners, especially those with young children, face unique challenges in managing work and home. For employees who frequently receive little recovery support from their spouse, they may have very few opportunities to recoup resources and allow their bodily systems to return to resting levels (ten Brummelhuis et al., 2010). Thus, these employees may resort to work withdrawal to conserve personal resources (Idris, O’Driscoll, & Anderson, 2011). As predicted theoretically and shown empirically, people who routinely fail to recover are more likely to experience psychosomatic complaints, burnout, and psychological distress—and strains, as opposed to stressors, have been the strongest predictor of withdrawal behaviors (Binnewies et al., 2009a; Poulsen et al., 2015; Sluiter et al., 1999; Spector et al., 2006). Therefore, I expect that spousal recovery support for dual earners is a particularly vital interpersonal resource (ten Brummelhuis & Bakker, 2012a) that enables the employee to engage in recovery behaviors that are then negatively associated with work withdrawal. I acknowledge that receiving spousal recovery support may confer benefits beyond increasing the employee’s recovery behaviors that contribute to resource gain, such as trust and appreciation. Therefore, I hypothesize,

**Hypothesis 5:** Recovery behaviors (relaxation, mastery, psychological detachment, and control) partially mediate the negative relationship between of adequate recovery support on work withdrawal, within person. Specifically, adequate recovery support is positively related to recovery behavior (Hypothesis 1) and recovery behavior is negatively related to work withdrawal.
CHAPTER III: METHOD

Participants and Procedure

To achieve a targeted sample size of 160 dyads, participants were recruited using both a peer-nomination strategy and an organizational email listserv. Students at two Midwestern universities were requested to distribute survey invitation emails to couples they knew (e.g., parents, friends, co-workers) who both worked at least part-time (12 hours a week) and were married. Each student was provided with a unique code to give via email to each person that s/he recruited. Codes were used to link each dyad member and award students with nominal extra credit for surveys completed. Based on my personal network, I contacted members of a Midwest leadership organization directly; they were requested to forward the email to their spouse in the same manner as above. All recruitment was done via email.

Each email contained a summary of the study and a link to the online survey. The landing page of the survey contained the informed consent—participants were requested to click “next” if they agreed to the terms of the study. Additionally, on this page, participants entered the identifier code. The survey took approximately 15 minutes to complete. On the final page of the survey, participants had the option to enter their email addresses if they wished to participate in future or follow-up surveys. Thus, for those who did not enter a follow-up email address, the data was anonymous; for those who did provide their address, the data was confidential and available only to the author.

Three hundred and seventy-two people participated in the study. The data were first checked for un-effortful responding by using timestamp data; if participants spent less than five minutes on the survey they were excluded. I also checked for questionable data patterns, such as

1 At least 45 dyads are required to test for nonindependence at 80% (Kenny et al., 2006).
choosing the same response choice for every question (e.g., 1, 1, 1, 1), or “Christmas tree-ing” (1, 2, 3, 4, 5, 4, 3, 2, 1); these participants were removed. In total, fifteen participants were removed for un-effortful responding or suspicious data patterns. Then, using the codes each participant provided, partners were matched. In the case of data entry errors in which the person entered a code with extra digits, another strategy was used to confirm the correct dyad match. Specifically, all participants were asked to list theirs and their partner’s job title. Because each person provided both answers, job titles could be confirmed between suspected dyads. After matching participants, 145 couples (290 people) remained.

There was a very small amount of missing data. Across study variables, at the item level, there was less than .01 percent missing data. There did not appear to be a systematic missing data pattern. Because of this, and to retain as many participants as possible, when computing variables, the construct mean was imputed at the individual level if a person responded to at least 75 percent of the items within the construct. If the participant did not respond to at least 75 percent of the items within the construct, a value for that construct was not calculated.

To be retained for analyses, each dyad had to meet four criteria: (1) the couple was married or cohabitating, (2) each person worked at least 12 hours per week 3) the couple was heterosexual, and 4), after imputation, no missing data was allowed. These first criteria were selected based on the nature of the topic under study—dual-earning couples who may provide or withhold support to each other outside of work. Thus, couples were required to work at least part time and to be married or cohabitating. It should be noted that in the recruitment email, students were instructed to email only married couples; however, a small number of couples participated who were unmarried but cohabitating or in a civil union/domestic partnership. Given the difficulty of collecting dyadic data, and based on the rationale that recovery support should
function similarly in cohabitating but unmarried couples as in married couples, these participants were retained. Same-sex couples were omitted from the study because participants could not be classified into Partner A and Partner B based on their gender; this was required to complete the analyses. And finally, to calculate modification indices when analyzing the theoretical model, AMOS software requires there to be no missing data.

In implementing inclusion criteria, one couple was removed because they were not married or cohabitating, one couple was removed because they did not work at least 12 hours a week, six homosexual couples were removed, and three couples were removed that had incomplete data. This resulted in a final sample of 134 matched couples. Although my aim was to recruit 160 dyads, based on (Kenny et al., 2006) review of the 25 reciprocal dyadic studies such as this, the current sample size is above the average of 101 dyads. Based on this information and practical considerations, recruitment was stopped upon retaining 134 dyads.

Ten percent (n = 26) of the sample were from the organizational sample and 80 percent (n = 242) were recruited via students. Ninety-four percent of the sample was married and six percent were single or in civil union/domestic partnership but were cohabitating. Fifty-six percent of couples had at least one child under the age of 18, 7.8 percent reported eldercare responsibilities. On average, couples had been married for 17.8 years or in a relationship for 5.0 years. In Table 1, paired sample t-tests are reported to compare the demographic characteristics of men and women. As seen in Table 1, men in the sample were older (M_{Men} = 44.80 years, M_{Women} = 43.13 years), reported higher incomes [M_{Men} = 9.01 ($50,001-$75,000), M_{Women} = 6.63 ($30,001-$40,000)], and worked longer hours on average (M_{Men} = 48.83 hours, M_{Women} = 39.21 hours) than women. Consistent with previous dyadic research and the Bureau of Labor Statistics
data, male partners tend to be older than female partners, and to work longer hours and for higher pay (Bureau of Labor Statistics, 2015, 2016; Park & Fritz, 2015; ten Brummelhuis et al., 2010).

Measures

Each partner reported on all study variables on a 5-point scale (from 1 = *strongly disagree* to 5 = *strongly agree*) unless otherwise noted. Participants were instructed to consider the previous MONTH when responding. Full item wording information can be found in the appendix. Gender, number of children or parents living in household, work hours, income, marital status, length of relationship, and job titles were assessed. Given the large number of parameters to be estimated and thus the complexity of the model, coupled with a moderate sample size, a path analytic rather than a latent approach was used to test the theoretical model (see Figure 1) to maximize statistical power. Cronbach’s reliability estimates for each construct are presented in Table 3.

**Provided spousal recovery support.** Park and Fritz's (2015) 4-item measure ($\alpha = .85-.88$) was used to assess the support each partner gives. An example item is, “I provide support or assistance for my spouse (partner)...to relax or do relaxing things.” Park and Fritz’s scale was developed and validated based on the *Recovery Questionnaire* (Sonnentag & Fritz, 2007) and has been shown to be distinct from general spousal social support, spousal undermining behaviors, and recovery behaviors (Park & Fritz, 2015).

**Received adequate recovery support.** Park and Fritz's (2015) 4-item measure was adapted and extended to assess the adequacy of support received (Brock & Lawrence, 2008), rather than given. The stem, “I receive the (right amount) of support or assistance from my spouse (partner) to...” was used. The scale demonstrated good reliability ($\alpha = .79$, men; 76; women) and confirmatory factor analyses confirmed the unidimensional nature of the scale.
[χ^2(2) = 5.3 p = .07, CFI = .99, TLI = .97, and RMSEA = .08], with all items loading significantly on the factor.

**Recovery behavior.** Recovery experiences were assessed using Sonnentag and Fritz’s (2007) 16-item measure. There are four dimensions of recovery experiences to be measured: psychological detachment, relaxation, mastery, and control. An example item is, *I forget about work.* In Sonnentag and Fritz’s (2007) cross validation of the measure, Cronbach’s alpha was .85 for each subscale.

**Trait mindfulness.** A psychometrically improved 13-Chiitem version (Medvedev et al., 2016) of Brown and Ryan's (2003) 15-item mindfulness attention awareness scale (MAAS) was used. Cronbach’s alpha of the original scale has been reported between .78-.92 (Brown and Ryan, 2003). Based on a Rasch model (Medvedev et al.), the revised scale contains only 13 items (items 6 and 15 were omitted). The original scale used a 6-point scale (1 = almost always, 6 = almost never). The revised response scale combines response options 2 and 3 (very frequently, and somewhat frequently), and options 4 and 5 (somewhat infrequently and very infrequently). Based on Medvedev et al.’s recommendations, item responses were converted from an ordinal scale to an interval scale. These recommended modifications were demonstrated to improve item functioning and precision (Medvedev et al.). An example item is *I could be experiencing some emotion and not be conscious of it until sometime later.* Due to a transcription error in the survey scale, the response scale was inverted. To correct this, items were recoded so that higher scores reflected higher levels of mindfulness.

**Work withdrawal.** Lehman & Simpson's (1992) eight-item scale measuring psychological work withdrawal was used. Lehman and Simpson (1992) reported a Cronbach’s alpha value of .82. An example item is, *Chatted with co-workers about non-work topics.*
Data Analysis Strategy

The structural equation modeling program AMOS (Arbuckle, 2014) was used to analyze the data according to the Actor Partner Interdependence Model (APIM; Kenny et al., 2006). That is, because each person is nested within a dyad, the partners’ responses are interdependent. This non-independence must be accounted for by using an appropriate modeling strategy. Because each member of the dyad could be meaningfully identified by his/her gender, and because gender may influence the strength of proposed pathways in the model, the data was considered identifiable. Thus, by classifying women as Partner 1 and men as Partner 2, potential gender differences in the theoretical model could be estimated. A fully reciprocal model (containing both mens’ and womens’ scores on each construct) was tested, and thus, the effects for men and women were calculated simultaneously. Further, due to the potential for gender differences in dyadic crossover research (Westman, 2002, 2006), the pathways from men and women were not constrained to be equal. This means that regression coefficients for the same pathways (e.g., provided support to received adequate support) for each partner could vary, and were not forced to be equal across men and women.

To evaluate the fit of the theoretical model, several criteria were used. The goal of assessing model fit is to determine if the difference between the observed data and the expected data is greater than one would expect due to sampling error. Indices of model fit are not used to independently assess fit but must be interpreted together. The chi-square statistic and associated p-value indicate whether the population and sample are significantly different; a p-value of greater than .05 (non-significant) is desired, as this would indicate the model does not significantly vary from the population. However, the chi-square statistic is very sensitive to large sample size (is almost always insignificant), and other fit indices must be considered that
adjust for sample size. The comparative fit index (CFI) is used as an indicator of incremental fit; that is, how well the theoretical model fits over the baseline model (a baseline model is one in which observed variables are uncorrelated). In the past, a CFI value of .90 indicated adequate fit, but now .95 or greater is commonly considered good fit, with values closer to 1 indicating very good fit (Lei & Wu, 2007). In addition, the root mean squared error of approximation (RMSEA) and standardized root mean square residual (SRMR) are used as indicators of absolute model fit, that is, how well the model reproduces the sample covariance matrix. RMSEA values less than or equal to .06 and SRMR values less than .08 suggest good model-data fit (Hu & Bentler, 1999). In the current study, the chi-square statistic, CFI, SRMR, and RMSEA were used to collectively assess model fit.
CHAPTER IV: RESULTS

In Table 1, means, standard deviations, and paired sample \( t \)-tests for men and women are reported. Men and women reported similar levels of provided recovery support, adequate recovery support received, relaxation, control, and work withdrawal. Men reported slightly lower levels of psychological detachment (\( M = 2.85, SD = .83 \)) than women (\( M = 3.11, SD = .78 \)), \( t(133) = -2.93, p < .05 \). Men reported higher levels of trait mindfulness (\( M = 4.20, SD = .64 \)) than women (\( (M = 4.03, SD = .59), t(133) = -2.19, p < .05 \)).

In Table 2, bivariate correlations and Chronbach’s alpha reliability estimates are reported. All but one study variable, men’s ratings of provided recovery support (\( \alpha = .69 \)), demonstrated a traditionally acceptable reliability estimate (\( \alpha \geq .70; Nunnally, 1978 \)). In previous research with larger sample sizes, men’s ratings of provided recovery support displayed higher reliability (\( \alpha = .85-.88, Park & Fritz, 2015 \)). To further ensure the validity of the scale, a CFA\(^2\) was conducted in which all items significantly loaded onto one factor \( [\chi^2(2) = .04, p = .98, CFI = 1.00 \text{ and } RMSEA = .00] \). Thus, the scale was retained for model testing.

Model Overview and Assessment

The first step in testing the proposed model was to estimate the initial path model based on Figure 1. The proposed interaction effect (Hypothesis 4) was included in the initial path model by creating a centered product term for each partner. Each parallel endogenous variable between men and women was set free to covary to account for interdependence of the data and shared error of partners (Kenny et al., 2006). For example, the error term for men’s reported provided spousal support was set to correlate with that of women’s provided support. Consistent

\(^{2}\) Due to missing data at the item level within the measure, AMOS is unable to compute SRMR.
with previous research (Park & Fritz, 2015), within each partner, the error terms of the four recovery activities were also set free to covary. Having control of free time, for example, may facilitate a person’s participation in other recovery activities such as relaxation (ten Brummelhuis & Bakker, 2012b). For example, the error terms for women’s relaxation, mastery, control, and psychological detachment were set to free covary with each other. A complete depiction of the tested model, including error terms and research questions, can be seen in Figure 2.

The initial path model was estimated and showed poor fit, $\chi^2(94) = 198.95 \quad p < .05, \quad \text{CFI} = .71 \quad \text{RMSEA} = .09, \quad \text{SRMR} = .09$. The $\chi^2$ was significant and all fit indices did not meet the desired cut-offs. An alternative model was tested in which parallel pathways were constrained to be equal for men and women; this resulted in a worse-fitting model, $\chi^2(109) = 213.33 \quad p < .05, \quad \text{CFI} = .66 \quad \text{RMSEA} = .09, \quad \text{SRMR} = .10$. Therefore, subsequent analyses were based on the first, non-constrained model. Sixteen out of 30 theoretical pathways were significant, but the modification indices revealed that the hypothesized model significantly deviated from the data. I conducted a review of the residual covariances to identify possible sources of model misfit. Out of 171 values, the largest two values were $.10|$, which were not helpful in identifying sources of misfit. Following a poor fitting model, respecification is necessary in which the researcher considers theoretically justified model changes (Kline, 2011).

Based on theoretical considerations and suggested modification indices, five pairs of errors were allowed to correlate, and two pairs of direct paths were added. First, the error terms for providing recovery support and receiving adequate recovery support within persons were allowed to correlate. Although not initially hypothesized, from both a resource and equity perspective, the amount of support a partner gives is likely related to the amount of support he or she receives. Second, the error terms for trait mindfulness and psychological work withdrawal
were allowed to correlate within persons, suggesting that one’s ability to remain mindful may influence the extent to which he or she reports psychologically withdrawing from work. Then, although not suggested via modification indices, but based on the premise that this should have been specified in the original model, the error terms for provided support were allowed to co-vary with each recovery activity within-persons. A person’s opportunity to both offer support and engage in recovery behavior may be partially contingent on the same unmeasured resource (free time). These additional correlated errors are reported in Table 5.

And finally, a direct partner effect was added in which partner A’s provided support predicted partner B’s reported psychological detachment, suggesting that some support that Partner A is providing may influence Partner B’s ability to psychologically detach, beyond Partner B’s reception of adequate support. These unstandardized (and standardized) effects are reported in Table 3 (and 4).

The addition of these parameters significantly improved model fit, $\chi^2(80) = 84.54, p = .34$, CFI = .99, RMSEA = .02, SRMR = .06. [$\chi^2$ difference (14) = 114.41, $p < .05$]. To increase model parsimony, pairs of non-significant pathways were trimmed from the model. This resulted in four pairs (eight pathways) being trimmed at the individual level: 1) mastery experiences to psychological work withdrawal, (2) control experiences to psychological work withdrawal, (3) the interaction term to adequate support received, and (4) adequate support received to psychological withdrawal. As a result, the interaction terms and their corresponding error terms (which were each correlated with within-person trait mindfulness, cross-partner provided support, and each other) were also removed for each partner. The resulting model continued to fit the data well [$\chi^2(60) = 60.21, p = .47$, CFI = 1.00, RMSEA = .005, SRMR = .06].
Due to the deletion of the interaction terms, the models are no longer nested and as such, no chi-square difference test is conducted. The final, revised empirical model is depicted in Figure 3.

Hypothesis Testing

Standardized and unstandardized path estimates are reported in Tables 3 and 4 for the final empirical model. In Table 5, errors terms allowed to correlate in the final model are reported.

Hypothesis 1: Receiving adequate recovery support positively predicts recovery behavior (psychological detachment, relaxation, mastery, and control), within persons. Hypothesis 1 was fully supported for men and partially supported for women. Men who reported more adequate recovery support engaged in more psychological detachment (β = .28, \(p < .05\)), relaxation (β = .45 = \(p < .01\)), mastery (β = .26, \(p < .01\)), and control (β = .37, \(p < .01\)). Women who reported more adequate recovery support engaged in more psychological detachment (β = .22, \(p < .05\)), relaxation (β = .28, \(p < .01\)), and control (β = .18, \(p < .05\)), but not mastery behavior (β = .11, \(p > .05\)).

Hypothesis 2: Partner A’s reported provision of recovery support is positively related to Partner B’s reception of adequate recovery support. Hypothesis 2 was supported for women but not men. When men reported providing more recovery support, women reported receiving more adequate recovery support (β = .25, \(p < .01\)). However, recovery support provided by women was not related to adequate recovery support perceived by men (β = .12, \(p > .05\)).

Hypothesis 3: Partner A’s provision of recovery support mediates the effect of Partner A’s trait mindfulness on Partner B’s reception of adequate recovery support. Hypothesis 3 was partially supported. Men’s trait mindfulness predicted their provision of
support (B = .28, \( p < .01 \)); more mindful men provided more support. Men’s provision of support predicted women’s reception of adequate support (Hypothesis 2; B = .25, \( p < .01 \)). The indirect effect of men’s trait mindfulness on women’s reception of adequate support was significant (B = .07, SE = .03, CI = .02, .15, \( p < .05 \)). Women’s trait mindfulness did not predict their provision of support (B = .08, \( p > .05 \)), and women’s provision of support did not predict men’s reception of adequate support (Hypothesis 2: B = .12, \( p > .05 \)), therefore no indirect effect was estimated.

**Hypothesis 4:** Partner A’s trait mindfulness moderates the relationship between Partner B’s reported provision of recovery support and Partner A’s reception of adequate recovery support. For more mindful partners, the relationship between their received support and their partner’s provided support is stronger. When considering non-significant pairs of pathways to drop from the model to improve parsimony, the product term of Partner A’s trait mindfulness and Partner B’s provision of recovery support did not have a significant effect on Partner A’s reception of adequate support (men, B = .06, \( p > .05 \); women, B = .03, \( p > .05 \)) and was dropped from the final empirical model. However, there was a main effect in which men’s trait mindfulness significantly predicted their reception of adequate support (B = .24, \( p < .01 \)), more mindful men reported receiving more adequate support. This effect was not significant for women (B = .14, \( p > .05 \)).

**Hypothesis 5:** Recovery behaviors partially mediate the negative relationship between adequate recovery support and work withdrawal, within person. Specifically, recovery support is positively related to recovery behavior (Hypothesis 1) and recovery behavior is negatively related to work withdrawal.

Hypothesis 5 was partially supported. As tested in Hypothesis 1, men who reported adequate recovery support reported engaging in more of each type of recovery behavior; women
engaged in more psychological detachment, relaxation, and control, but not mastery. The prediction that recovery behavior is negatively related to work withdrawal was not supported. Men who engaged in more psychological detachment reported higher psychological work withdrawal ($B = .14, p < .05$); this relationship was not significant for women ($B = .06, p > .05$). Women who reported more relaxation also reported higher levels of psychological work withdrawal, although this relationship was not significant at the alpha = .05 level ($B = .15, p = .055$). All other relationships between recovery behavior and work withdrawal were not significant in both men and women, and were therefore trimmed from the final model. And finally, there was no significant direct effect for men or women from the reception of adequate support to psychological work withdrawal. These paths were also trimmed from the final empirical model.

**Research Question 1:** Will one’s trait mindfulness predict his/her engagement in recovery behaviors beyond spousal recovery support? For men, higher trait mindfulness did indeed predict more engagement in all recovery behaviors: psychological detachment ($B = .27, p < .05$), relaxation ($B = .21, p < .05$), mastery ($B = .38, p < .01$), and control ($B = .22, p < .05$). For women, no relationships were significant: psychological detachment ($B = -.13, p > .05$), relaxation ($B = .06, p > .05$), mastery ($B = .12, p > .05$), and control ($B = .02, p > .05$).

**Paths added during model respecification.** Six pairs of correlations and two pairs of paths were added to the model during respecification. Six pairs of correlations were within-person, and the one path was a pair of cross-partner effects. Three pairs of theoretically reasonable paths were added from suggested modification indices. The remaining four paths were based on additional consideration of the literature. Although they were added based on theoretical relevance and empirical support, these paths should be considered exploratory since
they were not proposed in the initial theoretical model. The unstandardized (and standardized) parameter estimates for these paths are reported in Table 3, (4), and 5.

Within persons, provided support and received adequate support were allowed to correlate (Men = .45, p < .01; Women = .33, p < .01) based on the principles of equity. There is likely a feedback relationship in that when partners receive support they may feel more inclined to pay back such support, and vice-versa. Trait mindfulness was set to predict psychological work withdrawal within persons (Men: B = -.37, p < .01, Women: B = -.31, p < .01). Because mindfulness is a quality that helps people attend to the present moment without judgment, higher mindfulness may equate to a greater ability to stay focused on one’s work. Those with lower trait mindfulness reported more psychological withdrawal from work. A direct effect was added from Partner A’s provided support to Partner B’s reported psychological detachment (women provided support to men psychological detachment, B = .25, p < .01; men provided support to women psychological detachment, B = -.16, p < .01). Some support that is offered by a partner may go unnoticed by the other partner, but may nevertheless help that partner to psychologically detach. And conversely, support provided by a partner may be viewed as unhelpful or even annoying by the target.

Within persons, support provided was allowed to correlate with each recovery term, as one’s ability to both provide support and engage in recovery behavior may be based on the same limited resource of time [Psychological Detachment, Men = .18, p < .05, Women = -.06, p > .05; Relaxation, Men = .18, p < .05, Women = -.06, p > .05; Mastery, Men = .12, p > .05, Women = .15, p > .05; Control, Men = -.22, p < .01, Women = -.07, p > .05].
**Squared multiple correlations.** Squared multiple correlations from the final empirical model for all endogenous variables are reported in Table 6. The percentage of variance explained ranges from 1 percent (men psychological withdrawal) to 25 percent (men relaxation).
CHAPTER V: DISCUSSION

In an increasing number of couples, both people participate in the workforce. Individual after work recovery processes, therefore, do not operate in isolation. In addition to coordinating household chores, parenting, community involvement, or overtime work, partners may need to coordinate their recovery from the workday. Until recently, few researchers have addressed this interdependence explicitly when designing studies on recovery. By using a reciprocal, dyadic design I offer a more complete picture of how support offered between partners influences recovery behavior and psychological withdrawal from work. Further, I investigated the extent that a personal characteristic (mindfulness) may help explain why people give more support, or are more likely to notice the support offered by a partner. Understanding how partners relate to each other outside of work, and how malleable characteristics such as mindfulness may contribute to beneficial recovery behaviors, can help practitioners better design employee well-being intervention efforts.

Implications for Theory

Recovery behavior and support. Drawing on a resource-based framework and largely consistent with my hypotheses, when people reported receiving more adequate recovery support from their partners, they also tended to engage in more recovery behaviors. Men engaged in more psychological detachment, mastery behavior, relaxation, and control; women engaged in more of each behavior except mastery. This is the first study to consider that the adequacy of support may be even more important than the offering of support in predicting recovery behaviors. This supports and extends Park and Fritz’s (2015) empirical work by suggesting that adequate recovery support from a partner is an especially important resource enhancing opportunity in one’s personal environment (Hobfoll, 2002). Theorists have previously suggested
that people need an opportunity to engage in recovery behaviors and then the motivation to participate in recovery activities (Newman et al., 2014). Under the time constraints in dual-earning households, especially those with children, a partner may have a vital role in creating time and or motivating one to engage in recovery behaviors. Expanding both the ERM and COR, one reason that people may chose not to or be unable to recover is that they do not have sufficient motivation or opportunity to do so. The intimate support of a partner can be an important condition that enhances recovery behavior.

However, because I did not measure support received, this study design does not allow for a direct comparison of relative contributions of adequate support received and support received in predicting recovery behavior. Yet what these results do show, is that support reported by one’s partner did not enhance the prediction of engagement in recovery behaviors (with two exceptions, discussed below) beyond the target’s report of adequate support. In previous studies (e.g., Hahn et al., 2012; Hahn & Dormann, 2013; Park & Fritz, 2015; Park & Haun, 2016), only the target’s received support or the partner’s provided support have been assessed; both reports of support have not been tested in their prediction of recovery behavior. Yet although conceptually distinct, this construct of adequacy of support must be further empirically validated in future research.

Further, beyond one’s own reports of receiving adequate support, partners’ reports of providing support explained additional variance in one’s psychological detachment, although these relationships differed between men and women. When women reported providing more support, husbands engaged in more psychological detachment. That is, women may be providing support in ways that are “invisible” to men or that men may not code as adequate support (Bolger, Zuckerman, & Kessler, 2000). As the results suggest, whether invisible or un-coded by
men, such support still helps them to detach from work. For example, cleaning the kitchen and
loading the dishwasher may free up a man’s time to read a book and detach from work—even if
he isn’t completely aware of the link. Alternatively, women may be engaging in behaviors that
they themselves don’t recognize and report as support. They may offer encouraging words about
work or spend quality time with their partners and men may report this as adequate support that
helps them recover; women may not make this connection. In sum, women may both provide
support that men perceive as adequate as well as support that men are not aware of, both which
aid in men’s psychological detachment.

Evolutionary psychology offers one explanation for this finding. Based on social norms
established over the course of human history, women have been the foremost socializers,
responsible for teaching behaviors and tradition to offspring (Tanner & Zihlman, 1976). Further
empirical research offers evidence that in heterosexual relationships, women tend to initiate more
support, have a greater sensitivity to support needed, and also desire to give more support
(Buhrke & Fuqua, 1987; Flaherty & Richman, 1989).

This finding further contributes to our understanding of conservation of resources theory
and offers some directions for future research. In this case, men need not be aware of the support
that women are providing for it to be effective. This further strengthens the argument that partner
support can be an especially vital resource. Researchers should continue to investigate how a
partner’s involvement may reveal an impact on other indicators of recovery or well-being, both
directly and indirectly (e.g., Park & Haun, 2016; Rodriguez-Munoz, Sanz-Vergel, Antino,
Demerouti, & Bakker, 2017). The idea of adequacy of support rather than volume of support
may also be considered in other areas of the workplace psychology literature. Constructs such as
perceived organizational support or family supportive supervisor behaviors may be more
predictive of employee outcomes when considered from a view of adequacy; further, offering employees an opportunity to explain why such support is adequate (or inadequate) may generate insight into the types of benefits on behaviors organizations and leaders should display.

Conversely, when men reported providing more support to their partners (after accounting for women’s adequate support received) women reported significantly less psychological detachment. Inadequate does not necessarily mean too little support, but can indicate that support is not useful, or even patronizing. Brock and Lawrence (2009) found that over five time points, overproviding spousal support (not specific to recovery) was as strongly linked to decreased martial satisfaction as was underproviding. The support men report providing may be considered inadequate by women. I acknowledge that this relationship is contrary to the reported bivariate correlation between men’s provided support and wives’ detachment (.31).

Structural equation modeling allows one to better test theory by simultaneously accounting for the effect of multiple variables (such as women’s adequate support received) on an outcome; I prefer the results from the model testing to the bivariate correlations for these reasons.

In considering both adequacy of support received and support provided for both partners, I determined there might be a large degree of disconnect between the support a person offers and what is received by his/her partner. When men reported providing more recovery support, women reported receiving more adequate recovery support (B = .27). This association was not supported in the opposite direction—support women provided was not linked to men’s reports of adequate support received (B = .12, \( p < .05 \)). A larger sample with more power would give us more confidence in this finding. However, given the modest effect sizes, a clear discrepancy exists between support provided and adequate support received, highlighting the potential for recovery support to get lost in translation and/or the type of support offered to be inadequate.
These results provide support for optimal matching theory (Cutrona, Shaffer, Wesner, & Gardner, 2007) and the construct of support adequacy in marriage—support must match the stressor or situation as well as the personality of the person needing support (Brock & Lawrence, 2009; Dehle et al., 2001). Couples should aim to better communicate their desired type of support as well as act on this information. Doing so may enhance the ability for both partners to recover from work. Researchers may also consider factors that strengthen the relationship between provided and received support, such as the couples’ status as work-linked (Park & Haun, 2016).

**Psychological work withdrawal.** Scholars have regarded support from an intimate partner to be an especially valuable resource (Hobfoll, 1989, 2002). Spousal recovery support, therefore confers its own benefits as well as helping to generate resources through recovery behaviors (Park & Fritz, 2015; Park & Haun, 2016). This study was the first to test whether, within the tenets of COR, spousal support can directly or indirectly (through its influence on recovery behavior) influence psychological work withdrawal. Put another way, this model tested the idea that people may use work withdrawal as a means of conserving resources (Muraven, Gagné, & Rosman, 2008; Scott & Barnes, 2011). I found that recovery behaviors and received adequate support were largely not predictive of psychological work withdrawal. Although past research has shown that evening recovery behaviors such as relaxation and psychological detachment predict next day work engagement (e.g., Sonnentag, 2003; ten Brummelhuis & Bakker, 2012), engaging in recovery behaviors did not appear to prevent withdrawal, at least cross-sectionally.

Further, receiving adequate support from a spouse was also not predictive of work withdrawal. Conversely, Park and Haun (2016) found that partner provided recovery support
predicted the recipient’s level of state recovery, which subsequently predicated the recipient’s work engagement. In this way, it is clear that while recovery behaviors and support may boost positive work outcomes, there is not yet support for these predictors reducing negative outcomes such as withdrawal. Contrary to my hypotheses, psychological detachment predicted higher levels of work withdrawal in men, and women who relaxed more tended to report higher levels of work withdrawal, although this was not significant at an alpha level of .05 ($p = .057$).

These results may be interpreted in light of studies that have shown that a curvilinear relationship between psychological detachment and task performance and proactive behavior, in which too much detachment might make it more difficult to switch back into job-mode (e.g., Fritz, Yankelevich, Zarubin, & Barger, 2010). Using a daily diary study, Rodriguez-Munoz, Sanz-Vergel, Antino, Demerouti, and Bakker (2017) found that on days when employees reported performing well on the job, this led to a sense of satisfaction, and led to increased psychological detachment. The authors suggested that good performance creates a sense of cognitive closure (Park and Fritz, 2015) that better allows people to detach.

In this study, work withdrawal may function similarly regarding time-ordering. Employees may be psychologically withdrawing from the workplace because they are indeed low on resources, yet in the evenings they are actively trying to make up for this by engaging in psychological detachment or relaxation. Alternatively, withdrawal from work could be the result of too much detachment or relaxation that makes it hard for employees to reinvest in the work. Such questions may be answered with study designs more able to detect ordering effects (e.g., diary studies). Although strain (which can be prevented through achieving recovery) is more strongly related to work withdrawal than stressors, withdrawal may be too distal or broad of a construct to be affected by individual recovery behaviors.
Mindfulness. Given the benefits of receiving recovery support, Park and Haun (2016) called for an investigation of the factors that may influence a partner’s offering of recovery support. In this study, I investigated trait mindfulness as such a factor and in doing so, merged the traditional theories of recovery (COR, ERM) with theories of motivation. Improving peoples’ levels of mindfulness has become a popular target for workplace and clinical interventions due to its apparent malleability and the numerous purported personal and organizational benefits linked to those with higher mindfulness scores. Self-determination theorists suggest that highly mindful people may be more likely to act with autonomous motivation. That is, they may act more consistently with their values and reality, rather than being pushed or pulled by external pressures. Further, based on self-regulation theory, they may better regulate their emotions and be less reactive to their environment. Based on these theories, mindful people may better offer support and be more likely to notice when support is given.

In the current study, mindfulness was a predictor of one’s provision of support, and one’s perception of receiving support—but only in men. When men were better at focusing on the present and acting with awareness, they were more likely to report offering support to their partners, and more likely to report receiving adequate support. Further, men’s trait mindfulness had a significant indirect relationship with women’s reception of adequate support through men’s provision of support. Interestingly, men reported significantly higher levels of trait mindfulness than women. Sex differences in trait mindfulness scores have received conflicting support (Katz & Toner, 2013; Niemiec et al., 2010; Shorey, Brasfield, Anderson, & Stuart, 2014). Previous studies have suggested that women may benefit more from mindfulness training than men (Katz & Toner, 2013).
In an experiment with college students, women showed significant improvements in negative affect following a semester of mindfulness training. The authors controlled for baseline mindfulness scores, as well as hours spent practicing mindfulness. The authors showed that at the conclusion of the intervention, men and women facets showed differential improvements across various facets of mindfulness (e.g., self-compassion, non-reactivity). In the current study, the chosen measure of mindfulness was unidimensional and thus did not generate facet-level scores. Although the unidimensional measure has been extensively validated, in this case, it may be that particular facets of mindfulness offer more fidelity when predicting recovery support. Thus, more work must be done to investigate the potential mechanism by which mindfulness is related to offering recovery support. Using a facet measure of mindfulness would be a preferred starting point.

Mindfulness also appeared to benefit the recovery process in men, but not women. More mindful men engaged in more of each type of recovery behavior. Previous research has been conflicting; mindfulness has predicted engaging in control behaviors, but not relaxation or mastery (Marzuq & Drach-Zahavy, 2012), and psychological detachment (Hülsheger et al., 2014). Mindfulness has also been a catalyst for improving vigor and decreasing exhaustion when coupled with relaxation (Marzuq & Drach-Zahavy, 2012). Given the unique sex differences found in this study, such work should be replicated with a facet-level measure of mindfulness that may offer more insight. Mindfulness thus links recovery theories with motivational theories, as these results suggest that at least for men, higher levels of mindfulness may engender a sense of motivation to recover as well as create the right opportunities to engage in recovery behaviors.

And although not hypothesized, for both men and women, higher levels of trait mindfulness were strongly associated with less psychological work withdrawal. Thus, the
tendency to act with awareness and without judgment predicted people were also less likely to
daydream at work or spend time on personal matters. This finding lends further support to the
notion that mindful employees are more likely to benefit their organizations.

Practical Implications

The results of this study add to the dialogue concerning the growing proportion of dual-
earner couples across the world. Given the potential for spousal recovery support to improve
recovery behaviors, and the documented link between recovery behaviors and outcomes of
interest for employers (e.g., work engagement, proactive behavior, subjective well-being), these
results offer one avenue for employers who are trying to achieve such outcomes. Offering
workplace-sponsored mindfulness training may be beneficial for both the employee and their
partner, to the extent that employees are able to engage in more recovery behavior and to also
experience less psychological work withdrawal. Researchers have shown both self and online
mindfulness training for employees to be an economical and efficacious method for improving
employee levels of mindfulness, as well as improving recovery processes such as sleep quality
and duration (Aikens et al., 2014; Hülsheger, Feinholdt, & Nübald, 2015).

Further, these results may more directly relate to organizations that employ both partners
in a relationship, or are who are considering the implications of doing so. As Park and Haun
(2016) recommend, organizations may wish to consider offering training or benefits to
employees and their partners. Beyond mindfulness, such training could also help employees to
increase the adequacy of the support they offer each other (thereby facilitating recovery behavior
and positive outcomes); this could be especially important for organizations that employee both
members of the couple.
Limitations

This was an important first study in offering a more complete picture of partners’ provided and received adequate recovery support, as well as for establishing potential relationships between trait mindfulness and provided recovery support. However, to better understand the causal direction and stability of these relationships, a true longitudinal study with at least three time points is needed. Further, an experience sampling study may help to determine when people are most likely to provide support or to believe that support is adequate by investigating other situational variables, such as work engagement, mood, or children’s needs.

In this study, there were significant gender differences; when the model was constrained to be equal across men and women, the model fit poorly. Other researchers conducting dyadic studies of after work recovery using samples of US managers and executives (Hahn & Dormann, 2013), Korean married couples (Park & Fritz, 2015), and German employees (Hahn et al., 2014) have not found support for gendered effects. The presence of gender effects continues to be inconsistent in other avenues of work-family crossover research (e.g., Westman, 2002). Careful replication studies aimed at isolating contextual differences such as endorsement of egalitarian gender roles, benevolent sexism, or differences in partner income levels may clarify these relationships. The size of this sample limited my ability to cross-validate both the new measure of adequate spousal support, as well as the model itself. Both should be replicated in a second independent sample.

Conclusion

This study met the three outset goals. First, I further supported spousal recovery support as a critical interpersonal resource, and determined that the adequacy of support may be even more important than the offering of support in predicting recovery behaviors. Second, I
determined that at least for men, mindfulness may be an important factor in improving the interpersonal resource of spousal support. And finally, I determined that spousal recovery support and recovery behaviors were not linked to work withdrawal in the hypothesized manner; higher levels of relaxation in women and higher levels of psychological detachment in men were associated with more psychological work withdrawal. However, trait mindfulness was found to be strongly positively associated with psychological work withdrawal.
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   4_1YR_S2501&prodType=table

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   from
   http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_1
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### APPENDIX A. TABLES

Table 1: Descriptive Statistics for Men and Women (paired samples *t*-tests)

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<td>Mean</td>
<td>SD</td>
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* *p < .05, ** *p < .01
Table 2: Intercorrelations and Coefficient Alphas for Major Study Variables (Part 1)

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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Bolded are the correlations of parallel variables between husbands and wives.
Table 2: Intercorrelations and Coefficient Alphas for Major Study Variables (Part 2)

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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Bolded are the correlations of parallel variables between husbands and wives
Table 3: Unstandardized Parameter Estimates Retained in Final Empirical Model

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| Paths Added in Revised Model     |                |                          |                          |                          |                          |
| Provided Support (W)             |                |                          |                          | .22*                    | .10  | --             | --                       |                          |                          |
| Provided Support (M)             |                |                          |                          | --                      | --   | .32**          | .10                      |                          |                          |
| Trait Mindfulness                |                |                          |                          | -.37**                  | .07  | -.31**         | .09                      |                          |                          |

* p < .05, ** p < .01, ~ p = .055

M = Men; W = Women
Table 4: Standardized Parameter Estimates Retained in Final Empirical Model

<table>
<thead>
<tr>
<th>Paths Specified in Initial Model</th>
<th>Standardized</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate Support</td>
<td>Psychological Detachment</td>
<td>.21**</td>
</tr>
<tr>
<td>Adequate Support</td>
<td>Relaxation</td>
<td>.41**</td>
</tr>
<tr>
<td>Adequate Support</td>
<td>Mastery</td>
<td>.21**</td>
</tr>
<tr>
<td>Adequate Support</td>
<td>Control</td>
<td>.33**</td>
</tr>
<tr>
<td>Provided Support (W)</td>
<td>Adequate Support Received (M)</td>
<td>.22**</td>
</tr>
<tr>
<td>Provided Support (M)</td>
<td>Adequate Support Received (W)</td>
<td>--</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Provided Support</td>
<td>.32**</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Adequate Support</td>
<td>.24**</td>
</tr>
<tr>
<td>Detachment</td>
<td>Psych. Work Withdrawal</td>
<td>0.21*</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Psych. Work Withdrawal</td>
<td>-.07</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Psychological Detachment</td>
<td>.20*</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Relaxation</td>
<td>.19*</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Mastery</td>
<td>.31</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Control</td>
<td>.20*</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Paths Added in Revised Model</th>
<th>Standardized</th>
<th></th>
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<tbody>
<tr>
<td>Provided Support (W)</td>
<td>Psychological Detachment (M)</td>
<td>.25**</td>
</tr>
<tr>
<td>Provided Support (M)</td>
<td>Psychological Detachment (W)</td>
<td>--</td>
</tr>
<tr>
<td>Trait Mindfulness</td>
<td>Psych. Work Withdrawal</td>
<td>-.42**</td>
</tr>
</tbody>
</table>

* $p < .05$, ** $p < .01$, ~ $p = .057$

M = Men; W = Women
Table 5: Estimates of Correlated Errors in Final Empirical Model

<table>
<thead>
<tr>
<th>Error Terms Set Free to Correlate in Initial Model</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Mindfulness (M) &lt;---&gt; Trait Mindfulness (W)</td>
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<tr>
<td>Provided Support (M) &lt;---&gt; Provided Support (W)</td>
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</tr>
<tr>
<td>Adequate Support Received (M) &lt;---&gt; Adequate Support Received (W)</td>
<td>.06</td>
</tr>
<tr>
<td>Psychological Detachment (M) &lt;---&gt; Psychological Detachment (W)</td>
<td>.01</td>
</tr>
<tr>
<td>Relaxation (M) &lt;---&gt; Relaxation (W)</td>
<td>0.13~</td>
</tr>
<tr>
<td>Mastery (M) &lt;---&gt; Mastery (W)</td>
<td>.23*</td>
</tr>
<tr>
<td>Control (M) &lt;---&gt; Control (W)</td>
<td>-.16*</td>
</tr>
<tr>
<td>Psych. Work Withdrawal (M) &lt;---&gt; Psych. Work Withdrawal (W)</td>
<td>0.12</td>
</tr>
<tr>
<td>Psychological Detachment (W) &lt;---&gt; Relaxation (W)</td>
<td>.25**</td>
</tr>
<tr>
<td>Psychological Detachment (W) &lt;---&gt; Mastery (W)</td>
<td>-.13</td>
</tr>
<tr>
<td>Psychological Detachment (W) &lt;---&gt; Control (W)</td>
<td>.15</td>
</tr>
<tr>
<td>Relaxation (W) &lt;---&gt; Control (W)</td>
<td>-.01</td>
</tr>
<tr>
<td>Relaxation (W) &lt;---&gt; Control (W)</td>
<td>.41**</td>
</tr>
<tr>
<td>Mastery (W) &lt;---&gt; Control (W)</td>
<td>.22*</td>
</tr>
<tr>
<td>Psychological Detachment (M) &lt;---&gt; Relaxation (M)</td>
<td>.47**</td>
</tr>
<tr>
<td>Psychological Detachment (M) &lt;---&gt; Mastery (M)</td>
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</tr>
<tr>
<td>Psychological Detachment (M) &lt;---&gt; Control (M)</td>
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</tr>
<tr>
<td>Relaxation (M) &lt;---&gt; Mastery (M)</td>
<td>-.09</td>
</tr>
<tr>
<td>Relaxation (M) &lt;---&gt; Control (M)</td>
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</tr>
<tr>
<td>Mastery (M) &lt;---&gt; Control (M)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Terms Free to Correlate in Final Retained Model</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate Support Received (M) &lt;---&gt; Provided Support (M)</td>
<td>.46**</td>
</tr>
<tr>
<td>Adequate Support Received (W) &lt;---&gt; Provided Support (W)</td>
<td>.33**</td>
</tr>
<tr>
<td>Psychological Detachment (M) &lt;---&gt; Provided Support (M)</td>
<td>0.12*</td>
</tr>
<tr>
<td>Relaxation (M) &lt;---&gt; Provided Support (M)</td>
<td>.18*</td>
</tr>
<tr>
<td>Mastery (M) &lt;---&gt; Provided Support (M)</td>
<td>.12</td>
</tr>
<tr>
<td>Control (M) &lt;---&gt; Provided Support (M)</td>
<td>-.22**</td>
</tr>
<tr>
<td>Psychological Detachment (W) &lt;---&gt; Provided Support (W)</td>
<td>-.06</td>
</tr>
<tr>
<td>Relaxation (W) &lt;---&gt; Provided Support (W)</td>
<td>-.06</td>
</tr>
<tr>
<td>Mastery (W) &lt;---&gt; Provided Support (W)</td>
<td>.15</td>
</tr>
<tr>
<td>Control (W) &lt;---&gt; Provided Support (W)</td>
<td>-.07</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, ~ p = .053, two-tailed
Table 6: Squared Multiple Correlation Coefficients for Endogenous Variables

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided Support</td>
<td>.09</td>
<td>.01</td>
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<tr>
<td>Adequate Support Received</td>
<td>.07</td>
<td>.06</td>
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<tr>
<td>Psychological Detachment</td>
<td>.13</td>
<td>.13</td>
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<tr>
<td>Relaxation</td>
<td>.25</td>
<td>.09</td>
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<tr>
<td>Mastery</td>
<td>.17</td>
<td>.02</td>
</tr>
<tr>
<td>Control</td>
<td>.18</td>
<td>.04</td>
</tr>
<tr>
<td>Psychological Work Withdrawal</td>
<td>.18</td>
<td>.12</td>
</tr>
</tbody>
</table>
Figure 1. Hypothesized theoretical model. Correlated parallel error terms and research questions not depicted.
Figure 2. Initial theoretical path model. Tested in AMOS with correlated errors of parallel variables, correlated recovery experiences, and the research question depicted. Single headed arrows represent direct effects. Curved arrows represent error terms allowed to covary. Hypotheses are depicted as black arrows; green arrows signify research questions.
Figure 3. Final retained empirical model. Pairs of non-significant pathways were trimmed. The seven additional pathways are depicted with a dotted line. Due to complexity of model, standardized and unstandardized path estimates are depicted in Tables 3 and 4, and estimates of correlated errors are reported in Table 5.
APPENDIX C. SPOUSAL RECOVERY SUPPORT PROVIDED

Participant Instructions: Please indicate the degree to which you agree with the following statements: I provide support or assistance for my spouse…

Response Scale:
1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

Spousal Recovery Support
1. to relax or do relaxing things
2. to forget about work
3. to take time for leisure
4. to learn new things
APPENDIX D. ADEQUATE RECOVERY SUPPORT RECEIVED

Participant Instructions: Please indicate the degree to which you agree with the following statements: My spouse provides the right amount of support or assistance for me…

Response Scale:
1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

Spousal Recovery Support
1. to relax or do relaxing things
2. to forget about work
3. take time for leisure
4. to learn new things
APPENDIX E. RECOVERY EXPERIENCES

Participant Instructions: Thinking about times that you are not at work (after work, weekends, vacations, holidays), indicate the extent you agree with the following statements.

Response Scale:
1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

Recovery Experiences
1. I relax or do relaxing things
2. I forget about work.
3. I do not think about work at all.
4. I distance myself from my work.
5. I get a break from the demands of work.
6. I kick back and relax.
7. I do relaxing things.
8. I use the time to relax.
9. I take time for leisure.
10. I learn new things.
11. I look for intellectual challenges.
12. I do things that challenge me.
13. I do something to broaden my horizons.
15. I decide my own schedule.
16. I determine how to spend my time.
17. I take care of things the way I want them done.
APPENDIX F. TRAIT MINDFULNESS SCALE

**Participant Instructions:** Below is a collection of statements about your everyday experience. Using the 1–4 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be.

**Response Scale:**
- 1 = Almost never
- 2 = Somewhat infrequently
- 3 = Somewhat frequently
- 4 = Almost always

**Trait Mindfulness**
1. I could be experiencing some emotion and not be conscious of it until some time later.
2. I break or spill things because of carelessness, not paying attention, or thinking of something
3. I find it difficult to stay focused on what’s happening in the present.
4. I tend to walk quickly to get where I’m going without paying attention to what I experience along the way.
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
6. It seems I am “running on automatic” without much awareness of what I’m doing.
7. I rush through activities without being really attentive to them.
8. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.
9. I do jobs or tasks automatically, without being aware of what I’m doing.
10. I find myself listening to someone with one ear, doing something else at the same time.
11. I drive places on “automatic pilot” and then wonder why I went there
12. I find myself preoccupied with the future or the past.
13. I find myself doing things without paying attention
APPENDIX G. WORK WITHDRAWAL

Participant Instructions: Thinking about the last MONTH, how often have you…

Response Scale:
1 = Never
2 = Rarely
3 = Sometimes
4 = Often
5 = Always

Psychological Work Withdrawal
1. Had thoughts of being absent
2. Chatted with co-workers about non-work topics
3. Left work station for unnecessary reasons
4. Daydreamed
5. Spent work time on personal matters
6. Put less effort into job than should have
7. Had thoughts of leaving current job
8. Let others do your work
APPENDIX H. INCOME SCALE

1 = less than $10,00
2 = $10,000 – $15,000
3 = $15,001 – $20,000
4 = $20,001 – $25,000
5 = $25,001 – $30,000
6 = $30,001 – $35,000
7 = $35,001 – $40,000
8 = $40,001 – $50,000
9 = $50,001 – $75,000
10 = $75,001 – $100,000
11 = More than $100,000
APPENDIX I. HUMAN SUBJECTS REVIEW BOARD APPROVAL

DATE: June 29, 2016

TO: Kalsey-Jo Kossie, M.A.
FROM: Bowling Green State University Human Subjects Review Board


SUBMISSION TYPE: Revision

ACTION: APPROVED

APPROVAL DATE: June 28, 2016

EXPIRATION DATE: June 9, 2017

REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of Revision materials for this project. The Bowling Green State University Human Subjects Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

The final approved version of the consent document(s) is available as a published Board Document in the Review Details page. You must use the approved version of the consent document when obtaining consent from participants. Informed consent must continue throughout the project via a dialogue between the researcher and research participants. Federal regulations require that each participant receives a copy of the consent document.

Please note that you are responsible to conduct the study as approved by the HSRB. If you seek to make any changes in your project activities or procedures, those modifications must be approved by the committee prior to initiation. Please use the modification request form for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must also be reported promptly to this office.

This approval expires on June 9, 2017. You will receive a continuing review notice before your project expires. If you wish to continue your work after the expiration date, your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date.

Good luck with your work. If you have any questions, please contact the Office of Research Compliance at 419-372-7716 or hsrb@bgsu.edu. Please include your project title and reference number in all correspondence regarding this project.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.