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FAMILY SUPPORTIVE ORGANIZATION PERCEPTIONS, WORK ROLE OVERLOAD, AND BURNOUT: CROSSOVER EFFECTS OF BURNOUT ON RECOVERY

A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of Arts

in

The Department of Psychology

by Suzanne M. Booth B.S., McNeese State University, 2008 May 2011

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ABSTRACT

The present study is a dyadic examination of the effects individuals' perceptions of their partners' burnout have on the individuals' burnout and their ability to recover from work demands. The effects of burnout were investigated in light of the presence of the buffer of family-supportive organization perceptions. The proposed model for the study was tested using statistical equation modeling (N = 300 cohabiting couples). Family-supportive organization perceptions were shown to mitigate the influence of work role overload on an individual's burnout and positively relate to recovery from work. In the model, individuals' perceptions of their partners' burnout was driven by both the partners' actual burnout and the individuals' own burnout. The predicted crossover effects between individuals' burnout and their partners' work recovery were non-significant; also the predicted feedback loop between individuals' perceptions of their partners' burnout and the individuals' work recovery was non-significant. Potential factors influencing these null results and avenues for future research are discussed.

INTRODUCTION

Dual-earner couples are those in which both members are employed. As more women enter the workforce, the number of dual-earner couples continues to increase in the United States (Holahan & Gilbert, 1979; Kelleher, 2007); from 1977 to 2008, the percentage of couples classified as dual-earner increased from 66% to 79% (Galinsky, Aumann, & Bond, 2009). As repeatedly suggested in existing literature and in light of the increase in dual-earner couples, the need for research regarding the effects of dual-earner living arrangements on various types of work-family outcomes grows (e.g., Bakker, Demerouti, & Burke, 2009; Barnett, Gareis, & Brennan, 2009; Hammer, Neal, Newsom, Brockwood, & Colton, 2005; Matthews, Del Priore, Acitelli, & Barnes-Farrell, 2006; Westman, Vinokur, Hamilton, & Roziner, 2004). However, as noted by Casper, Eby, Bordeaux, Lockwood, and Lambert (2007), 89% of extant work-family literature focuses on the individual and his/her experiences. As such, there is a significant need for research on crossover effects within dual-earning couples (see also Kinnunen, Feldt, Mauno, & Rantanen, 2010). Hence, in an effort to address the call for research on dyadic crossover effects, crossover effects between dual-earner couples are the focus of the present study.

The lack of dyadic literature in the work-family realm is problematic, because as discussed in family systems theory (Bronfenbrenner, 1977, 1979; Hammer, Neal et al., 2005), individuals are affected not only by their own experiences, but also those nearest them (i.e., their spouse). Specifically, within family systems theory, individuals affect and are affected by the individuals in their family, and because each individual has his/her own work, family, and other roles (including behaviors and attitudes associated with those roles), the entire family unit is affected by each individual's work, family, and other life roles. Additionally, research on dyadic crossover is grounded in conceptual and empirical evidence suggesting that when an individual experiences conflict between work and family (i.e., work-family conflict; Greenhaus & Beutell,

1985) his/her experiences might not only be due to the spillover of the personal stressors from one domain to another, but also to the individual being affected by his/her partner's stress (Bakker, Demerouti, & Schaufeli, 2005).

Work-family conflict is conceptualized as existing when the demands and needs of one domain (e.g., work) interfere with the demands and needs of performance within another domain (e.g., family; Greenhaus & Beutell, 1985). Work-family conflict is further conceptualized as a bidirectional process, meaning that both family-to-work conflict, family interfering with work tasks, and work-to-family conflict, work interfering with family tasks, exist (Frone, Russell, & Barnes, 1996). Within the literature, work-family conflict is discussed as having both intra- and inter-individual effects. Specifically, work-family conflict spillover occurs when strain and stress from one domain transfer to and negatively affect performance in another domain – this, by definition, is an intra-individual phenomenon (Bakker et al., 2009; see also, Lambert, 1990). Conversely, crossover is the transfer of an individual's stress and strain from one domain to a domain of his/her partner, thereby increasing the stress and strain of the partner – this is an interindividual phenomenon (Bakker et al., 2009; see also, Westman, 2001).

Of the research that has been conducted, crossover effects within dual-earner couples has included the crossover of job stress from one spouse to another (e.g., Bolger, Delongis, Kessler, & Wethington, 1989), as well as the crossover effects of burnout (e.g., Bakker et al., 2005; Westman, Etzion, & Danon, 2001). Burnout is exhaustion and fatigue as a result of continued work with no method of adequate recovery from the demands (Shirom & Melamed, 2006). Past research has shown that the crossover of burnout within a couple is related to a variety of outcomes including a decrease in health and an increase in depression in a burned-out individual's partner (e.g., Bakker, 2009), and burnout is negatively related to sense of control, and positively related to social undermining (Westman et al., 2001). Thus, the crossover of

negative experiences such as job stress and burnout from an individual to his/her partner often results in an increase in overall negative outcomes within the individual's partner, such as declines in both physical and psychological well-being (Bakker, 2009; Westman & Etzion, 1995).

The proposed model tested is presented in Figure 1. Overall, as noted earlier, there is a call for research to better explain how intra-individual antecedents of burnout function within a dyadic context in order to gain an improved understanding of potential crossover effects (Bakker, 2009; Westman et al., 2001). That said, the present investigation helps to meet this call in that intra-individual antecedents of burnout (e.g., overload and recovery; Maslach & Jackson, 1984; Meijman & Mulder, 1998; Westman & Eden, 1997) are included, and family-supportive organization perceptions (e.g., an individual believes that his/her employing organization permits employees to take off of work to attend to family demands without negative repercussions; Allen, 2001) is positioned as an organizationally based support mechanism that may indirectly buffer against burnout. Finally, as part of the main contribution of the study, the issue of partner perception is introduced as a missing link in explaining how partner burnout may crossover and feedback to affect individual experiences. In the next section, supporting theory and empirical results for the intra-individual hypotheses are presented. This is followed by a discussion of the inter-individual effects and the role of partner perceptions in the crossover process.

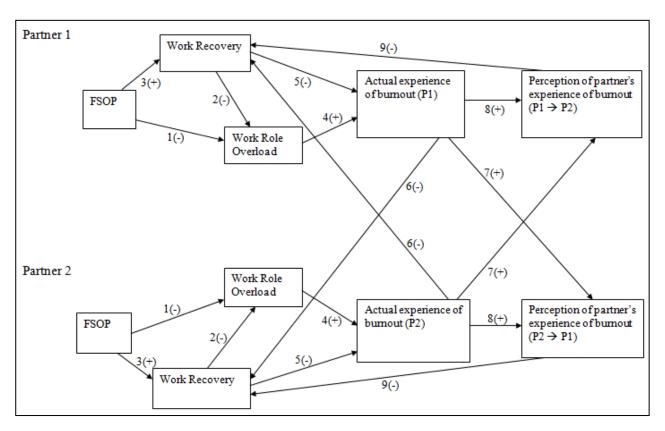


Figure 1 – Proposed Model and Relationships

REVIEW OF LITERATURE

Intra-Individual Relationships and Hypotheses

Social support, a topic of much interest within the work-family literature, can be defined as an individual aiding another by lending resources such as empathy, love, time, money, information, and advice (van Daalen, Willemsen, & Sanders, 2006; see also, House, 1981). Furthermore, based upon this definition of social support and Hobfoll's conservation of resources theory (1989), Hobfoll, Freedy, Lane, and Geller (1990) established their social support resource theory. Within their social support resource theory, Hobfoll et al. assert that social support negatively relates to stressors and positively relates to well-being. However, they also maintain that social support is dependent on both individual and environmental factors. That is, in an attempt to preserve one's personal identity, an individual often will use the resources (i.e., anything – for example money, information, and abilities – that enables an individual to acquire some valued commodity) available to him/her, including self-esteem, skills, and social support, to sustain his/her ideals and strengthen his/her identity (Hobfoll et al., 1990).

Therefore, social support serves as an important buffer against the potential negative effects of various stressors an individual might experience, including work stressors (Hobfoll et al., 1990). Moreover, the social support that individuals use to lessen the impact of their work stressors can originate from sources both in the personal realm (i.e., home domain) as well as work domain (e.g., Aycan & Eskin, 2005; Matthews, Bulger, & Barnes-Farrell, 2010).

According to the direct effects model of social support (see Cohen & Wills, 1985; Viswesvaran, Sanchez, & Fisher, 1999), increased work-based sources of social support are purported to directly result in a reduction of work stressors. Specifically, support from the work domain – coworkers, employer, and organization – as opposed to support from the personal realm, is most effective in decreasing the negative effects of work stressors on psychological well-being and

work-to family conflict (Seiger & Wiese, 2009; Terry, Nielsen, & Perchard, 1993; Wadsworth & Owens, 2007).

In support of the link between an individual and their work organization, Eisenberger, Huntington, Hutchison, and Sowa (1986) introduced the concept of perceived organization support, the support and commitment that an employee credits his/her employing organization with displaying towards him/her. In addition, Eisenberger et al. noted that there exists a positive relationship between an individual's perceived organization support and his/her satisfaction with and willingness to exert effort on behalf of the organization. Thus, as an individual's level of perceived organization support increases, so does his/her commitment to the organization and psychological well-being, which is "characterized by the presence of positive affect, the absence of negative affect, and job satisfaction and life satisfaction" (Panaccio & Vandenberghe, 2009, p. 226).

The positive relationship between an individual's psychological well-being and his/her level of perceived organization support, as discussed above, is impactful, especially when combined with the notion of spillover (see Kinnunen, Feldt, Geurts, & Pulkkinen, 2006). The effect that perceived organization support has on an individual's psychological well-being does not solely influence his/her work life, but given potential spillover effects, his/her family life may also benefit from the improvement of the individual's psychological well-being. Extending this concept, Thomas and Ganster (1995) determined that organizational policies that are supportive of workers' families, such as flextime, are positively related to employees' work control perceptions, which are positively related to employees' physical and psychological well-being.

Although Thomas and Ganster (1995) demonstrated that the existence of family-friendly organizational policies were positively linked to employee well-being, Allen (2001) determined

that family-supportive organization perceptions, the extent to which an individual believes that his/her work organization is supportive of his/her personal or family life, more strongly relate to employee psychological well-being. Of note, family life is dependent upon the individual and his/her definition of family. However, Allen alluded to family responsibilities including childcare responsibilities and the like, but family is not limited to only children but rather can include spouse/partner, siblings, parents, and other individuals and family responsibilities (Huffman, Youngcourt, Payne, & Castro, 2008). Nevertheless, Allen argued that although an organization may have policies in place that are supportive of its employees' family lives, the employees may not use the available resources, they may not know about them, or the employees may believe that use of such policies may reflect poorly on them.

Hence forth, family-supportive organization perceptions (Allen, 2001) is hypothesized to relate to an individual's experience of work stressors. Work stressors are any work domain variable whose influence and presence or absence incites an increase in the level of stress that an individual experiences (see Spector, Dwyer, & Jex, 1988). The particular stressor of interest in the present study is *work role overload*. Work role overload is the feeling that there is too much work to do without adequate resources (i.e., time and energy) with which to complete the work (Frone, Yardley, & Markel, 1997; see also, Parasuraman, Purohit, Godshalk, & Beutell, 1996). Moreover, role overload is conceptualized as both a time-based and strain-based predictor of work-family conflict (Frone et al., 1997; see also, Parasuraman et al., 1996). This means that role overload can be defined as both "the perception of having too many things to do and not enough time to do them" and a situation of "too much work to accomplish in an inadequate period of time [which] is likely to lead to the experience of emotional distress" (Frone et al., 1997, p. 150).

Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) suggest that life roles (e.g., work roles and family roles) compete for resources, because the roles do not have the same, but rather have

conflicting responsibilities and norms. Furthermore, in an effort to satisfy the demands of their work domain, individuals may often take time and energy from their family life to complete work related responsibilities. This allocating of family time to work-related demands may cause an increase in conflict between and a decrease in satisfaction with an individual's work and family lives (e.g., Boyar, Maertz, Pearson, & Keough, 2003; Cardenas, Major, & Bernas, 2004; Carlson & Kacmar, 2000). Additionally, the conflict over resources between domains is also supported by conservation of resources theory (Hobfoll, 1989). As Hobfoll suggests, an individual's separate domains (e.g., work and home) will compete for resources (e.g., time and energy), all in an attempt to maintain and replace needed resources in the domains.

Although individuals experience conflict between their work and family lives due to stressors, such as work role overload, family-supportive organization perceptions may serve as a buffer against the negative impact of work role overload on an individual. Past research has shown family-supportive organization perceptions to be a strong mediator between work-family policies and outcomes such as work-family conflict, job satisfaction and burnout (e.g., Allen, 2001; Cook, 2009). However, although conceptually supported, the argument that family-supportive organization perceptions serves as a buffer against experiences of work role overload remains unstudied. Nonetheless, extant literature does emphasize the fact that support and overload are inversely related to outcomes such as job satisfaction and burnout (e.g., Cardenas et al., 2004; Chou & Robert, 2008; Cortese, Colombo, & Ghislieri, 2010; Fong, 1990; Yildirim, 2008). Additionally, Foley, Hang-Yue, and Lui (2005) asserted that an increase in perceived organizational support mitigates the positive relationship between work-family conflict and role overload. Thus, given past theoretical and empirical work, family-supportive organization perceptions is hypothesized to be negatively related to the stressor of work role overload.

Hypothesis 1: Family-supportive organization perceptions is negatively related to work role overload.

Although family-supportive organization perceptions (i.e., a work domain construct) is proposed to buffer against the negative impact of work role overload on an individual, according to ecological systems theory (Bronfenbrenner, 1979) an individual is affected by multiple factors originating in multiple domains (i.e., the work and family domains). Specifically, in his ecological systems theory, Bronfenbrenner asserted that individuals' ideals, behaviors, and opinions are a composite of the influences of the individuals' micro-, meso-, exo-, and macrosystems (i.e., those around the individuals, the environments in which the individuals exist, the environments and settings that the individuals families/friends exist, and the overall culture and community in which the individuals live). Hence, it is additionally concluded that experiences of *recovery* in the non-work domain also buffer against the negative impact of work role overload. Work recovery, which is a relatively understudied topic, is the replenishing of resources (e.g., energy) that are expended on account of work demands, stressors, and strains (Meijman & Mulder, 1998).

Past conceptual and empirical work suggests that there are four experiences which promote recovery: psychological detachment, relaxation, mastery-oriented strategies, and control (Sonnentag & Fritz, 2007). First, work recovery via psychological detachment can be described as when an individual recovers from the strain of work by disconnecting from, not being bothered by, or consumed by work concerns and issues while not in the work domain (Etzion, Eden, & Lapidot, 1998; Sonnentag & Bayer, 2005). Relaxation, the second experience proposed to promote recovery, can be described as a state of decreased physical exertion and activity, combined with activities which incite a positive affect – for example, taking a walk (Sonnentag & Fritz, 2007). Mastery-oriented strategies, the third experience promoting recovery, are non-

work related activities that require an individual to learn a new skill – for example, learning to play a new sport. Finally, control, the fourth component, is an individual's ability to decide how he/she spends his/her non-work time, and this type of control negatively relates to distress, and thus promotes recovery.

Additional past research has shown that recovery from work demands and work stressors is beneficial for an individual's overall wellbeing (e.g., Moreno-Jimenez, Mayo, Sanz-Vergel, Geurts, Rodriguez-Munoz, & Garrosa, 2009; Sitaloppi, Kinnunen, & Feldt, 2009). Additionally, in their effort-recovery model, Meijman and Mulder (1998) proposed that the expenditure of energy, resources, and effort by an individual in one domain (e.g., work) without an opportunity to recover due to high demands (e.g., workload) from the work and/or family domains could result in negative outcomes for the individual in either or both domains. Moreover, conservation of resources theory (Hobfoll, 1989) supports the notion that if an individual is able to recover from work strains, this recovery from work could mean a renewed vigor, energy, and drive. Hence, theoretical and empirical work indicate that if an individual is able to recover from his/her work, then he/she will experience fewer harmful outcomes, such as work role overload. Thus, the following relationship is offered.

Hypothesis 2: Work recovery is negatively related to work role overload.

Furthermore, it is offered that family-supportive organization perceptions relate to work recovery by enhancing the positive effects that work recovery has on an individual in his/her work and family lives. Since family-supportive organization perceptions has been shown to buffer the negative consequences of work on an individual and an individual's family life (Allen, 2001), family-supportive organization perceptions should facilitate recovery from work due to individuals not being concerned about work while in the family domain. However, this relationship has not been previously examined in the literature.

To start, as previously stated, family-supportive organization perceptions indicates the degree to which individuals feel they are able to attend to family needs without negative repercussions from their work organization (Allen, 2001), and work stressors have been shown to exhibit a negative relationship with recovery from work through psychological detachment (Sonnentag & Bayer, 2005). Recovery from work through psychological detachment is supported by research on boundary theory, which is based upon the separating of various parts of one's life in an effort to establish order (Ashforth, Kreiner, & Fugate, 2000). Moreover, it has been shown that increased segregation of work and family (i.e., setting strict physical and time boundaries between the domains, preventing overlap) negatively relates to issues such as workfamily conflict (Matthews, Barnes-Farrell, & Bulger, 2010). To that end, if individuals feel that their employing organization supports them in participating in their family domain, then the individuals should be able to more efficiently psychologically detach and ultimately recover from their work on account of a decrease in stress from work concerns while in the family domain. As such, it is posited that family-supportive organization perceptions positively relates to recovery from work.

Hypothesis 3: Family-supportive organization perceptions is positively related to recovery from work.

In view of suggestions made by Allen (2001) that family-supportive organization perceptions be considered in terms of its effects on the work-family interface and work outcomes, burnout is included in the present model as an intra-individual outcome of interest. Burnout has been shown to relate to a variety of negative outcomes including, decreases in job satisfaction (e.g., Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010), decreases in well-being (e.g., Prins, Gazendam-Donofrio, Tubben, Van Der Heijden, Van De Wiel, & Hoekstra-Weebers, 2007), and increases in social undermining (e.g., Westman et al., 2001). Furthermore, both work

role overload and work recovery, two of the intra-individual antecedents included in the model, have been shown to be conceptually and empirically relevant within the burnout process (see Maslach & Jackson, 1984; Sonnentag, Binnewies, & Mojza, 2008). To date, however, these constructs have not been systematically examined in the context of family-supportive organization perceptions. Therefore, in the present study, burnout is investigated in light of family-supportive organization perceptions.

Burnout is described "as relating to individuals' feelings of physical, emotional, and cognitive exhaustion, thus focusing on the continuous depletion of the individuals' energetic coping resources resulting from their chronic exposure to occupational stress" (Shirom & Melamed, 2006, p. 179; see also, Shirom, 1989, 2003). Moreover, burnout is most often linked to conservation of resources theory (Hobfoll, 1989), because in an effort to avoid burnout, individuals "strive to obtain, retain, protect, and foster valued resources and minimize any threats of resource loss" (Brotheridge & Lee, 2002, p. 58). Although an individual may strive to preserve resources, the individual may use his/her resources to satisfy job demands or complete a job task. However, if the individual does not receive any return for the work completed, this loss of resources without replacement can eventually result in the experience of burnout (cf. Brotheridge & Lee, 2002; Riolli & Savicki, 2003; Shirom & Melamed, 2006). As such, past research has shown work role overload to positively relate to burnout (e.g., Cordes & Dougherty, 1993; Maslach & Jackson, 1984; Sweeney & Summers, 2002). Thus, in an effort to replicate past research, the following hypothesis is offered.

Hypothesis 4: Work role overload is positively related to an individual's experience of burnout.

Drawing on the effort-recovery model (Meijman & Mulder, 1998) and conservation of resources theory (Hobfoll, 1989), if an individual lacks sufficient time or is not able to detach

himself/herself from work concerns when he/she is not at work, the individual is unable to adequately recover from work strains or replenish used resources. Additionally, this diminished recovery may consequently relate to increased fatigue, negative affect, and psychological strain (Sonnentag et al., 2008; Moreno-Jimenez et al., 2009). Furthermore, given these negative consequences are primary indicators of burnout (i.e., exhaustion and fatigue; see Shirom & Melamed, 2006), it follows that if an individual is consistently unable to recover from work strains and subsequently also life demands, he/she is more likely to become burned-out. Therefore, in light of past research, the following relationship between work recovery and burnout is posited.

Hypothesis 5: Recovery from work is negatively related to burnout.

Overall, a number of antecedents of burnout have been empirically established, including work role overload and work recovery (see Maslach & Jackson, 1984; Shirom & Melamed, 2006). Furthermore, an individual's burnout and its antecedents can affect not only the individual (i.e., intra-individual effects), but also the individual's partner (i.e., inter-individual effects). Thus, in an effort to determine the effect that an individual's burnout has on his/her partner's experiences and perceptions, an investigation of the inter-individual effects of burnout is warranted.

Inter-Individual Relationships and Hypotheses

Crossover effects (i.e., inter-individual effects) are defined as the psychological stress and strain of one partner in a couple (i.e., dyad) affecting the level of stress and strain of the other partner in the relationship (Bolger et al., 1989; Westman & Vinokur, 1998). Within past research, three types of crossover have been proposed: direct crossover, indirect crossover, and common stressors (Westman & Vinokur, 1998).

Direct crossover effects are described as the transmission of stress from one partner to the other (Westman & Vinokur, 1998). An example of direct crossover, or "an empathic reaction" of an individual to his/her partner (Westman et al., 2001, p. 469), is an individual's work-family conflict positively relating to his/her partner's work-family conflict. On the other hand, indirect crossover effects are described as the transmission of strain from one partner to the other done through the occurrence of negative interactions between the partners brought on by individual stress. Social undermining is an example of indirect crossover which occurs when an individual behaves in a negative manner towards his/her partner resulting in distress in the partner (Westman et al., 2001; Westman et al., 2004). Finally, common stressors are described as shared strains that affect both members of the dyad due to shared experiences and living arrangements. Westman et al. (2001) offered job insecurity as an example of a common stressor between the members of couples employed by the same organization, which was undergoing a downsizing.

From this, past research has also examined the crossover effects of work stressors on partners' anxiety, depression, job commitment, and job satisfaction (Crossfield, Kinman, & Jones, 2005), and the crossover effects of mood and affect within dual-earning couples (Chan & Margolin, 1994). Furthermore, Westman et al. (2001) investigated the crossover of burnout in the presence of job control between members of a dual-earning dyad. The notion behind this is that if one member of the dyad is burned-out due to his/her work demands, then this will affect his/her partner's level of burnout (see Westman & Bakker, 2008; Westman et al., 2001). However, aside from Westman et al.'s research (2001), there exists limited research on the crossover of burnout within dual-earning couples.

Hence, of particular interest here are the possible crossover effects of burnout in cohabiting dual-earning couples. More specifically, individual recovery is thought to relate to not only intra-individual phenomenon, but also to be influenced by the inter-individual effects of

burnout. That is to say that if an individual's partner is burned-out, the partner's burnout is an environmental stressor that can interfere with the individual's ability to recover in the family domain from the demands of his/her work domain (see Westman & Etzion, 1995; Westman & Vinokur, 1998). According to the social support resource theory (Hobfoll et al., 1990), the social support that an individual receives from those closest to them (i.e., his/her partner) can buffer against the negative impact of stressors (e.g., work stressors) and aid in the recovery process. However, if an individual's partner is burned-out, then the partner will most likely be unable to provide social support to the individual.

In addition, if an individual's partner is burned-out, then the individual will more likely incur an increased amount of responsibilities in the family domain and will also have to attend to the needs of his/her burned-out partner. Thus, it is likely that the individual will be unable to adequately relax, replenish his/her resources (e.g., energy), and recover from work (Meijman & Mulder, 1998; Sonnentag & Fritz, 2007). Finally, if an individual's partner is burned-out, then the partner's burnout will serve as a constant reminder to the individual about work concerns (i.e., negative social interactions; Westman & Vinokur, 1998). Thus, the individual will be more likely to think about his/her own and his/her partner's work demands and workload (see Westman & Etzion, 1995). This constant concern and stress over work may prevent the individual from recovering via psychological detachment from work concerns (e.g., Etzion et al., 1998). Hence, it is hypothesized that an individual is less likely to recover from his/her work when his/her partner experiences greater burnout.

Hypothesis 6: An individual's actual experience of burnout is negatively related with his/her partner's work recovery.

In line with the concept of direct crossover effects, as part of an individual experiencing burnout, it follows that his/her partner would perceive him/her as being burned-out (Westman &

Vinokur, 1998). For example, if an individual complains to his/her partner about going to work each day, struggles with getting up in the morning for work, and constantly appears drained and exhausted after work, then his/her partner would most likely perceive him/her to be burned-out. Kenny and Acitelli (2001), among others (e.g., Swann, 1984), have previously demonstrated that an individual can accurately determine (i.e., perceive) his/her partner's emotions and experiences due to repeated exposure to and intimacy with the other. In addition, Matthews et al. (2006; see also Jones & Fletcher, 1993) have demonstrated empirical support, within the work-family literature, for the accuracy of partner perceptions, when they showed that partner's can accurately perceive each other's work-partner conflict (a type of work-family conflict). Thus, the following relationship is offered.

Hypothesis 7: An individual's actual experience of burnout is positively related to the partner's perception of the individual's burnout.

It should be recognized that Kenny and Acitelli (2001) also note that although partners are capable of accurately perceiving their partner's states (in this case, burnout) individuals are also subject to a certain amount of bias when determining the partner's states (i.e., burnout). Within the partner perception literature, it has been argued that partners are very similar (Epstein & Guttman, 1984), and based upon this similarity, when information is lacking about an individual's partner, the individual may substitute his/her own perceptions of the state of the partner in lieu of specifics (Higgins, King, & Mavin, 1982; Kenny & Acitelli, 2001). Thus, a burned-out individual is more likely to perceive his/her partner to be burned-out as well (Kenny & Acitelli, 2001; Matthews et al., 2006; Saffrey, Bartholomew, Scharfe, Henderson, & Koopman, 2003; Westman & Vinokur, 1998).

Additionally, a burned-out individual is also more likely to demonstrate a negative affect (e.g., Schepman & Zarate, 2008), and as a result, the individual's overall perceptions will be

more negative – he/she will see the world through a negative lens. For example, if a burned-out individual's partner comes home from work upset because his/her boss yelled at him/her, the burned-out individual may attribute the partner's negative affect to mean that the partner is burned-out (i.e., attribute it to a more chronic state like burnout), as opposed to simply upset about the events of that day (i.e., a more proximal affective state). As such, the following hypothesis is offered.

Hypothesis 8: An individual's burnout is positively related to his/her perception of his/her partner's burnout.

A final proposed relationship within the model, which has yet to be examined in the literature, and a primary contribution of the overall study is the critical and intricate relationship between an individual's perceptions of his/her partner's burnout and the individual's work recovery. If an individual perceives his/her partner to be burned-out, he/she will be less able to recover from work demands in the family domain. This is due to issues such as a lack of relaxation and increased stress within the family domain (see Sonnentag & Fritz, 2007). For example, if a burned-out individual perceives his/her partner to be burned-out, then he/she may be unable to relax while at home due to worry over the partner's and his/her own work issues, and thus the individual will perpetuate his/her own burnout by never being able to adequately recover from work. This perpetuation of an individual's burnout as a result of his/her own burnout, his/her partner's burnout, and the individual's perceptions of the partner's burnout is the basis for the hypothesized cyclical feedback loop (see Westman et al., 2001).

Hypothesis 9: An individual's perceptions of his/her partner's burnout is negatively related to the individual's work recovery.

MATERIALS AND METHODS

Sample

Participants for the proposed study are 600 members of heterosexual, cohabiting dyads (i.e., 300 couples). The average number of years that the couples have been living together was $13.94 \ (SD = 11.35)$. Furthermore, in order to be included in the sample, both partners had to work a minimum of 20 hours a week (males: M = 48.51, SD = 11.62; females: M = 40.37, SD = 10.04), and had to be at least 18 years of age (males: M = 40.78, SD = 12.15; females: M = 38.52, SD = 11.61). Additionally, combined, the members of each couple had to work at least 60 hours a week (M = 88.88, SD = 15.53).

Approximately 89% of participants identified themselves as Caucasian, and 63% of couples had a combined household income of more than \$75,000. Also, 41.8% of participants indicated that they had at least one child under the age of 18 living at home, and 17.8% indicated that they assist with the care of a dependent adult. With regard to males, approximately 21% reported working in management, business, or financial operations related occupations, 31% reported working in professional and related occupations, and another 28% reported working in more traditional "blue collar" (e.g., production, installation, maintenance) or service occupations. Women reported the following concerning their employment: approximately 15% reported working in management, business, or financial operations related occupations, 44% reported working in professional and related occupations, and another 10% reported working in more traditional "blue collar" (e.g., production, installation, maintenance) or service occupations.

Procedure

Undergraduate students served as recruiters of the couples for the study. Students were asked to solicit at least two sets of cohabiting dyads to complete the survey. The undergraduate recruiters were asked to e-mail the survey link to both members of cohabiting dyads. When the

undergraduate students sent out the survey to the dyad that they were recruiting, they sent the same link to both members. Furthermore, the recruiters were given codes to assign to their couples, and when the recruiters emailed the couples, they sent the same code to both members of an individual dyad. This method allowed both surveys from a dyad to be linked. Students received nominal course extra credit for their participation.

When the student recruiters emailed the participants, both members of a dyad were asked to independently complete a web-based survey. Each set of surveys from the dyads were linked through the use of the assigned identification number. Each member of the dyad received email notification requesting that he/she complete the anonymous survey. This method enabled the members of the dyads to complete the survey independently of each other. The dyads were a convenience sample collected via a snowball technique.

Measures

Family-supportive Organization Perceptions. Family-supportive organization perceptions was assessed with six items adapted from Allen (2001) by Shockley and Allen (2007) and validated by Booth and Matthews (revise & resubmit) (see Appendix A). The responses for the items are on a 5-point scale (1 = strongly disagree, to 5 = strongly agree). All items are reversed coded so that higher response values indicate increased family-supportive organization perceptions. Samples of the items are "Individuals who take time off to attend to personal matters are not committed to their work" and "Employees who are highly committed to their personal lives cannot be highly committed to their work."

Burnout. Burnout was assessed with fourteen items from the Shirom-Melamed Burnout Measure (SMBM) (Shirom & Melamed, 2006) (see Appendix B). The responses for the items are on a 7-point scale (1 = never or almost never, to 7 = always or almost always). Samples of the items are "I have no energy for going to work in the morning," "I feel I'm not focused in my

thinking," and "I feel I am not capable of investing emotionally in coworkers and customers." Additionally, exploratory factor analyses (i.e., principle components analyses) were completed on this scale to investigate the underlying structure of the scale. To that end, the results of the factor analyses on the items showed a three component structure for both men and women (see Appendices F & G, respectively). The three components reflect the subscales of physical fatigue, cognitive weariness, and emotional exhaustion (Shirom & Melamed, 2006). Furthermore, the three component structure explained 81.5% of the variance for men, and 78.8% of the variance for women.

Perception of Partner Burnout. Perception of partner burnout was assessed with fourteen items adapted from the Shirom-Melamed Burnout Measure (SMBM) (Shirom & Melamed, 2006) (see Appendix C). The responses for the items are on a 7-point scale (1 = never or almost never, to 7 = always or almost always). Samples of the items are "He/she has no energy for going to work in the morning," "He/she seems to not be focused in his/her thinking," and "He/she seems to feel he/she is unable to be sensitive to the needs of coworkers and customers."

Work Role Overload. Work role overload was assessed with five items from Reilly (1982) adapted by Thiagarajan, Chakrabarty, and Taylor (2006) (see Appendix D). The responses for the items are on a 5-point scale (1 = strongly disagree, to 5 = strongly agree). Samples of the items are "I need more hours in the day to do all the things that are expected of me" and "I cannot ever seem to catch up."

Work Recovery. Work recovery was assessed with sixteen items from the Recovery Questionnaire (Sonnentag & Fritz, 2007) (see Appendix E). The responses for the items are on a 5-point scale (1 = strongly disagree, to 5 = strongly agree). Samples of the items are "During time after work, I forget about work", "During time after work, I kick back and relax", "During

time after work, I do something to broaden my horizons," and "During time after work, I determine for myself how I will spend my time." Additionally, exploratory factor analyses (i.e., principle components analyses) were completed on this scale to investigate the underlying structure of the scale. To that end, the results of the factor analyses on the items showed a four component structure for both men and women (see Appendices H & I, respectively). The four components reflect the subscales of psychological detachment, relaxation, mastery, and control (Sonnentag & Fritz, 2007). Furthermore, the four component structure explained 77.4% of the variance for men, and 78.6% of the variance for women.

RESULTS

Analytic Strategy and Preliminary Analyses

The means and standard deviations for all variables included in the model can be found in Table 1. Additionally, preliminary assessments of internal consistency reliability of the measures and correlations for all variables in the study were completed (see Table 2). To that end, each measure demonstrated acceptable internal consistency reliability estimates (greater than .70; Nunnally, 1978). Also, none of the bivariate correlations between constructs are greater than .90, and as a result, the correlations suggest the data are not multicollinear (Tabachnick & Fidell, 2007). However, because there did appear to be some significant differences between the construct correlations for men and women, post hoc paired samples *t*-tests were conducted to determine if the means of the constructs differed between men and women (see Table 1 for *t*-test results for all constructs). Women reported significantly more family-supportive organization perceptions than did men, but no other significant differences were observed between the construct means for men and women. The mean difference between men and women on the family-supportive organization perceptions construct will be elaborated in the discussion section.

Table 1 – Means, Standard Deviations, and Paired T-test Results

	<u>M</u> 6	<u>Men</u>		men_		
	Mean	SD	Mean	SD	df	t
1. Family-Supportive Organization Perceptions	3.41	.82	3.68	.86	299	-4.29*
2. Work Role Overload	3.01	.96	2.98	1.04	299	.30
3. Recovery from Work	3.36	.60	3.27	.66	299	1.76
4. Burnout	2.98	1.05	2.92	1.02	299	.79
5. Perception of Partner Burnout	3.16	1.06	3.04	1.11	299	1.51

Note: *p < .05

Table 2 – Reliability Estimates and Correlation Coefficients

-	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Family-Supportive Organization Perceptions (male)	(.86)													
2. Work Role Overload (male)	24**	(.89)												
3. Recovery from Work (male)	.14*	42**	(.89)											
4. Burnout (male)	20**	.58**	41**	(.95)										
5. Perception of Partner Burnout (male)	15**	.25**	11	.33**	(.95)									
6. Family-Supportive Organization Perceptions (female)	.16**	07	01	11	30**	(.88.)								
7. Work Role Overload (female)	03	.14*	06	.10	.29**	27**	(.91)							
8. Recovery from Work (female)	04	08	.18**	08	19**	.17**	45**	(.90)						
9. Burnout (female)	10	.13*	11	.25**	.46**	33**	.50**	42**	(.94)					
10. Perception of Partner Burnout (female)	05	.24**	28**	.40**	.16**	.01	.15**	13*	.34**	(.95)				
11. Length of Relationship	.05	11	05	17**	11	.09	01	11	13*	08	-			
12. Total Household Income before Taxes	.03	07	04	16**	18**	.06	.01	.00	07	09	.39**	-		
13. Work Hours (male)	07	.24**	16**	.15**	.14*	.03	01	01	.07	.00	.04	.05	-	
14. Work Hours (female) Note: $*p < .05, **p < .05$.07)1	.04	08	.02	.03	07	.25**	22**	.06	.00	.06	.15*	.02	-

Because the data in the study is dyadic, responses were analyzed using Kashy and Kenny's (2000) actor-partner interdependence model (APIM). The APIM is appropriate for the purposes of this study because the APIM takes into account the fact that an individual in a dyad is able to affect not only his/her own ideas and experiences (actor affect), but also those of his/her partner as well (partner affect). Thus, within a dyad, the members influence and affect both themselves and each other, creating non-independent data (Campbell & Kashy, 2000; Kenny & Ledermann, 2010). Therefore, consistent with previous dyadic studies (see Badr, 2004; Campbell, Simpson, Kashy, & Rholes, 2001; Ko & Lewis, 2011; Matthews et al., 2006), the APIM was used to account for the interdependence of the data.

Furthermore, the responses of the members of the dyads were linked with their respective partner via the participant codes (men – Partner 1; women – Partner 2) and then assessed using structural equation modeling (SEM; Kashy & Kenny, 2000; Kenny & Ledermann, 2010). The

statistical package AMOS 17 (Arbuckle, 2008) was used to examine the fit of the data to the model.

With regard to determinates of fit, the typical measure of model fit in SEM is the χ^2 value, wherein a non-significant χ^2 is indicative of a good fitting model (Kenny, 2010). However, because χ^2 is often significant due to a high sensitivity to large sample sizes, other measures of fit are used to further assess the fit of the model (Kenny, 2010). That said, the comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean residual (SRMR) are typically valued as good measures of model fit and are thus used in conjunction with χ^2 (Schermelleh-Engel, Moosbrugger, & Müller, 2003). A CFI value of greater than or equal to .95 is considered to be an indicator of good model fit (Hu & Bentler, 1998, 1999), while a RMSEA value of less than or equal to .06 is indicative of good model fit (Hu & Bentler, 1999). Finally, a SRMR value of less than .08 is generally considered an indicator of good model fit (Kenny, 2010).

The model demonstrated good fit $[\chi^2(22) = 48.07, p < .05, CFI = .96, RMSEA = .06,$ SRMR = .05]. The resultant χ^2 value was significant, but χ^2 is sensitive to large sample sizes (see Bergh & Ketchen, 2009; Hessen, Dolan, & Wicherts, 2006). Furthermore, the CFI, RMSEA, and SRMR values were all within the recommended ranges, and thus, the model showed good overall fit. Results for the individual hypotheses are presented in two sections below. The first set of results focus on the proposed intra-individual effects. The crossover effects (inter-individual effects) are presented second. It should be noted, all parallel cross-gender constructs in the SEM model were allowed to covary with each other (e.g., male work role overload was correlated with female work role overload) – this process is in line with SEM best practices and in response to the interdependence of the data (Kenny, Kashy, & Cook, 2006). The correlation coefficients between all parallel constructs are available in Table 3.

Table 3 – Correlation Coefficients for All Parallel Variables

	Family Supportive Organization Perceptions	Work Role Overload	Work Recovery	Burnout	Partner Burnout
	(men)	(men)	(men)	(men)	(men)
Family Supportive Organization					
Perceptions (women)	.16**				
Work Role Overload (women)		.14*			
Work Recovery (women)			.18**		
Burnout (women)				.25**	
Partner Burnout (women)					.16**

Note: *p < .05, **p < .01

Unstandardized Path Estimates: Intra-Individual Effects

The unstandardized estimates for each hypothesized path are reported in Figure 2; with dyadic data, unstandardized path estimates are best to use when reporting the path estimates because the variances and covariances are different between men and women on the variables under investigation, and the standardized estimates do not take into account these differences and would as a result skew the data. Overall, six of seven intra-individual hypotheses were fully supported for both men and women.

Hypothesis 1 was fully supported; family-supportive organization perceptions negatively related to work role overload (men: B = -.21, p < .01; women: B = -.23, p < .01). When partners experienced more family-supportive organization perceptions, they each reported less work role overload. Hypothesis 2 was also supported for both men and women; recovery from work negatively related to work role overload (men: B = -.65, p < .01; women: B = -.66, p < .01). As predicted, greater recovery experiences were associated with fewer experiences of work role overload for both men and women.

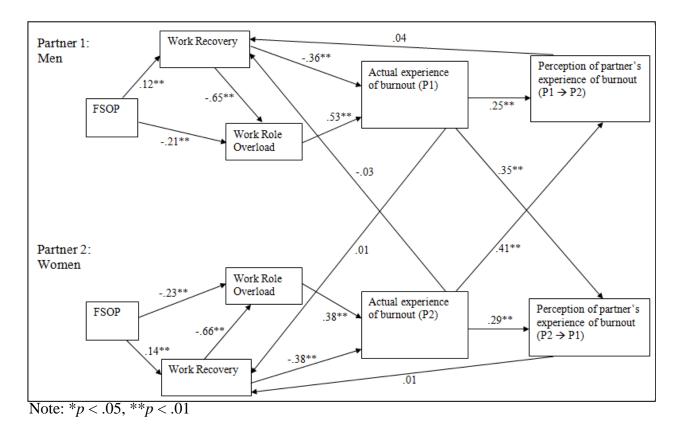


Figure 2 – Path Estimates of the Tested Model

Additionally, Hypothesis 3 was fully supported; family-supportive organization perceptions positively related to recovery from work (men: B = .12, p < .01; women: B = .14, p < .01). As both men and women's experiences of family-supportive organization perceptions increased, so did their recovery from work. Hypothesis 4 too was supported for both men and women; work role overload positively related to an individual's actual experience of burnout (men: B = .53, p < .01; women: B = .38, p < .01). Each partner's work role overload increased in conjunction with increases in their own burnout.

Furthermore, Hypothesis 5 was also supported for men and women; recovery from work negatively related to an individual's actual experience of burnout (men: B = -.36, p < .01; women: B = -.38, p < .01). As men and women reported more recovery from work, they also reported lower levels of burnout. Hypothesis 8 was also fully supported; an individual's actual experience of burnout positively related to his/her perceptions of his/her partner's burnout (men:

B = .25, p < .01; women: B = .29, p < .01). This suggests that, as both men and women's burnout increases, so do their perceptions of their partners' burnout. However, Hypothesis 9 was not supported for either men or women; an individual's perception of his/her partner's burnout did not significantly negatively relate to the individual's recovery from work (men: B = .04, p > .05; women: B = .01, p > .05). The lack of significance in this relationship indicates that the proposed feedback loop does not exist for the present model.

<u>Unstandardized Estimates of Crossover Effects: Inter-Individual Effects</u>

In the present model, although two sets of crossover effects were hypothesized, only one set was supported. Specifically, Hypothesis 6 (i.e., an individual's actual experience of burnout is negatively related to his/her partner's work recovery) was not supported for either men or women, but Hypothesis 7 was fully supported - an individual's actual experience of burnout positively related to the partner's perception of the individual's burnout. Given that Hypothesis 6 was not supported, an individual's recovery from work was not shown to increase as his/her partner's actual experience of burnout decreased (men: B = .01, p > .05; women: B = .03, p > .05). Because Hypothesis 7 was supported, as an individual's actual experience of burnout increased, so did his/her partner's perception of his/her burnout (men: B = .35, p < .01; women: B = .41, p < .01). These relationships will be further elaborated in the discussion.

DISCUSSION

This study is a valuable addition to current literature and theory because it expands the body of research investigating the effects of intra-individual relationships on dyadic interindividual crossover effects. Although not all of the proposed relationships functioned as hypothesized, this study still adds to research on dyadic effects. Results and contributions of the current study along with suggestions for future research are next expanded with regard to three distinct topics. The first topic is a discussion of the model, specifically with regard to crossover effects. The second topic is an evaluation of the non-significant perceptions-recovery feedback loop. Finally, in the third topic, the extensive impact of family-supportive organization perceptions is covered.

The Model and Crossover Effects

As predicted and suggested by Meijman and Mulder with their effort-recovery model (1998), as recovery from work increased, work role overload and burnout decreased for an individual. Furthermore, while these intra-individual relationships successfully led the way to the investigation of the crossover effects of the decrease in an individual's burnout, the hypothesized results are not present. Specifically, in the present model, the crossover effects of an individual's burnout to his/her partner's recovery from work were not significant. This lack of empirical support from the present study to support past literature and theory may be due to the assessment of recovery. In the present model, recovery from work was assessed with the overall work recovery measure, but future research should investigate the effect of the individual components of the construct, such as psychological detachment and relaxation.

Post-hoc analyses of the effects of the individual components of recovery indicated that the relaxation component of the construct may in fact be driving the relationships between recovery and the other variables in the model. When included on its own, the model using the

relaxation component of work recovery has a χ^2 value of 43.59, which is less than the original model fit ($\chi^2 = 48.07$), and as a result indicates an improved fit (Byrne, 2010). As such, relaxation may be the best driver of the relationships in the present model, and this notion is further supported in that conceptually, relaxation implies replenishment of used energy and resources. This replenishment of resources is the opposite of burnout under conservation of resources theory (Hobfoll, 1989). To be exact, burnout is the using up of resources without replacement, but if one can replenish his/her lost resources through relaxation, then he/she should experience less burnout. Moreover, the other components of recovery (i.e., psychological detachment, control, mastery) do not have the same underlying implication of replenishment of lost resources, and as a result, may not be as influential as relaxation in the model. In sum, future research into the effects of the various components of the work recovery construct may produce significant crossover effects between an individual's actual experience of burnout and his/her partner's work recovery.

Another potential argument for the non-significant relationship between an individual's burnout and his/her partner's recovery from work is that there may be a variety of moderators that influence the relationship. Specifically, the number of hours that an individual works may affect the proposed relationship in that individuals with more work hours may have more burnout and thus have a higher chance of affecting their partners' work recovery. Other variables to consider that may influence the relationship between an individual's burnout and his/her partner's recovery from work are length of relationship and income. In support of the potential impact that length of relationship may play in the proposed relationship, burnout was shown to negatively correlate with length of relationship for both men and women (see Table 2).

Additionally, work hours for men and women negatively related to work recovery for men and women, respectively; while income was negatively related to burnout for men. Overall, these

additional variables have the potential to help explain the non-significant relationship between individual burnout and partner recovery, and thus future research on the issue should incorporate the suggested variables.

Overall, although the inter-individual relationship between an individual's burnout and his/her partner's work recovery did not work in the present model, the crossover effect of an individual's burnout to his/her partner's perception of the individual's burnout was significant. This significant relationship adds to previous research (Matthews et al., 2006; Westman & Vinokur, 1998) that partners are capable of accurately perceiving each other's emotional states. Furthermore, because both the individual's burnout and the partner's burnout significantly related to the individual's perception of his/her partner's burnout, it is not sufficient to assess individual experiences or partner experiences alone when perceptions are being investigated. However, although these relationships to perceptions of partner burnout were significant, perceptions did not significantly relate to any outcomes in the model; specifically, perceptions did not relate significantly to recovery.

Non-Significant Feedback Loop

In the present model, the perceptions of partner burnout variable did not significantly link to individuals' work recovery, and thus, the predicted feedback loop was not created (Hypothesis 9). Perceptions of partner burnout did not work in this model, but that could be a function of the constructs examined. For example, the assessment of the overall work recovery construct may be interfering with producing significant results. As previously mentioned, the argument could be made that it is not the overall work recovery measure that links to perceptions of partner burnout, but rather, one or two of the components could produce the proposed negative relationship (see Sonnentag & Bayer, 2005; Sonnentag & Fritz, 2007). Furthermore, Matthews et al. (2006) observed that perceptions of conflict were related to more relationship tension. As a result,

another option may be that it is better to investigate how perceptions of partners affect couple level variables, which then may affect individual level constructs (e.g., well-being). Nonetheless, the non-significant relationship is of particular interest because it may ultimately insight future investigations to determine the cause of the non-significant relationship.

Family-Supportive Organization Perceptions

In the literature, family-supportive organization perceptions was initially offered as a mediator between family-friendly work benefits and positive work outcomes (e.g., decrease in work-family conflict and increase in job satisfaction; Allen, 2001). However, in the present study, the significance of the model shows that family-supportive organization perceptions can also serve as a valuable predictor of variables such as overload, recovery and burnout. As such, future studies that incorporate family-supportive organization perceptions as a predictor are also appropriate, just as investigating additional meditational effects of family-supportive organization perceptions.

With regard to the specific relationship between family-supportive organization perceptions and work role overload, it was observed that individuals with more family-supportive organization perceptions reported lower levels of work role overload. This finding is especially applicable in the applied sector in that it further emphasizes the role that a family-supportive organization can play in mitigating the negative experiences that employees can encounter. Grandey, Cordeiro, and Michael (2007) observed that family-supportive organization perceptions and work hours combine to affect individuals' work-family conflict. That is, individuals who reported higher levels of family-supportive organization perceptions also reported a decrease in the positive relationship between work hours and work-family conflict. Thus, the present study combined with past research supports the idea that organizations need to

consider not only implementing family-friendly policies, but also need to maintain a family-friendly culture so that employees are maximally able to benefit.

In addition to investigations of the effect of family-supportive organization perceptions on negative experiences, the results of this study showed that family-supportive organization perceptions relate to positive aspects of work as well. Specifically, an individual's recovery from work increased as family-supportive organization perceptions increased. Furthermore, given the negative relationship displayed between an individual's work recovery and his/her burnout, the study provides additional evidence of the effect that family-supportive organization perceptions can have on harmful outcomes, even through indirect means. Haar and Roche (2010) noted the indirect role that family-supportive organization perceptions can play between variables when they observed that life satisfaction significantly mediated the relationship between family-supportive organization perceptions and the outcome variables of job satisfaction, turnover intent, and job burnout. Moreover, investigations of indirect relationships is an outlet for future research particularly because it would help to answer the call for research that seeks to examine and explain complex relationships (Casper et al., 2007).

In line with discussing future research are the results of post-hoc analyses completed on family-supportive organization perceptions. Post hoc analyses were run on the data to test whether there were any differences between the levels of the investigated variables for men and women. The results of the post hoc paired samples *t*-tests showed that the only variable that was significantly different between men and women was family-supportive organization perceptions (see Table 1 for exact values). Women reported significantly higher levels of family-supportive organization perceptions than did men. Some potential explanations of the difference include that women seek out employers who are more supportive of family needs than do men due to a higher salience of family issues for women than men (see Cook, 2009). Also, in line with Cook

(2009) that women are more aware of available family support at work, men may not value family support from their employer as highly as women do, and as a result, do not think or care about the family-supportiveness of their employer as much as women. Theoretical support for the difference may incorporate role theory (Biddle, 1986), and literature on the typical roles of men and women and the resulting differences in needs (e.g., dual-earners' experiences of stress and overload; Santora & Esposito, 2010).

Other future research that is of consideration is the investigation of the potential impact of family-supportive organization perceptions and how to make an organization family supportive. There presently exists some research suggesting predictors of family-supportive organization perceptions (Lapierre et al., 2008), but given the impact that family-supportive organizations has been shown to have on work outcomes, additional research which illuminates specific applied actions that insight family-supportive organization perceptions needs to be identified and completed. Of note, Shockley and Allen (2007) investigated the moderating effect of family-supportive organization perceptions on the relationship between flexible work arrangements and work-family interference, but they did not observe any significant interactions of family-supportive organization perceptions. However, although this particular set of relationships did not work, future research should continue to consider the impact that family-supportive organization perceptions has on family-friendly interventions such as flexible work arrangements.

Limitations

In the present study, the reception of the results may be affected by the presence of limitations, and thus, those limitations are addressed. To start, the sample for the present study was predominantly wealthy white-collar couples. As such, there may be some issues with generalizability of the results of the current study to other populations; however, because the

method for this study was a snowball sampling method, a convenience sample was obtained. That said, a nationally representative or generalizable sample was not sought. Future research should consider using other samples that will generalize to additional populations.

In addition to the lack of generalizability of the present study, the data was obtained via self-report. Although past research has emphasized that self-report methodology can increase the common method variance and as a result distort results (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), the use of self-report methodology in the present study is appropriate and necessary because the measures being assessed are based around individual perceptions (see Lance, Dawson, Birklebach, & Hoffman, 2010). Furthermore, although some past research has called into question the use of self-report measures when assessing burnout (Schaufeli, Enzmann, & Girault, 1993), the use of self-report measures in assessing burnout is generally accepted in current practice and is considered an adequate method of investigating burnout (e.g., Demerouti, Mostert, & Bakker, 2010; ten Brummelhuis, Bakker, & Euwema, 2010).

Another limitation associated with common method bias is the fact that the same measure of burnout is used to assess both individual levels of burnout and perceptions of partner burnout. This is a potential issue due to the fact that the relationship between the variables may be inflated due to overlap and similarity between the measure items. Research has shown that when assessing the same or similar constructs, it is appropriate to use different measures (i.e., multitrait multi-method; Campbell & Fiske, 1959), but recently, Lance et al. (2010) reported that there may not be as much of an impact on variance from a lack multi-trait multi-method as once previously thought. Specifically, Lance et al. found that the inflationary effect of mono-method is balanced by the increase in measurement error. Nevertheless, future research should assess the utility of using multiple measures of burnout when investigating relationships between an individual's burnout and his/her perceptions of his/her partner's burnout. One way to do this

would be to use one measure of burnout to assess an individual's burnout (e.g., the Shirom-Melamed Burnout Measure; Shirom & Melamed, 2006) and a different measure of burnout to assess perceptions of partner burnout (e.g., the Oldenburg Burnout Inventory; Demerouti et al., 2010).

Finally, despite the call of present work-family research to complete studies using longitudinal research (Casper et al., 2007), the present study is a cross-sectional design. To that end, the cross-sectional design of the study should not limit the contribution of the study to the present body of work-family research, but rather, because this study was completed through the use of a complex and rigorous statistical design and is an assessment of crossover relationships between members of a dyad, this study should be valued as an answer to the call for studies which incorporate advanced statistical designs and intricate models (Casper et al., 2007). Overall, this study, despite its limitations, does add to the work-family literature.

CONCLUSIONS

The present study adds to the present body of literature on the subject of dyadic crossover, specifically regarding the influence of family-supportive organization perceptions on the amount of burnout partners in a cohabiting dyad perceive in each other. This information may be useful to organizations and couples in recognizing that employees are not solely influenced by the work environment but are rather a composite of influences from their work environments, their partners' work environments, their home-lives, and their own perceptions of their partners' well-being. Furthermore, the emphasis on this interdependence of individuals and domains highlights the issue that burned-out employees have the potential to affect not only themselves, but also their partners and ultimately their partners' work. Overall, this study is further evidence of the extensive and intertwined intra- and inter-individual effects that are capable of influencing individuals and their partners.

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APPENDIX A

FAMILY-SUPPORTIVE ORGANIZATION PERCEPTIONS MEASURE

To what extent do you agree that each of the following statements represent the philosophy or beliefs of your organization (*remember*, *these are not your own personal beliefs*—but pertain to what you believe is the philosophy of your organization):

- 1. Work should be the primary priority in a person's life (R)
- 2. Employees who are highly committed to their personal lives cannot be highly committed to their work (R)
- 3. Attending to personal needs, such as taking time off for sick children is frowned upon (R)
- 4. Individuals who take time off to attend to personal matters are not committed to their work (R)
- 5. It is assumed that the most productive employees are those who put their work before their family life (R)
- 6. The ideal employee is the one who is available 24 hours a day (R)

Note. (R) indicates the item is reverse coded so that higher scores indicate more positive perceptions of the organization's support for work/nonwork balance.

Scale. 1 = Not at all, 2 = Just a little, 3 = A moderate amount, 4 = Quite a lot, 5 = A great deal

APPENDIX B

SHIROM-MELAMED BURNOUT MEASURE (SMBM)

Below are a number of statements that describe different feelings that you may feel at work. Please indicate how often, in the past 30 workdays, you have felt each of the following feelings:

- P 1. I feel tired
- P 2. I have no energy for going to work in the morning
- P 3. I feel physically drained
- P 4. I feel fed up
- P 5. I feel like my "batteries" are "dead"
- P 6. I feel burned out
- C 7. My thinking process is slow
- C 8. I have difficulty concentrating
- C 9. I feel I'm not thinking clearly
- C 10. I feel I'm not focused in my thinking
- C 11. I have difficulty thinking about complex things
- E 12. I feel I am unable to be sensitive to the needs of coworkers and customers
- E 13. I feel I am not capable of investing emotionally in coworkers and customers
- E 14. I feel I am not capable of being sympathetic to co-workers and customers

Note. The letters before each item represent the three subscales of the Shirom-Melamed Burnout Measure (SMBM). The three subscales are: P = physical fatigue; E= emotional exhaustion; and C= cognitive weariness.

Scale. 1 = Never or Almost Never, 2 = Very Infrequently, 3 = Quite infrequently,

4 = Sometimes, 5 = Quite Frequently, 6 = Very Frequently, 7= Always or Almost Always

APPENDIX C

PARTNER PERCEPTION OF BURNOUT SCALE

Below are a number of statements that describe different feelings that your partner may feel at work. Please indicate how often, in the past 30 workdays, you think your partner has felt each of the following feelings:

- P 1. He/she seems tired
- P 2. He/she has no energy for going to work in the morning
- P 3. He/she seems physically drained
- P 4. He/she seems fed up
- P 5. He/she seems like his/her "batteries" are "dead"
- P 6. He/she seems burned out
- C 7. His/her thinking process is slow
- C 8. He/she has difficulty concentrating
- C 9. He/she seems to not be thinking clearly
- C 10. He/she seems to not be focused in his/her thinking
- C 11. He/she has difficulty thinking about complex things
- E 12. He/she seems to feel he/she is unable to be sensitive to the needs of coworkers and customers
- E 13. He/she seems to feel he/she is not capable of investing emotionally in coworkers and customers
- E 14. He/she seems to feel he/she is not capable of being sympathetic to co-workers and customers

Note. The letters before each item represent the three subscales of the Shirom-Melamed Burnout Measure (SMBM). The three subscales are: P = physical fatigue; E= emotional exhaustion; and C= cognitive weariness.

Scale. 1 = Never or Almost Never, 2 = Very Infrequently, 3 = Quite infrequently, 4 = Sometimes, 5 = Quite Frequently, 6 = Very Frequently, 7= Always or Almost Always

APPENDIX D

WORK ROLE OVERLOAD SCALE

Please respond to the following statements based on how strongly you agree or disagree with each statement:

- 1. I have to do things that I do not really have the time and energy for.
- 2. I need more hours in the day to do all the things that are expected of me.
- 3. I cannot ever seem to catch up.
- 4. I do not ever seem to have any time for myself.
- 5. There are times when I cannot meet everyone's expectations.

Scale. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

APPENDIX E

RECOVERY QUESTIONNAIRE

Please respond to the following statements based on how strongly you agree with each statement:

- PD 1. During time after work, I forget about work.
- PD 2. During time after work, I don't think about work at all.
- PD 3. During time after work, I distance myself from my work.
- PD 4. During time after work, I get a break from the demands of work.
- R 5. During time after work, I kick back and relax.
- R 6. During time after work, I do relaxing things.
- R 7. During time after work, I use the time to relax.
- R 8. During time after work, I take time for leisure.
- M 9. During time after work, I learn new things.
- M 10. During time after work, I seek out intellectual challenges.
- M 11. During time after work, I do things that challenge me.
- M 12. During time after work, I do something to broaden my horizons.
- C 13. During time after work, I feel like I can decide for myself what to do.
- C 14. During time after work, I decide my own schedule.
- C 15. During time after work, I determine for myself how I will spend my time.
- C 16. During time after work, I take care of things the way that I want them done.

Note. The four subscales are: PD = Psychological Detachment; R = Relaxation; M = Mastery; C = Control.

Scale. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

APPENDIX F
FACTOR ANALYSIS: SMBM MALE

	Component		
	1	2	3
3. I feel physically drained	0.84		
5. I feel like my "batteries" are "dead"	0.81		
6. I feel burned out	0.81		
2. I have no energy for going to work in the morning	0.78		
1. I feel tired	0.78		
4. I feel fed up	0.76		
10. I feel I'm not focused in my thinking		0.86	
11. I have difficulty thinking about complex things		0.84	
9. I feel I'm not thinking clearly		0.84	
8. I have difficulty concentrating		0.82	
7. My thinking process is slow		0.79	
14. I feel I am not capable of being sympathetic to co-workers and customers			0.90
13. I feel I am not capable of investing emotionally in coworkers and customers			0.86
12. I feel I am unable to be sensitive to the needs of coworkers and customers			0.82

Note. The results shown are from the principle components analysis completed at the item level. A Varimax rotation with Kaiser Normalization was used. Only loadings above 0.40 are shown. Component 1 consists of the items associated with the physical fatigue subscale. Component 2 consists of the items associated with the cognitive weariness subscale, and component 3 consists of the items associated with the emotional exhaustion subscale.

APPENDIX G
FACTOR ANALYSIS: SMBM FEMALE

	Component		
	1	2	3
3. I feel physically drained	0.84		
5. I feel like my "batteries" are "dead"	0.84		
6. I feel burned out	0.79		
2. I have no energy for going to work in the morning	0.75		
1. I feel tired	0.72		
4. I feel fed up	0.72		
10. I feel I'm not focused in my thinking		0.87	
11. I have difficulty thinking about complex things		0.85	
9. I feel I'm not thinking clearly		0.85	
8. I have difficulty concentrating		0.84	
7. My thinking process is slow		0.81	
14. I feel I am not capable of being sympathetic to co-workers and customers			0.89
13. I feel I am not capable of investing emotionally in coworkers and customers			0.85
12. I feel I am unable to be sensitive to the needs of coworkers and customers			0.84

Note. The results shown are from the principle components analysis completed at the item level. A Varimax rotation with Kaiser Normalization was used. Only loadings above 0.40 are shown. Component 1 consists of the items associated with the physical fatigue subscale. Component 2 consists of the items associated with the cognitive weariness subscale, and component 3 consists of the items associated with the emotional exhaustion subscale.

APPENDIX H
FACTOR ANALYSIS: RECOVERY MALE

	Component			
	1	2	3	4
6. During time after work, I do relaxing things.	0.91			
7. During time after work, I use the time to relax.	0.88			
8. During time after work, I take time for leisure.	0.84			
5. During time after work, I kick back and relax.	0.83			
10. During time after work, I seek out intellectual challenges.		0.88		
12. During time after work, I do something to broaden my horizons.		0.86		
11. During time after work, I do things that challenge me.		0.85		
9. During time after work, I learn new things.		0.81		
1. During time after work, I forget about work.			0.89	
3. During time after work, I distance myself from my work.			0.89	
2. During time after work, I don't think about work at all.			0.88	
4. During time after work, I get a break from the demands of work.			0.67	
15. During time after work, I determine for myself how I will spend my time.				0.89
14. During time after work, I decide my own schedule.				0.86
16. During time after work, I take care of things the way that I want them done.				0.78
13. During time after work, I feel like I can decide for myself what to do.				0.65

Note. The results shown are from the principle components analysis completed at the item level. A Varimax rotation with Kaiser Normalization was used. Only loadings above 0.40 are shown. Component 1 consists of the items associated with the relaxation subscale. Component 2 consists of the items associated with the mastery subscale. Component 3 consists of the items associated with the psychological detachment subscale, and component 4 consists of the items associated with the control subscale.

APPENDIX I
FACTOR ANALYSIS: RECOVERY FEMALE

	Component			
	1	2	3	4
7. During time after work, I use the time to relax.	0.89			
6. During time after work, I do relaxing things.	0.86			
8. During time after work, I take time for leisure.	0.81			
5. During time after work, I kick back and relax.	0.79			
11. During time after work, I do things that challenge me.		0.88		
12. During time after work, I do something to broaden my horizons.		0.88		
10. During time after work, I seek out intellectual challenges.		0.87		
9. During time after work, I learn new things.		0.80		
14. During time after work, I decide my own schedule.			0.87	
15. During time after work, I determine for myself how I will spend my time.			0.82	
16. During time after work, I take care of things the way that I want them done.			0.80	
13. During time after work, I feel like I can decide for myself what to do.			0.79	
1. During time after work, I forget about work.				0.90
2. During time after work, I don't think about work at all.				0.88
3. During time after work, I distance myself from my work.				0.86
4. During time after work, I get a break from the demands of work.				0.72

Note. The results shown are from the principle components analysis completed at the item level. A Varimax rotation with Kaiser Normalization was used. Only loadings above 0.40 are shown. Component 1 consists of the items associated with the relaxation subscale. Component 2 consists of the items associated with the mastery subscale. Component 3 consists of the items associated with the control subscale, and component 4 consists of the items associated with the psychological detachment subscale.

VITA

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