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**Work-related helping and family functioning: A work–home resources perspective**

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Research on interpersonal organizational citizenship behaviors (OCB-Is) – discretionary and constructive prosocial actions directed at colleagues and not included in job descriptions (Lee & Allen, 2002), has burgeoned, reflecting a growing interest in prosocial behaviors at work. Scholars traditionally treat enacting OCB-Is as desirable for employees, with research showing that helping colleagues can enhance positive affect and job performance (Glomb, Bhave, Miner, & Wall, 2011; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Sonnentag & Grant, 2012). However, there is mounting evidence that performing OCB-Is may backfire and result in detrimental outcomes such as fatigue and reduced work progress (Bolino, Hsiung, Harvey, & LePine, 2015; Koopman, Lanaj, & Scott, 2016).

While this research has been valuable, our knowledge of the consequences of OCB-Is is still incomplete. First, much of this work has been limited to *performing* OCB-Is at the expense of *receiving* them. This neglect is surprising given that OCB-Is occur in dyadic relations, where individuals can be both actors and recipients of OCB-Is, and these dynamics of giving and receiving help may shape employees' experiences (Nahum-Shani & Bamberger, 2011). Further, receiving OCB-Is has “bright” and “dark” sides that mirror those associated with performing OCB-Is (as we elaborate on later), and may therefore alter the effects of OCB-I enactment in intriguing ways.

Second, prior research has mainly investigated the effects of OCB-Is on work-related outcomes (for a review, see MacKenzie, Podsakoff, & Podsakoff, 2018), while overlooking its influence on family life (for exceptions, see Halbesleben, Harvey, & Bolino, 2009; Lin, Ilies, Pluut, & Pan, 2017). As OCB-Is are discretionary actions that serve a relational purpose (Lee & Allen, 2002), choosing how often to engage in OCB-Is could have implications for employees'

interactions with their families. For example, investing emotional resources into helping co-workers could drain employees' resources and prevent them from providing emotional support to their spouses at home. Given that the work–family interface can affect one's general well-being and performance in each domain (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; McNall, Nicklin, & Masuda, 2010), it is essential to understand when, how, and why OCB-I engagement can spill over to affect family outcomes. This knowledge can help employees make decisions to offer help more rationally and help managers identify ways to better leverage OCB-Is so as to build a sustainable climate that enables employees to be both good workplace citizens and family members.

We therefore seek to redress the aforementioned concerns by considering how the interplay of enacting and receiving OCB-Is affects employees' family life. Drawing on the Work-Home Resources (W-HR) model (ten Brummelhuis & Bakker, 2012), we adopt a balanced view on the spillover effects of performing OCB-Is. We propose that while OCB-I enactment can impair family life via depleting personal resources and eliciting exhaustion, it can also enrich family life by building resources such as feelings of personal accomplishment.

Further, we build new theory within the W-HR framework by examining OCB-I receipt as a moderator of the spillover effects of OCB-I enactment on family outcomes. While the W-HR model identifies receiving OCB-Is (a form of social support) as a contextual resource, it can also threaten self-esteem (Beehr, Bowling, & Bennet, 2010; Deelstra et al., 2003). We thus go beyond the main effects of receiving or enacting OCB-Is suggested by the W-HR model (ten Brummelhuis & Bakker, 2012) and examine the interactive dynamics of OCB-I enactment and receipt, which are both resource consuming and resource generating. Specifically, we argue that receiving OCB-Is may buffer against the resource depletion induced by OCB-I enactment, yet it

may also diminish feelings of personal accomplishment generated by performing OCB-Is. We present our conceptual model in Figure 1.

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Insert Figure 1 about here  
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Our research makes several contributions to the literatures on OCBs and the work–family interface within the W-HR framework. First, we offer a theoretical integration of the consequences of enacting and receiving OCB-Is, which brings together fragmented research streams within the frameworks of the W-HR model and general resource theories. The simultaneous consideration of enacting and receiving OCB-Is can potentially explain the sometimes-divergent findings with respect to the effects of OCB-I (e.g., Bolino et al., 2015; Glomb et al., 2011).

Further, we study the effects of OCB-I enactment on family outcomes, adopting a balanced approach that examines both resource-depleting and enriching mechanisms. This could extend our understanding of the potentially null-relationships between OCB-I enactment and family outcomes—these may not be a result of work–family segmentation, but may instead arise from countervailing positive and negative effects (Edwards & Rothbard, 2000). Our study also goes beyond previous studies that simultaneously examines the costs and benefits of performing OCB-Is (e.g., Koopman et al., 2016; Lin et al., 2017) by adopting a longer temporal interval, and thus shows that performing OCB-Is has enduring consequences.

Notably, our study does not assess employees’ perceptions of whether their work experiences interfere with or enhance their family lives (as most research on work-family conflict and enrichment is wont to do), but instead examines family outcomes through the eyes of the spouse. Indeed, researchers have urged the necessity of examining observable behavioral

outcomes (Bakker, Demerouti, & Sanz-Vergel, 2014). As such, our work demonstrates the strength of the influence that OCB-I enactment has on employees' behaviors at home, such that their partners are able to accurately observe these effects.

Finally, our study provides some evidence that qualitatively distinguishes OCB-I engagement from other more typical job demands (e.g., quantitative workload). While high job demands are likely to be associated with high exhaustion and low personal accomplishment, we propose that engaging in OCB-Is would instead be associated with high exhaustion *and* personal accomplishment. Such differences not only highlight OCB-I as a unique demand (potentially due to its prosocial nature), but also corroborate other research showing that personal accomplishment operates differently from the other indicators of burnout (Bakker & Heuven, 2006; Kristensen, Borritz, Villadsen, & Christensen, 2005; Schaufeli & Taris, 2005).

### **Theoretical Overview and Hypothesis Development**

Resource-based theories, such as the W-HR Model (ten Brummelhuis & Bakker, 2011) and Conservation of Resources (COR) theory (Hobfoll, Halbesleben, Neveu, & Westman, 2018) provide us with a relevant framework to understand work–family spillover processes via resource enrichment or depletion. Central to these theories is the notion that resources, including personal (e.g., self-esteem, energy) and contextual (e.g., social support) resources, are necessary for goal striving (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014). Further, the W-HR model specifies various classes of personal resources, such as physical, psychological, and affective resources, that may be depleted or developed as a result of contextual demands and resources at home or in the workplace (Hobfoll, 1989; ten Brummelhuis & Bakker, 2012). Loss or threat to one's resources can lead to the experience of fatigue or distress (Hobfoll, 1989). However, investing resources can also allow individuals to build more resources. As such,

individuals are motivated to protect their existing resources from depletion, and to accumulate more resources (Hobfoll et al., 2018).

Beyond the general predictions of these theories, the W-HR model specifies precisely how experiences at work (home) spill over to the home (work) domain (ten Brummelhuis & Bakker, 2012). That is, work–family conflict occurs when demands in one domain drain personal resources and consequently hamper outcomes in the other domain, whereas enrichment emerges when experiences in one domain build personal resources and improve functioning in the other domain. We thus draw on the W-HR model to examine how employees’ OCB-I enactment results in resource depletion and generation, and the ensuing consequences for family functioning. Specifically, we examine exhaustion as depletion of personal energetic resources and feelings of personal accomplishment as accumulation of psychological resources, as a result of performing OCB-Is.

### **OCB Enactment as Resource Depleting**

We first propose that OCB-I enactment is resource depleting and could result in exhaustion. Exhaustion, a core component of burnout (Maslach & Jackson, 1981; Shirom, 1989), is a “chronic state of emotional and physical depletion” (Cropanzano, Rupp, & Byrne, 2003, p. 160). Based on the W-HR model, effortful activities drain individuals’ cognitive, emotional, and physical energies (ten Brummelhuis & Bakker, 2012), and chronic resource depletion arising from dealing with workplace demands can give rise to exhaustion (Demerouti et al., 2001). Employees engaging in OCB-Is draw on their personal resources to assist their coworkers with various tasks. For instance, covering the duties of an absent colleague demands not only time (Lin et al., 2017), but also the additional expenditure of cognitive and emotional energy—

employees expend their personal energies to complete work tasks and are emotionally invested in helping colleagues (Joireman, Kamdar, & Daniels, 2006; Rioux & Penner, 2001).

While the loss of one's valued resources is in its own right highly salient and psychologically stressful (Hobfoll, 2011), OCB-I enactment can be even more fatiguing for employees because the depleted resources are not used toward advancing their own work goals (Koopman et al., 2016). Barnes et al. (2008) showed that employees encounter a trade-off between focusing on their own work and helping others when having limited time. That is, in line with the W-HR model, employees who perform OCB-Is may have inadequate remaining resources to manage other contextual demands, and thus experience stressful consequences such as greater time pressure, resulting in further strain (Bergeron, 2007; Lazarus & Folkman, 1987; ten Brummelhuis & Bakker, 2012). Indeed, studies at the within-individual level show that performing OCB-Is can deplete employees' resources later in the day (in the forms of depletion, emotional exhaustion, fatigue; see Gabriel, Koopman, Rosen, & Johnson, 2018; Koopman et al., 2016; Lanaj et al., 2016). However, as exhaustion is often conceptualized as a chronic psychological state, examining the association between OCB-Is and exhaustion over a longer temporal interval (as in our study) would serve to highlight how the resource depletion associated with OCB-Is can persist over time. We therefore propose:

*Hypothesis 1a:* OCB-I enactment is positively related to exhaustion.

### **OCB-I Enactment as Resource Enriching**

Conservation of resources theory and the W-HR model further suggests that resource investment may lead to acquisition of other resources (Hobfoll, 1989, 2011; ten Brummelhuis & Bakker, 2012). In the context of OCB-I enactment, employees' resource investment toward helping their coworkers could generate resources, and there is evidence that OCBs are indeed



linked to higher performance ratings and job satisfaction (Koopman et al., 2016; Whiting, Podsakoff, & Pierce, 2008). We contend that helping colleagues generates additional personal resources for employees, through boosting their feelings of personal accomplishment. Personal accomplishment refers to employees' sense of professional efficacy and feelings of achievement and meaning at work (Maslach, Schaufeli, & Leiter, 2001). It serves as a key internal resource for employees' goal striving (Bandura, 1997; Hobfoll, 2002), and is a personal resource in the W-HR model (ten Brummelhuis & Bakker, 2012).

Helping coworkers can bolster employees' efficacy beliefs directly and indirectly. First, providing social support directly enhances employees' perceived competence and self-esteem (Batson, 1998; Williamson & Clark, 1989) by allowing them to demonstrate that they are in control of their environment and that they are "capable of effecting positive change" in the workplace (Rosso, Dekas, & Wrzesniewski, 2010, p. 110). Further, being able to successfully help their colleagues with work-related duties highlights their ability to manage various work duties, including those that may be outside of their typical job roles. Supporting this assertion, psychological studies report that volunteering or providing social support is associated with greater self-efficacy and feelings of competence (Caprara & Steca, 2005; Schwartz & Sendor, 1999; Weinstein & Ryan, 2010).

In addition, according to the W-HR, enacting OCBs may generate energies in the short-term, such as positive affect (Glomb et al., 2011; Koopman et al., 2016; Lin et al., 2017), which over time could have implications for employees' feelings of personal accomplishment. As COR theory suggests (Hobfoll et al., 2018), resources do not exist in isolation, but they tend to be accrued together. Consistent with this perspective, positive emotions can enhance self-efficacy

through promoting positive situational appraisals and successful adaptation to stress (Gloria, Faulk, & Steinhardt, 2013; Salanova, Bakker, & Llorens, 2006; Webster & Hadwin, 2015).

Similarly, employees who perform OCB-Is are likely to generate psychological resources (and feelings of personal accomplishment) for themselves through the experience of heightened meaningfulness at work (Maslach et al., 2001). Several scholars suggested that employees find meaning and purpose in their work through making a positive difference toward others' lives (Rosso et al., 2010; Wrzesniewski, Dutton, & Debebe, 2003). This perceived prosocial impact is heightened when employees have frequent opportunities to benefit others, especially when they have direct contact with their beneficiaries (Grant, 2007). Through performing interpersonal OCB-Is, employees have the opportunity to care for and empathize with their colleagues, and are able to directly witness the positive impact of their helping behaviors; they will therefore increase their experience of meaning at work (Lam, Wan, & Roussin, 2016; Sonnentag & Grant, 2012). In the parlance of the W-HR model, when employees use their resources toward helping others on a regular basis, they can experience "refuels" in their resource supply through the experience of positive emotions, which gradually builds their efficacy beliefs. Taken together, although OCB-I enactment consumes some resources, it can also facilitate the acquisition of other resources such as self-efficacy, thus boosting feelings of personal accomplishment.

*Hypothesis 1b:* OCB-I enactment is positively related to personal accomplishment.

### **Enrichment and Depletion Processes Linking Work and Family**

Extending the arguments above to the family domain, we draw upon the W-HR model to elucidate how exhaustion and personal accomplishment can influence employees' outcomes at home. According to the W-HR model, work-family conflict emerges when employees have insufficient resources to shoulder their familial duties as a result of managing workplace

demands (ten Brummelhuis & Bakker, 2012). With insufficient resources, exhausted employees are unable to meet their familial obligations (e.g., childcare, completing household chores; Chen et al., 2014) and have poor family performance (Li & Ilies, 2018). Moreover, exhausted employees may attempt to conserve their remaining resources by adjusting their behaviors (Hobfoll, 1989; ten Brummelhuis & Bakker, 2012). This could lead employees to withdraw from family duties or situations, especially those that are cognitively or emotionally demanding, such as making a difficult family decision or offering emotional support to a distressed family member. Indeed, research has shown that exhaustion is related to work–family conflict, as well as anger and social withdrawal (Greenbaum, Quade, Mawritz, Kim, & Crosby, 2014; Nohe, Meier, Sonntag, & Michel, 2015; Story & Repetti, 2006). Therefore, we hypothesize:

*Hypothesis 2:* Exhaustion is (a) positively related to marital withdrawal behavior and (b) negatively related to family performance.

Theory and research on work–family enrichment has examined how work events or experiences build resources and enhance family functioning (Greenhaus & Powell, 2006). We expect feelings of personal accomplishment to be a positive personal resource for employees, enhancing their family performance and allowing them to have positive interactions with their families, for several reasons. First, research has found that domain-specific self-efficacy is highly correlated with generalized self-efficacy (Betz & Klein, 1996), and that increases in domain-specific and global self-efficacy can be enduring across months (Grocott & Hunter, 2009). We expect that feelings of personal accomplishment at work could similarly increase employees' generalized sense of self-efficacy. In the W-HR model, perceptions of self-efficacy and competence are key personal resources that “facilitate efficient and effective coping” (ten Brummelhuis & Bakker, 2012, p. 553), and these employees are thus likely to perceive that they are more able to manage their task and relational demands in other domains (i.e., at home).

Second, as COR theory and the W-HR model suggest, accruing one type of resource facilitates the accumulation of other types of resources (Hobfoll, 2011; ten Brummelhuis & Bakker, 2011). We posit that feeling competent about the work domain can generate other personal resources such as optimism and a positive outlook toward life, which, together with increased personal accomplishment, would increase employees' willingness to invest resources gained from work into performing their household duties or engaging with their loved ones (Boyar & Mosley, 2007; Wayne, Grzywacz, Carlson, & Kacmar, 2007), as opposed to conserving their resources and withdrawing from family interactions. Indeed, research showed that greater perceived prosocial impact during the day was positively related to positive affect at home later in the night, and this was mediated by perceived competence (Sonnetag & Grant, 2012). While these results are at the day-level, this study provides initial support for our assertion that consistently performing OCB-Is at work can have positive effects for family life through increasing feelings of personal accomplishment. We hypothesize that:

*Hypothesis 3:* Personal accomplishment is (a) negatively related to marital withdrawal behaviors, and (b) positively related to family performance.

Integrating our reasoning above, we hypothesize that OCB-I enactment will indirectly affect the two family outcomes via the resource depletion and generation processes. That is, we propose that OCB-I enactment can have both negative and positive spillover effects: it is destructive for family life through exhaustion, but also constructive for family life through personal accomplishment.

*Hypothesis 4a:* OCB-I enactment is negatively related to family performance and positively related to marital withdrawal behavior via exhaustion.

*Hypothesis 4b:* OCB-I enactment is positively related to family performance and negatively related to marital withdrawal behavior via personal accomplishment.

### **The Moderating Role of OCB-I Receipt**

While we have discussed how OCB-I enactment can have positive and negative outcomes for employees, also relevant to this discussion are factors that may serve as boundary conditions for these effects. In addition to the potential resource gains in the form of personal accomplishment, helping one's co-workers may also generate contextual resources such as social support through reciprocity norms (Gouldner, 1960), which could influence the outcomes of performing OCB-Is. As such, although our study does not examine whether performing OCB-Is is related to receiving OCB-Is later, whether (and how much) employees receive OCB-Is from their coworkers is a particularly relevant and complex contextual moderator to investigate. In particular, OCB-I research has suggested that receiving social support can be a double-edged sword that simultaneously boosts and threatens individuals' resources (e.g., Beehr et al., 2010; Deelstra et al., 2003; Väänänen, Buunk, Kivimäki, Pentti, & Vahtera, 2005). Further, the W-HR model suggests that contextual demands and resources (in this case the provision and receipt of OCB-Is) may interact in interesting ways to influence employees' resource supplies (ten Brummelhuis & Bakker, 2012), we therefore aim to investigate their contrasting effects on employees' resource enrichment and depletion. Specifically, we propose that OCB-I receipt not only buffers against the negative effect of OCB-I enactment on exhaustion, but also mitigates the positive effect of OCB-I enactment on personal accomplishment.

Traditionally, receiving help and social support are thought to be beneficial for individuals (Cohen & Wills, 1985). Receiving social support, or even perceiving that social support is available, mitigates the negative effects of stressors on individuals (Hobfoll, 2002; Cohen & Wills, 1985). From the W-HR and other resource theories, receiving social support is a contextual resource that enhances employees' abilities to respond to their work demands and

plays an important role in the work-home enrichment process (Bakker & Demerouti, 2017; ten Brummelhuis & Bakker, 2012). This is supported by research showing that when employees experience conflict between the work and family domains, receiving support from the domain that causes the conflict is most effective at alleviating the stress (Nohe & Sonngtag, 2014). In this case, we expect that receiving OCB-Is from coworkers would act as a buffer against the depleting nature of performing OCB-Is at work, by helping to replenish employees' resources.

As mentioned earlier, employees expend energetic resources and time when they help their coworkers, which depletes resources that could otherwise be spent toward meeting their own goals. Receiving OCB-Is from coworkers could therefore enhance employees' abilities to respond to their work demands, through restoring lost resources, freeing up their available resources (e.g., reducing time spent on work activities), and promoting energy recovery (Billings, Folkman, Acree, & Moskowitz, 2000; Chiaburu & Harrison, 2008; Wells, Hobfoll, & Lavin, 1999). In addition, providing OCB-Is to coworkers and receiving OCB-Is in kind can foster a sense of camaraderie amongst coworkers and increase their satisfaction with their social relationships in the workplace (Nahum-Shani & Bamberger, 2011; Nahum-Shani, Bamberger, & Bacharach, 2011), which can also increase employees' resources (e.g., positive affect, increased vitality). However, when employees provide high levels of OCB-Is but perceive that they receive low levels of OCB-Is, they are unable to replenish valued resources and may experience greater exhaustion as a result of straining their already depleted resources to meet their work goals.

In conclusion, being helped not only contributes to employees' resource recovery but also positively changes their perception of resource loss induced by their own OCB-I enactment. Thus, we posit that OCB-I enactment will be less depleting when actors also receive high levels of OCB-Is from their colleagues.

*Hypothesis 5a:* Received OCB-I moderates the relationship between OCB-I enactment and exhaustion, such that the relationship is weaker when received OCB-I is higher.

However, receiving help may not always be as beneficial for employees as it is purported to be. Despite its noted benefits, some studies report that social support does not ease strain from stressors, and may even exacerbate strain (e.g., Beehr et al., 2010; Glaser, Tatum, Nebeker, Sorenson, & Aiello, 1999). To explain the “dark side” of social support, scholars propose that receiving support from others can constitute a threat to one’s self-esteem and other key resources. Seeking or accepting help from others could suggest that one is unable to manage work demands independently, and thus diminish one’s positive self-image (Nahum-Shani & Bamberger, 2011). Social support may cause individuals’ “skills to atrophy and competence to erode” (Liang, Krause, & Bennett, 2001, p. 514), and lead to a loss of independence and control over their environment (Fisher et al., 1982; Uy, Lin, & Ilies, 2017). Indeed, Deelstra and colleagues (2003) found that receiving help led to lower competence-based self-esteem, greater negative affect, and unfavorable physiological outcomes.

Finally, the response-shift perspective (Schwartz & Sendor, 1999; Schwartz & Sprangers, 1999) suggests that social or external events can prompt individuals to re-evaluate their selves (e.g., their values or ability to handle a particular task). For instance, studies have suggested that receiving help from others could highlight to individuals the difficulty of their contextual demands, because needing help implies that the individual lacks the ability to manage their demands independently (Daltroy, Larsona, Eatona, Phillips, & Liang, 1999; Nahum-Shani & Bamberger, 2011). Indeed, recent research has uncovered that fears of diminished image at work may prevent employees from accepting coworkers’ help (Thompson & Bolino, 2018), which suggests that employees perceive that receiving help can undercut their own feelings of

competence. This loss of autonomy and competence directly counters the proposed gains in competence and personal accomplishment arising from OCB-I enactment.

In sum, by highlighting to employees the stressful nature of their jobs and reducing their sense of mastery of and control over their work (Beehr et al., 2010), receiving OCB-Is may be a threat towards employees' resources, and therefore attenuate the positive relationship between OCB-I enactment and personal accomplishment.

*Hypothesis 5b:* Received OCB-I moderates the relationship between OCB-I enactment and personal accomplishment, such that the relationship is weaker when received OCB-I is higher.

We have proposed that OCB-I receipt moderates both the resource depleting and resource generating effects of OCB-I enactment (first-stage moderating effects) and we also linked the indicators of resource depletion (i.e., exhaustion) and resource acquisition (i.e., personal accomplishment) to the family outcomes. In our final hypotheses, we propose that OCB-I receipt moderates the indirect effects of OCB-I enactment on family outcomes through exhaustion and personal accomplishment. When employees receive more OCB-Is from their colleagues, their enactment of OCB-Is is less detrimental because it causes exhaustion to a lesser extent, but counterintuitively also has a weaker positive effect on personal accomplishment. Thus, we expect that receiving OCB-Is weakens both the positive and the negative spillover effects of OCB-I enactment on family life.

*Hypothesis 6a:* The indirect effects of OCB-I enactment on family performance and marital withdrawal behaviors through exhaustion are moderated by received OCB-I such that the indirect effects are weaker when received OCB-I is higher.

*Hypothesis 6b:* The indirect effect of OCB-I enactment on family performance and marital withdrawal behaviors through personal accomplishment are moderated by received OCB-I such that the indirect effects are weaker when received OCB-I is higher.



## Method

### Participants and Procedure

We collected data from employees of three banks in China and their spouses, at three time points. At Time 1 (T1), we surveyed employees' OCB-I enactment, OCB-I received, workload, and demographic variables. Two weeks later at Time 2 (T2), employees reported their exhaustion and personal accomplishment. Two weeks after T2, at Time 3 (T3), employees' spouses completed measures of employees' family performance, marital withdrawal behaviors, and their demographic information. Participants received 20 RMB (~3 USD) for each completed survey. We used the translation-back translation procedure to translate the English scales to Chinese (Brislin, 1980).

Of the 385 employees who agreed to participate, we received complete matched data from 320 employees and their spouses (response rate = 83%). For the focal employees, 63.4% were male and their mean job tenure was approximately 12 years ( $SD = 8.78$ ). On average, employees and their spouses were 35 years old ( $M = 34.87$ ,  $SD = 8.16$  for focal employees;  $M = 34.57$ ,  $SD = 7.93$  for spouses) and had been married for approximately 10 years ( $SD = 8.96$ ).

### Measures

**OCB-I enactment (T1).** Employees reported how often they engaged in OCB-Is toward their coworkers in the past month (1 = *never* to 5 = *always*) using an eight-item scale (Lee & Allen, 2002). A sample item was "willingly gave your time to help others who have work-related problems." Reliability for this scale was .90.

**OCB-I received (T1).** Employees rated the level of OCB-Is they received from their colleagues in the past month (1 = *never* to 5 = *always*). The same OCB-I scale was used (Lee & Allen, 2002), with the referent for each question modified and one item (went out of their way to

make newer employees feel welcome) removed as it was not targeted at the employees. A sample item was “your colleagues willingly gave their time to help you when you had work-related problems.” Reliability for this scale was .94.

**Exhaustion (T2).** We measured employees’ exhaustion since T1 using the five-item exhaustion subscale of the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). Participants were asked to recall their work experiences over the last two weeks and indicate their (dis)agreement (1 = *strongly disagree* to 7 = *strongly agree*) with each statement. A sample item was “I feel emotionally drained from my work.” Reliability for this scale was .93.

**Personal accomplishment (T2).** We measured employees’ feelings of personal accomplishment at work since T1 (1 = *strongly disagree* to 7 = *strongly agree*), using the six-item personal accomplishment subscale from the MBI-GS (Schaufeli et al., 1996). While this subscale is typically reverse-coded to reflect the *lack* of personal accomplishment, we did not reverse the scores in this study. An example item was “I can effectively solve the problems that arise in my work.” Reliability for this scale was .92.

**Family performance (T3).** We asked employees’ spouses to rate the focal employee’s performance at home since T2, using the eight-item measure developed by Chen and colleagues (2014) (1 = *does not fulfill expectations at all* to 5 = *fulfills expectations completely*). An example items was “complete household responsibilities.” Reliability for this scale was .86.

**Marital withdrawal behavior (T3).** Employees’ spouses also rated how often employees engaged in withdrawal behaviors within their marriage since T2 (1 = *Not at all* to 5 = *Very often*), using a nine-item scale (Schulz, Cowan, Cowan, & Brennan, 2004). A sample item was “He/she wants some quiet time to him/herself.” Reliability for this scale was .90.

**Controls (T1).** We controlled for age, gender, and job demands as they are either theoretically relevant in the W-HR model, or may influence OCB-I engagement and its outcomes (Bolino & Turnley, 2005; Byron, 2005; Halbesleben & Bowler, 2007). For instance, age may influence the extent to which employees experience work-family conflict or enrichment, as older employees may be more practiced at managing the work-family boundary (Allen & Finkelstein, 2014). Gender has been noted to have a complex relationship with helping (Eagly & Crowley, 1986), and could influence family outcomes (e.g., women are more likely to bear a larger portion of the household work) and work-family conflict (Byron, 2005). Finally, we controlled for in-role job demands which may influence employees' resources (ten Brummelhuis & Bakker, 2012), and therefore the extent to which they perform extra-role OCB-Is or their psychological outcomes. Employees were asked to rate their level of job demands over the past month using an eight-item scale (Janssen, 2001). A sample item was "Did you have to work fast?"<sup>1</sup>

## Results

### Descriptive Statistics and Confirmatory Factor Analyses

Table 1 presents the means, standard deviations, reliabilities, and correlations. We first conducted confirmatory factor analyses (CFA) to ascertain whether our study variables had adequate discriminant validity. As in other studies (Bolino et al., 2015; Ilies, Lanaj, Pluut, & Goh, 2018; Scott, Restubog, & Zagenczyk, 2013), we used item parcels to improve the ratio between the sample size and the number of estimated parameters in the model, and to increase the reliability of the latent variables by reducing random errors associated with the individual items (Little, Cunningham, Shahar, & Widaman, 2002). While parcelling has its critics, it is

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<sup>1</sup> We tested the model with and without controls and the results were not substantially different with one exception—in the model without controls, the results were actually stronger as OCB-I enactment was positively and significantly related to emotional exhaustion, but this relationship was not significant when we included control variables. In this manuscript, we report the results with control variables included as they are more conservative.

acceptable when the goal is to understand the relationships among latent variables, and not the relations among items (Williams & O'Boyle, 2008).

We created three parcels for all variables (with the exception of exhaustion, for which we used all 5 items as indicators), using Hall, Snell, and Foust's (1999) shared uniqueness strategy (for example, the 8-item OCB-I scale had two 3-item parcels and one 2-item parcel). First, we conducted exploratory factor analyses on each scale to determine if there were any secondary influences related to the indicators. We combined items that shared secondary influences into the same parcels. Only the indicators for family performance and job demands showed the influence of a secondary factor, and the other variables were parcelled randomly. Results showed that there was satisfactory discriminant validity in our seven-factor model (Hu & Bentler, 1999):  $\chi^2(209) = 332.930$ , CFI = .98, TLI = .97, RMSEA = .04, and SRMR = .04. These results were superior to a model where indicators of OCB-I enacted and OCB-I received loaded on a single factor ( $\Delta\chi^2(6) = 564.67$ ,  $p < .01$ ), and a model where indicators for the spouse-rated outcomes loaded on a single factor ( $\Delta\chi^2(6) = 407.86$ ,  $p < .01$ ).

### **Hypotheses Tests**

We tested our hypotheses using structural equation modeling with Mplus 7.4 (Muthén & Muthén, 2012). We used the same parcels as in the CFA to represent the indicators of each latent variable. We modeled the interaction between the two latent variables of OCB-I enactment and OCB-I received using the XWITH command (Sardeshmukh & Vandenberg, 2016). The direct effect of OCB-I received on exhaustion and personal accomplishment was also modeled<sup>2</sup> to provide accurate interpretations of the product terms (Cohen, Cohen, West, & Aiken, 2003). The unstandardized path coefficients for the moderated mediation model are depicted in Figure 2.

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<sup>2</sup> OCB-I received was negatively and significantly related to exhaustion ( $b = -.62$ ,  $p < .01$ ), and was positively and significantly related to personal accomplishment ( $b = .21$ ,  $p < .05$ )

Results showed that OCB-I enactment was not related to emotional exhaustion ( $b = .08, p = .65$ ), but was positively related to personal accomplishment ( $b = .31, p < .05$ ). Therefore, Hypothesis 1a was not supported, while Hypothesis 1b was supported. Supporting Hypothesis 2, emotional exhaustion was positively related to marital withdrawal behaviors ( $b = .04, p < .05$ ) and negatively to family performance ( $b = -.05, p < .05$ ). Personal accomplishment was negatively related to marital withdrawal behaviors ( $b = -.10, p < .01$ ) and positively related to family performance ( $b = .18, p < .01$ ), supporting Hypothesis 3. Our results also showed that the interaction between enacted and received OCB-I was significant in predicting emotional exhaustion ( $b = -.42, p < .01$ ; see Figure 3), but not personal accomplishment ( $b = -.13, p = .35$ ). Simple slope tests showed that OCB-I enactment was positively related to exhaustion for employees who received low levels of OCB-I (simple slope =  $.40, t = 2.27, p < .01$ ), but not for employees who received high levels of OCB-I (simple slope =  $-.24, t = -1.21, p = .23$ ). Therefore, Hypothesis 5a was supported but Hypothesis 5b was not supported.

Next, we tested our mediation and moderated mediation hypotheses. As OCB-I enactment had a main effect on personal accomplishment but not on exhaustion (i.e., Hypothesis 4a was not supported), we tested only the indirect effect of OCB-I enactment on the family outcomes through personal accomplishment. The indirect effects of OCB-I enactment on family performance ( $b = .05, 95\% \text{ CI} = [.005, .09]$ ) and on marital withdrawal behavior ( $b = -.03, 95\% \text{ CI} = [-.11, -.06]$ ) via personal accomplishment were both significant, supporting Hypothesis 4b. We then tested the conditional indirect effects of enacted OCB-I on family outcomes through exhaustion at higher and lower levels of OCB-I received (mean  $\pm$  1 SD). Supporting Hypothesis 6a, the negative indirect effect of OCB-I enactment on family performance through exhaustion was significant only at low (indirect effect =  $-.03, 95\% \text{ CI} = [-.07, -.002]$ ) but not high levels of

OCB-I received (indirect effect = .01, 95% CI = [-.01, .04]). Similarly, the positive indirect effect of enacted OCB-I on marital withdrawal behaviors through exhaustion was significant only when employees received low levels of OCB-I (indirect effect = .02, 95% CI = [.01, .08]) but not at high levels of OCB-I received (indirect effect = -.01, 95% CI = [-.05, .01]). As OCB-I enactment and OCB-I received did not have an interactive effect on personal accomplishment, Hypothesis 6b was not supported and we did not test the conditional indirect effects.

### **Discussion**

We drew upon the W-HR model to examine the interactive effects of enacting and receiving OCB-Is for employees' family outcomes. As predicted, enacting OCB-Is had a far-reaching influence on employees' family lives through exhaustion and personal accomplishment. Further, we found that receiving OCB-Is can mitigate the resource loss associated with OCB-I enactment—for employees who received more OCB-Is, the relationship between OCB-I enactment and exhaustion was weaker, and these employees' OCB-I enactment did not lead, through exhaustion, to withdrawal behaviors or impaired family performance. These interactive (beneficial) effects of OCB-I point to a compounded effect of encouraging OCB-I such that both employees and organizations can reap the benefits of OCB-Is without incurring the deleterious effects of resource depletion that have been documented when OCB-I enactment was studied in isolation from OCB-I receipt (e.g., Koopman et al., 2016). Of note is that the significant relationship between OCB-I enactment and exhaustion without controls became non-significant after we included controls, where in-role job demands had a strong and significant positive relationship with exhaustion ( $b = .55, p < .01, se = .16$ ). It is possible that some employees view helping coworkers as part of their work roles, as Morrison's (1994) conceptualization of perceived job breadth or OCB role definitions suggests. This perception could be more salient in

Asian cultures, which subscribe to values of high collectivism and high power distance (Jiao, Richards, & Hackett, 2013). With a strong emphasis on group interest and compliance to authority, the Chinese participants in this study may regard OCB-Is as part of the job.

### **Theoretical Implications**

Our findings have several key implications. First, we make several contributions to W-HR theory and the work–family literature by simultaneously considering the resource depleting and generating properties of OCB-Is and its spillover effects onto the family. At the most basic level, the W-HR model proposes how dealing with contextual demands in one domain can drain personal resources, and thus interfere with the other domain (ten Brummelhuis & Bakker, 2012). However, resource investment is also a core tenet of resource theories (Halbesleben et al., 2014; Hobfoll, 1989). Our study supports and advances the W-HR and resource theories by testing a model that examines both the depleting and enriching nature of OCB-Is, namely exhaustion and personal accomplishment as two distinct types of personal resources, and extends their outcomes to the family domain. This is an important contribution as OCB-I research has typically investigated the resource-depleting and resource-generating nature of OCB-Is separately, with few exceptions (Koopman et al., 2016; Uy et al., 2017), and much of this past research has contrasting views on the relationship between helping and family outcomes, suggesting either negative (Halbesleben et al., 2009) or positive spillover effects (Sonnentag & Grant, 2012). By highlighting how agentic actions at work can be both enriching and depleting, our study not only reconciles these conflicting views and explains the inconsistent or null relationships between OCB-I enactment and familial outcomes (such as the non-significant first-order correlations in our study), but also builds new theory on the resource implications of OCB-Is.

Supporting the W-HR model, our results show that certain workplace behaviors that utilize employee's resources can lead to exhaustion and interfere with family outcomes, but at the same time can build resources by bolstering feelings of personal accomplishment, and enhancing family outcomes (ten Brummelhuis & Bakker, 2012). In addition, the time-lagged and dual-source design of our study allowed us to more rigorously test the W-HR propositions of work-family spillover without actually asking employees about their perceptions of spillover. This is important because it further highlights the very real nature of work-family spillover, as spouses were able to discern differences in employees' performance and withdrawal behaviors at home as a result of their workplace behaviors.

Importantly, we extend previous research that separately investigated the bright and dark sides of performing and receiving OCB-Is by examining the interactive (and compounding) effects of these processes. Our results showed that while receiving OCB-Is restores the resources deployed toward helping coworkers, and thus buffers against the negative effects of resource depletion, receiving OCB-Is did not attenuate the positive relationship between OCB-I enactment and personal accomplishment. These results suggest that the resource gains from OCB-I enactment (in the form of increased efficacy) may not merely be fleeting in nature, and thus support the propositions of the W-HR model and other resource theories that resource investment can indeed build enduring personal resources equipping employees with the ability to meet future demands (Hobfoll, 1989; ten Brummelhuis & Bakker, 2012). That said, it is also possible that the self-esteem threat and stress associated with receiving help were not salient to our participants, which highlights potential caveats or conditions to when receiving help threatens individuals' self-esteem, such as when one is in chronic need of help (as in research on aging; Lu & Argyle, 1992), or when receiving help is unwanted or undesirable. For instance, in past



research documenting the detrimental effects of receiving help, these effects were evident primarily under conditions of “imposed” support, where participants did not necessarily require any help, and this was not contrasted with a condition in which participants requested support (Deelstra et al., 2003).

Finally, building on research on the costs and benefits of OCB-Is, our study identified personal accomplishment as an additional psychological mechanism explaining how OCB-I enactment can build employee resources. Extant research has focused on the positive affective consequences of OCB-Is, such as positive emotions (e.g., Koopman et al., 2016; Lin et al., 2017). Our results show that in addition to these affective outcomes, helping one’s colleagues also positively influences employees’ self-evaluations, a finding that could further explain associations between OCB-I enactment, job performance, and job satisfaction (Koopman et al., 2016; Whiting et al., 2008). These results also qualitatively distinguish OCB-Is, as a social activity, from other resource-draining demands, such as job demands. While typical work demands are associated with high exhaustion and reduced personal accomplishment, helping coworkers can be an exhausting but also a rewarding activity that increases personal accomplishment.

### **Practical Implications**

Our study has some practical implications for organizations. The findings of our study spell a positive outlook for performers of OCB-Is because engaging in OCB-Is can have positive consequences for their family lives. Although enacting OCB-Is may consume time and energy and thus impair employees’ performance at work and at home under certain conditions (e.g., when receiving low OCB-Is), it can be beneficial in building other types of resources—positive affect, meaningfulness (e.g., Glomb et al., 2011; Lam et al., 2016), and personal

accomplishment. Managers could point out these benefits to employees to increase OCB-Is. That said, managers should be mindful that OCB-Is should be volitional and creating high pressure to engage in OCB-Is will have inadvertent detriments such as increasing citizenship fatigue, job stress, and turnover intentions (Bolino et al., 2015; Bolino, Turnley, Gilstrap, & Suazo, 2010). Our findings suggest that not only are there positive consequences to enacting OCB-Is, but that employees who likewise receive OCB-Is are more resilient to the exhaustion and strain associated with OCB-I enactment. In view of these results, organizations could cultivate a culture of support and reciprocity to encourage employees to provide emotional and instrumental support to one another, and improve work and familial outcomes. Consistent with this suggestion, research found that employees in organizations characterized by support and compassion reported better health outcomes, satisfaction, and attendance (Barsade & O'Neill, 2014; O'Neill & Rothbard, 2017). Similarly, we expect that employees in cultures that encourage supportive and backing up behaviors would exhibit positive outcomes such as feelings of self-efficacy, and less exhaustion. To reduce potential felt indebtedness to help providers, organizations can encourage generalized exchanges which follow the role of collective reciprocity such that help recipients should respect help givers, but they can pass on the favor to someone other than the original givers (Yoshikawa, Wu, & Lee, 2020). For example, organizations could build an internal virtual platform for help seeking and giving. Organizations can also hire employees with higher generalized exchange orientation to make OCB-Is more effective and sustainable (Yoshikawa et al., 2020).

### **Limitations and directions for future research**

We attempted to address common method bias by separating the measurement of our variables over three waves, as well as by having participants' spouses provide reports of the

family outcomes (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Further, the tests for the interaction effects between OCB-I receipt and enactment should be virtually unaffected by common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012), which strengthens our confidence that our results are not unduly a result of multicollinearity.

While we view the time-lagged and dual-source design as strengths of our study, we acknowledge that there are limits as to the conclusions we can draw about the nature of resource losses and gains as a result of this design. Specifically, the dynamic nature of resources suggests that examining these processes using varying time frames (e.g., daily or weekly measures versus studies that track participants over months or years) could yield new and interesting insights into how resources are depleted and built over time. For instance, a study found that while work stressors led to a depletion of resources and poorer well-being in the short-term, there was a positive association between work stress and well-being in the long run, a result that counters resource theories and shows that employees can adapt to stressors over time (Matthews, Wayne, & Ford, 2014). Therefore, incorporating both shorter and longer measurements as part of the study design has become increasingly necessary in order to advance our understanding of the complex relationship between OCBs, resources, and work-family or well-being outcomes (Ilies, Aw, & Lim, 2016). Future research could therefore incorporate both daily and longer-term measures of OCB-Is to further our understanding of the dynamics of these relationships.

Finally, our study focused only on OCB-Is, and not OCBs directed toward the organization (OCB-Os). It is possible that the two forms of OCBs may differ in the extent to which each consumes or generates resources. For example, OCB-Os tend to be more planned and deliberate, as opposed to OCB-Is, which are more strongly motivated by affect than cognitions (Lee & Allen, 2002; Organ, 1990). In addition, employees are able to directly observe their

prosocial impact on others when performing OCB-Is, while any beneficial effect of OCB-Os to the organization may not be as immediate or discernible (Grant, 2007). Contrasting the effects of OCB-Is and OCB-Os, we may therefore expect that OCB-O enactment could consume more resources, but at the same time be less fulfilling and hence generate fewer resources compared to OCB-Is (at least in the short-run).

The present study offers directions for future research. We believe that our results underscore the importance of including not only boundary conditions, but also both positive and negative mechanisms linking OCB-Is and work–family outcomes. Future research employing resource theories should therefore not examine these two processes in isolation, but take into account their interactive effects on various types of resources. For instance, the pattern of support provided and received could shape resources through their emotional reactions, attitudes, and behaviors (e.g., affect, trust, social loafing). Similar models could also be applied toward the study of other workplace behaviors, where researchers consider both how employees behave as well as how their colleagues interact with them (e.g., incivility), and their subsequent effects. Future research could also consider examining the moderating role of individual differences in the relationships between OCB-I enactment, exhaustion, and personal accomplishment, such as employees' endorsement of positive reciprocity norms. It is possible that employees who believe that positive treatment should be reciprocated are more likely to experience exhaustion when they engage in OCB-Is without receiving help (Nahum-Shani & Bamberger, 2011)

Moreover, our results, when interpreted alongside research on receiving social support, suggest that the effect of receiving help is likely to depend on other as yet unexplored contextual factors. As mentioned, whether help received was sought after or unwanted could determine participants' perceptions of threatened self-esteem (Deelstra et al., 2003). Similarly, when help is

unwanted, it stands to reason that receiving OCB-Is would be unlikely to serve as a restorative for employees, and could instead be even more depleting.

Finally, our study showed that work events can differentially impact different types of resources. This suggests that future research could investigate specific classes of resources (e.g., emotional or cognitive resources) and their dynamic of losses and gains in predicting employee outcomes. This could provide a more nuanced understanding of how stressors or events affect employee outcomes, and allow for the development of interventions targeted at relieving the detriments of job stressors, while still reaping its benefits. For example, researchers could examine how different recovery experiences could restore employees' autonomy or cognitive and emotional energies (Sonnentag & Fritz, 2006). Activities that enable psychological detachment from work could be more effective in restoring cognitive resources after a day of heavy workload, as opposed to mastery activities that require further intellectual challenge, while mastery activities could be more effective (compared to relaxation) in boosting employees' personal accomplishment after events that threaten their self-efficacy (e.g., receiving negative feedback).

## **Conclusion**

In sum, we examined the spillover of interpersonal OCBs onto employees' family lives by considering the resource depleting and enriching mechanisms as well as the moderating role of being a recipient of OCB-Is. Our results indicate that performing OCB-Is is a double-edged sword for actors and their families, and that receiving OCB-Is can alleviate the detrimental consequences of enacting OCB-Is, without weakening its benefits. We hope future research will adopt this balanced view of the consequences of OCBs and explore other boundary conditions that shape these effects.

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Table 1

*Means, Standard Deviations, Correlations, and Reliabilities*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age (T1)	34.87	8.16	-								
2. Gender (T1)	1.63	0.48	-.25**	-							
3. OCB-I enacted (T1)	3.44	.67	.01	-.01	(.90)						
4. OCB-I received (T1)	3.39	.76	.04	-.16**	.52**	(.94)					
5. Job demands (T1)	3.31	.68	.02	-.06	.61**	.44**	(.88)				
6. Exhaustion (T2)	3.13	1.42	-.30**	.17**	.02	-.21**	.11*	(.93)			
7. Personal accomplishment (T2)	5.53	.95	.16**	-.04	.18**	.18**	.08	-.34**	(.92)		
8. Family performance (spouse report; T3)	4.08	.55	.07	-.03	.10	.13*	.07	-.22**	.29**	(.86)	
9. Marital withdrawal behaviors (spouse report; T3)	2.27	.76	-.06	.13*	-.02	-.01	.06	.27**	-.31**	-.39**	(.90)

*Note.* N = 320. Cronbach's alphas are in parentheses. Gender: *male* = 1, *female* = 2. OCB = Organizational citizenship behavior.

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

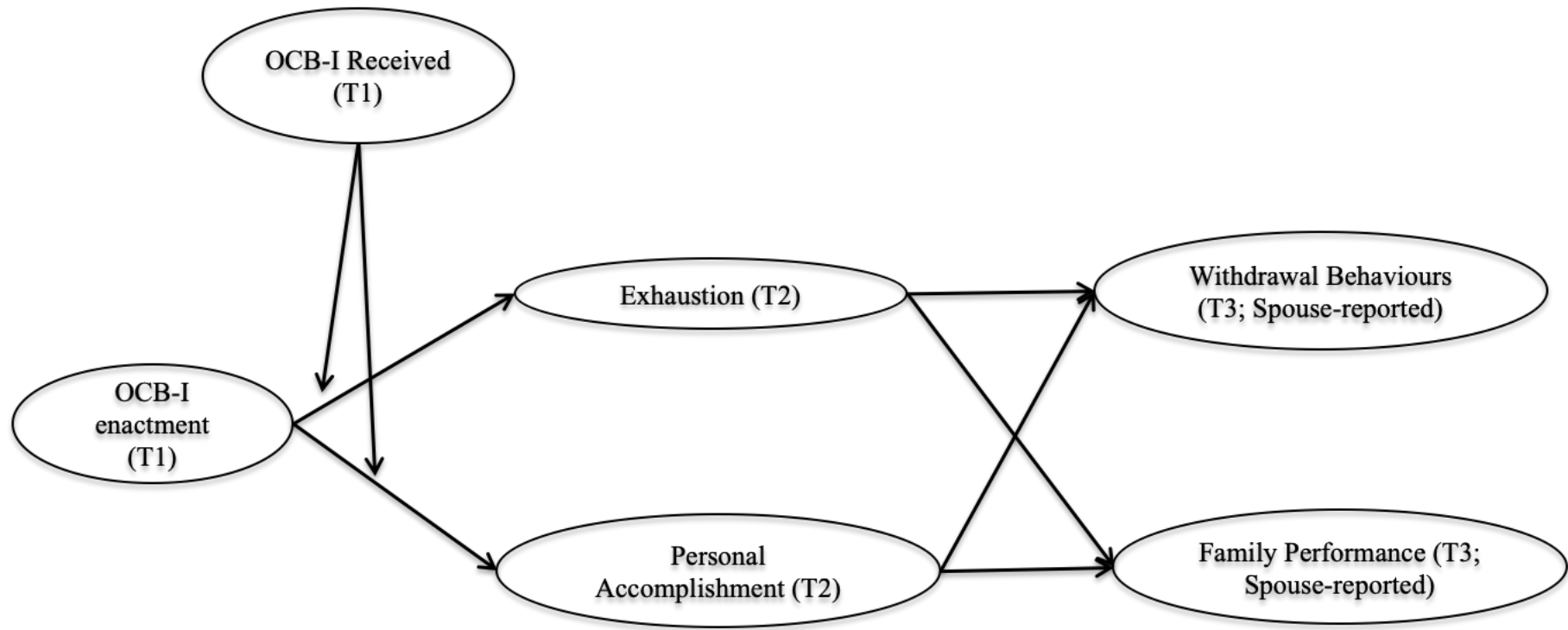
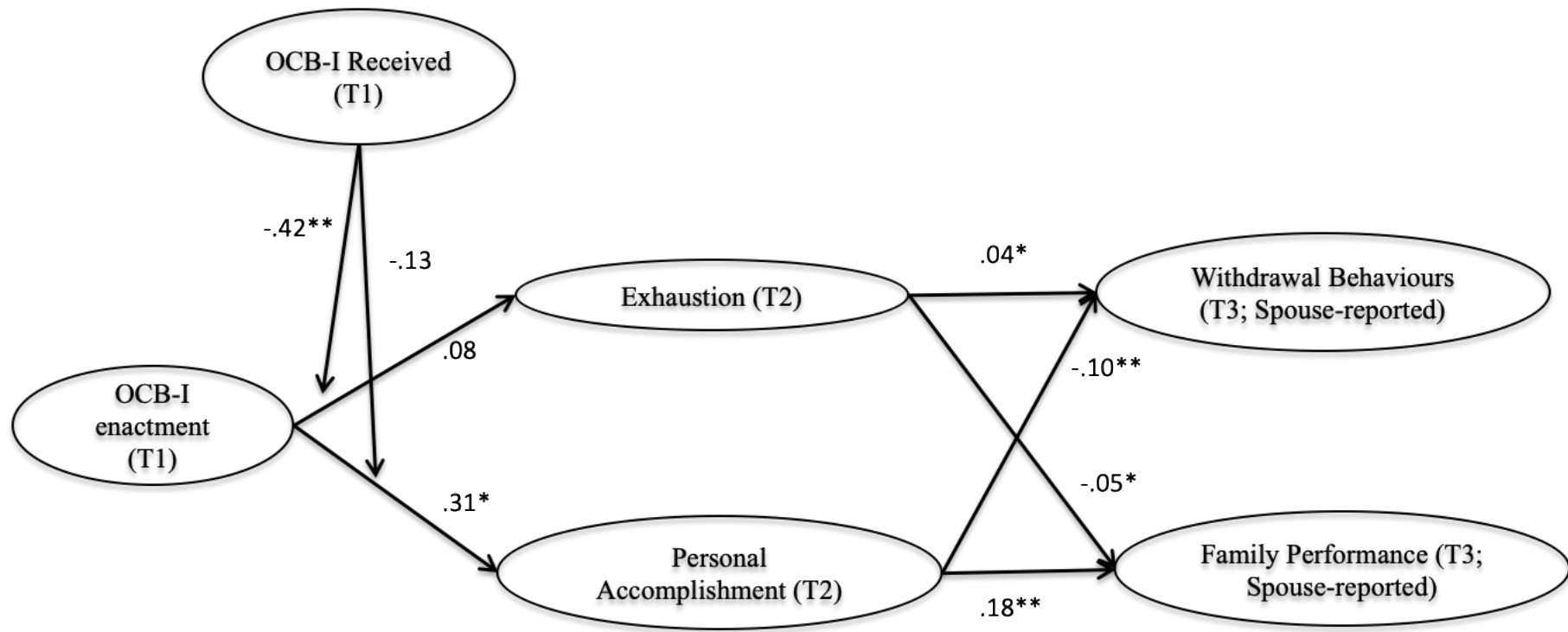


Figure 1. Theoretical Model.



<sup>a</sup> Path coefficients are unstandardized  
 \*  $p < .05$ , two tailed  
 \*\*  $p < .01$ , two tailed

Figure 2. Structural equation modeling results. <sup>a</sup>

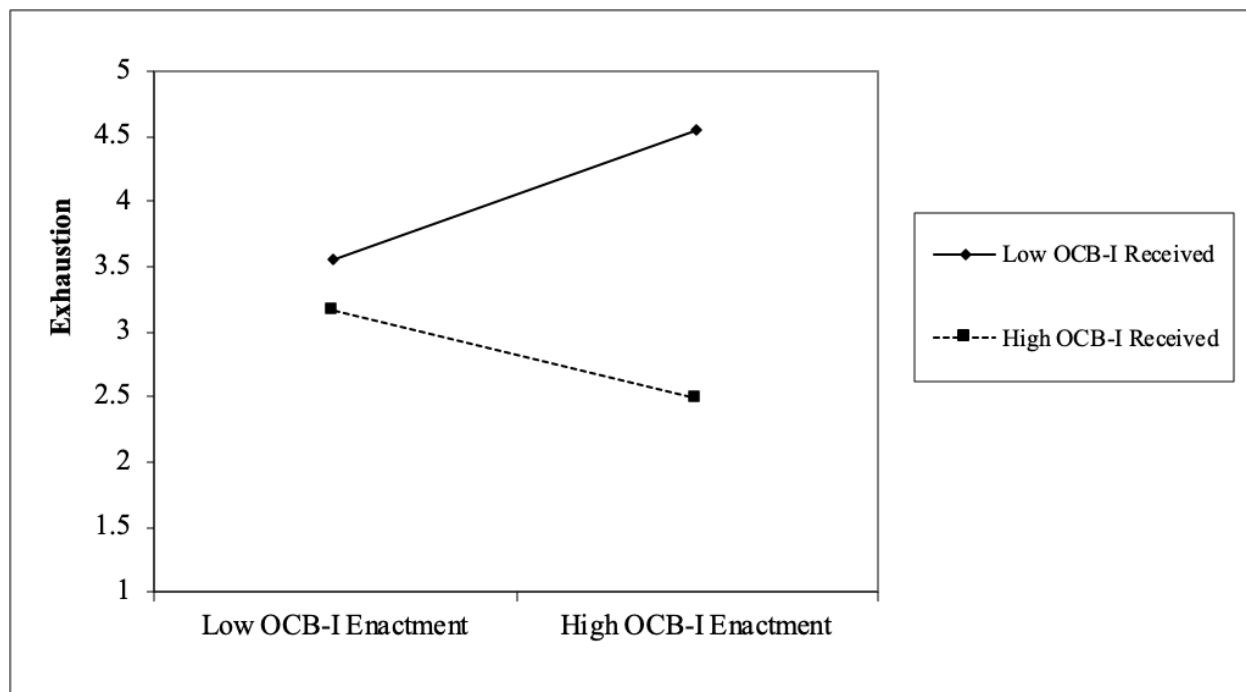


Figure 3. The interactive effect of OCB-I enactment and OCB-I received on exhaustion.