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Effects of Work-family Interface Conflicts on Salesperson Behaviors: A Double-edged Sword

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ABSTRACT

Work–family interface conflicts have typically been cast in a negative light due to their detrimental consequences. This study offers new insights by uncovering conditions under which such conflicts may produce both positive and negative effects on salesperson job-related behaviors in the context of B2B sales. Drawing on cognitive appraisal theory as an overarching theoretical framework, the authors suggest that informal controls (i.e., professional control and self-control) have differential moderating effects in salespeople's primary and secondary appraisal processes when faced with work–family conflict and family–work conflict. Dyadic data from a matched salesperson–customer sample reveals that professional control amplifies, whereas self-control mitigates, the positive effect of work–family conflict on perceived stress. Professional control amplifies the positive effect of stress on in-role behavior, and self-control strengthens positive effects of stress on in-role behavior and customer-directed extra-role behavior while suppressing unethical behavior under high stress. Moreover, the two types of informal controls moderate the direct effects of family–work conflict on salesperson behaviors in an opposite fashion, such that under a strong professional control, family–work conflict reduces in-role and extra-role behaviors and induces unethical behavior, whereas a strong self-control alleviates such detrimental effects. These findings suggest that work–family interface conflicts should be viewed as a double-edged sword capable of producing both positive and negative consequences under certain conditions, offering new theoretical insights and important managerial implications for this prevalent phenomenon in sales management.

Professional selling is inherently stressful because the boundary-spanning nature of the sales job entails frequent interactions between the salesperson and a large set of role partners both within (e.g., boss and co-workers) and outside (e.g., customers) the sales organization (Singh 1998). To the extent that role partners have diverse goals and expectations that compete for salespeople's limited resources and may not be compatible with one another, salespeople often experience role conflict, which gives rise to work stress (Nonis, Sager, and Kumar 1996). Although the sales literature has extensively investigated role conflict and the resultant stress arising from incompatible demands and requirements from work-related role partners (e.g., incompatible manager and customer expectations), another type of increasingly prevalent role conflict that has not received sufficient attention in the sales literature is work–family interface conflicts. Work–family interface conflicts occur when the role requirements from the work and family domains are mutually incompatible, wherein work can interfere with family (i.e., work–family conflict) and vice versa (i.e., family–work conflict), which can have adverse effects on employees' overall well-being and job performance (Edwards and Rothbard 1999; Matthews et al. 2014). Although work–family interface conflicts can arise in any occupation, they may be especially pronounced in the sales profession given its unique characteristics, particularly in the business-to-business (B2B) sales context. Compared with other employees who have a regular eight-hour-per-day job, B2B salespeople tend to have extensive travel requirements as they often must cover large territories (Wilson 1997), provide product-related services (e.g., installation, maintenance, and training customers) on customer locations (Moncrief 1986), and respond to customer service problems with short notice (Kothandaraman, Dingus, and Agnihotri 2014), which give rise to a volatile schedule and frequent overtime beyond regular business hours. Because the nature of the sales job makes it particularly hard to maintain work–family balance,

salespeople are more likely to suffer from work–family interface conflicts than are other employees (Bande et al. 2015).

While some researchers have investigated work–family interface conflicts in the sales context (e.g., Boles, Johnston, and Hair 1997; Nonis and Sager 2003), a review of studies across management, psychology, and marketing literature reveals important research gaps in this domain (see Table 1 for a summary of illustrative research). First, although past research has linked work–family interface conflicts to a variety of outcomes, the unanimous finding is that work–family interface conflicts dampen desirable outcomes (e.g., work performance) while inducing negative consequences (e.g., propensity to leave). That is, work–family interface conflicts have always been depicted in a negative light. However, it has been suggested that work–family interface conflicts may also have the potential to produce positive coping and performance outcomes (Gardner and Fletcher 2009; Rotondo and Kincaid 2008). Therefore, a neglected yet important question is the extent to which work–family interface conflicts may be a double-edged sword capable of producing both positive and negative outcomes.

Second, most researchers have focused only on direct effects (e.g., Anderson, Coffey, and Byerly 2002), moderating effects (e.g., Carr, Boyar, and Gregory 2008), or mediation effects (e.g., Netemeyer, Maxham III, and Pullig 2005) without simultaneously examining how and under what conditions (1) work–family interface conflicts lead to different levels of perceived stress and (2) stress may induce positive vis-à-vis negative coping behaviors. Answers to these questions shed light on the mechanisms through which the purported double-edged sword effects unfold, which, in turn, can inform theory and practice.

-- Table 1 about here --

Through the lens of cognitive appraisal theory as an overarching theoretical framework (Folkman et al. 1986), we propose informal controls (i.e., professional control and self-control) as critical boundary conditions in teasing out the positive as well as negative effects of work–family interface conflicts. Specifically, professional control is operative "when peers within one's work unit engage in collegial interaction, discussion, and informal evaluations of a colleague's work," whereas self-control is manifested in an individual's "commitment and willingness to take responsibility for his or her job" (Jaworksi and MacInnis 1989, p. 408). We use a dataset of matched B2B salesperson–customer dyads in China to test our theoretical framework depicted in Figure 1. Results indicate that professional control amplifies, whereas self-control mitigates the positive effect of work–family conflict on perceived stress. Professional control amplifies the positive effect of stress on in-role behavior, and self-control strengthens the positive effects of stress on in-role behavior and customer-directed extra-role behavior (hereafter extra-role behavior) while suppressing unethical behavior under high stress. Moreover, the two types of informal controls moderate the direct effects of family–work conflict on salesperson behaviors in an opposite fashion, such that under a strong professional control, family–work conflict reduces in-role and extra-role behaviors and induce unethical behavior, whereas a strong self-control alleviates such detrimental effects. These findings support our argument that work–family interface conflicts should indeed be viewed as a double-edged sword capable of producing both positive and negative salesperson behavioral consequences, which offer new theoretical insights and important managerial implications for this prevalent phenomenon in the B2B sales context.

-- Figure 1 about here --

3

The remainder of this paper is organized as follows. After a review of background literature and theoretical foundation, we provide detailed rationale for our research model and associated hypotheses. We then describe our sampling frame, data collection procedure, and data analysis techniques before reporting hypothesis testing results. We conclude the paper with a discussion of theoretical and managerial implications, limitations of the current study, and directions for future research.

Background literature and theoretical foundation

Work–family interface conflicts

For many working adults, work and family are particularly potent sources of stress as pressures from the work and family domains are often incompatible such that participation in work (family) can interfere with participation in family (work), thereby causing work–family interface conflicts (Bunk et al. 2012; Edwards and Rothbard 1999). Work–family interface conflicts typically refer to work–family conflict and family–work conflict, where "the former is a form of inter-role conflict in which the demands created by the job interfere with the performance of family-related responsibilities, and the latter is a form of inter-role conflict in which demands created by the family interfere with the performance of work-related responsibilities" (Netemeyer, Maxham III, and Pullig 2005, p. 130).

Work–family conflict and family–work conflict arise from the finite nature of time and energy employees have as limited resources, which may significantly hamper their ability to successfully accomplish tasks and responsibilities in both work and family domains on a daily basis (Bunk et al. 2012; Dahm et al. 2015). For example, a salesperson may have to frequently travel to different customer locations out of town or respond to unpredictable customer service

requests that require working on the customer's location beyond regular business hours, which can keep the salesperson from meeting his/her family responsibilities (e.g., pick up a child from daycare). Similarly, family responsibilities (e.g., taking a child to a doctor's appointment) can force a salesperson to reduce the number of new account visits to avoid being late, thereby potentially compromising customer acquisition performance.

An immediate consequence of work–family conflict and family–work conflict is job stress, which refers to nervousness or anxiety as a result of perceived conditions in the workplace that negatively affects an employee's emotional and/or physical well-being (Chen and Silverthorne 2008; Netemeyer, Brashear-Alejandro, and Boles 2004). It should be noted, however, that work–family conflict and family–work conflict are distinct constructs because they arise from different sources. According to the source attribution perspective (Shockley and Singla 2011), when an employee experiences work–family conflict, he or she will likely attribute the cause of conflict to the work role, which leads to greater stress at work. In contrast, when family–work conflict is experienced, one tends to attribute the source of conflict to his/her family, which can lead to greater stress in the family role than stress felt at work. Empirical evidence appears to corroborate the source attribution perspective where work–family conflict is found to have stronger effects on job stress than does family–work conflict (Chelariu and Stump 2011; Netemeyer, Brashear-Alejandro, and Boles 2004). At least partially through job stress, work–family conflict and family–work conflict are known to have a wide range of deleterious effects on job and family-related outcomes such as career success and family satisfaction in general (Chen and Silverthorne 2008; Dahm et al. 2015).

A less travelled path in the literature is investigating the potential for work–family interface conflicts to produce positive effects where participation in both work and family

domains can enhance an employee's performance (Rotondo and Kincaid 2008). It has been

suggested that stress is capable of producing both positive and negative outcomes under certain

conditions (Chan and Wan 2012) as a result of cognitive appraisal by the individual (Gardner

and Fletcher 2009). However, as Gardner and Fletcher (2009, p. 269) point out, "the factors

associated with positive outcomes are not as well established." Therefore, conditions under

which work–family interface conflicts may not have negative consequences or even be able to

produce positive effects warrant further investigation.

Cognitive appraisal theory

Salesperson's perceived stress as well as subsequent coping behaviors in the face of

work–family interface conflicts can be understood through the lens of cognitive appraisal theory

(Folkman et al. 1986; Lazarus and Folkman 1984). Cognitive appraisal theory posits that an

individual's psychological characteristics and environmental cues can interact with the specific

stressor in affecting perceived stress and subsequent coping behaviors (Gomes, Faria, and

Goncalves 2013).

According to Folkman et al. (1986, p. 992), cognitive appraisal is "a process through

which the person evaluates whether a particular encounter with the environment is relevant to his

or her well-being, and if so, in what ways." There are two interrelated components of the

cognitive appraisal process: primary appraisal and secondary appraisal. In primary appraisal, an

individual will first determine the relevance of an external stressor to his/her well-being. For

example, is there any potential harm or benefit with respect to work goals or personal values?

When primary appraisal indicates that the outcomes of such an encounter are either positive or

irrelevant to the individual, no more appraisal will be necessary; however, if the evaluation

suggests that there may be potential loss or harm to one's well-being, the individual will engage in secondary appraisal, where attempts will be made to determine what coping options could be taken to avoid or minimize such harm or loss. In other words, primary appraisal serves to intervene between the initial exposure to and subsequent experience of a stressor, thereby giving rise to significant individual differences in perceived stress (Tomaka et al. 1993). In secondary appraisal, an individual's actual coping behaviors reflect the person's cognitive and behavioral efforts to manage specific external/internal demands that are appraised as taxing, challenging, or threatening (Lazarus and Folkman 1984). It would be inappropriate to consider coping behaviors as a function of what an individual usually does under stress (i.e., main effects); rather, coping is contextual in nature as situational variables (e.g., cognitive or behavioral intervention) will interact with stress, which can subsequently motivate positive (e.g., task-focused coping) or negative (e.g., unethical behavior) coping behaviors (Darrat, Amyx, and Bennett 2010; Duhachek and Iacobucci 2005). Such context-specific effects of cognitive appraisal on coping behaviors have also been illustrated in recent sales research conducted in retailing environments, where a competitive climate spurs retail employees to seek help and break the negative effect of family–work conflict on job efficacy, thereby maintaining job performance (Arnold et al. 2009).

Cognitive appraisal theory is particularly useful in understanding perceived stress and subsequent coping processes in situations involving work–family interface conflicts given the chronic (as opposed to acute) nature of such conflicts (Sagy 2002). When faced with work–family conflict and family–work conflict, cognitive appraisal theory suggests that salespeople will first engage in a primary appraisal and perceive potential problems due to inability to maintain work–family balance, which can significantly compromise work and/or family role performance. This, in turn, will trigger secondary appraisal in which salespeople will consider

7

coping options and corresponding courses of action. It is during the primary and secondary

appraisal processes that the psychological and environmental context in which the appraisal is

made becomes salient, which can then moderate the perceptions and outcomes of work–family

interface conflicts (Lazarus 1999).

Hypothesis development

Model overview

Our conceptual model (Figure 1) is informed by Netemeyer, Maxham III, and Pullig's

(2005) study of work–family interface conflicts, but it differs in three important ways. First,

consistent with cognitive appraisal theory, our model suggests that effects of work–family

interface conflicts on stress are not monotonic; instead, work–family interface conflicts will

interact with environmental (i.e., professional control) and psychological (i.e., self-control)

variables[1] to affect perceived level of stress (i.e., primary appraisal). Second, salesperson's

unethical behavior directed at customers is a frequently reported behavioral deviance, which can

be induced by pressure arising from work–family interface conflicts and damage long-term

customer relationships (Darrat, Amyx, and Bennett 2010). Therefore, we consider not only

positive (i.e., in-role and extra-role behaviors) but also negative (i.e., unethical) coping behavior

in this study, which allows us to explicitly investigate the purported double-edged sword effects

of work–family interface conflicts. Third, the paths from stress to salesperson behavioral

responses are not straightforward but are moderated by professional control and self-control as

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[1] We chose informal controls (i.e., professional control and self-control) over formal controls (i.e., process control and outcome control) in our study because it has been demonstrated that informal controls have much stronger impact on job tension and dysfunctional behavior (Jaworski and MacInnis 1989). We nonetheless account for potential effects of process control and outcome control by including them as covariates.

proximal environmental and psychological interventions, which reflect the secondary appraisal process. We develop detailed hypotheses in the following sections.

Effects of work–family interface conflicts on stress (primary appraisal)

It has been well demonstrated that work–family conflict and family–work conflict have a positive main effect on stress because the demands of work and family may often be mutually incompatible as they compete for time, cognitive, and emotional resources (Dahm et al. 2015; Edwards and Rothbard 1999; Matthews, Wayne, and Ford 2014; Netemeyer, Maxham III, and Pullig 2005). However, perceived stress induced by the same level of work–family conflict and/or family–work conflict may vary significantly across employees due to the psychological and environmental context in which stress is experienced (Duhachek and Iacobucci 2005; Folkman 1984; Sagy 2002).

We argue that a high level of work–family conflict elevates perceived stress especially when professional control is high. This is because the source of work–family conflict is work itself (Shockley and Singla 2011), which may be indicative of one's lack of professional competence. For example, when a salesperson lacks skills in overcoming customer objections, he/she may have to visit more potential customers than do peers in order to meet the sales quota, which often leads to longer work hours and/or more frequent travel that prevent the salesperson from fulfilling family responsibilities. When professional control is operative, peers actively engage in work-related interactions and informal evaluations of one another's performance. Therefore, when a salesperson is unable to keep work–family balance, such deficiency may quickly be noticed by peers and bear negative social consequences because work–family conflict

9

is likely attributed to the salesperson's inability to handle job requirements efficiently (e.g., closing sales).

Moreover, "people tend to determine how others view them not only from the external feedback they receive but also from their own internal self-perceptions, observations of their own behavior, or even assumptions of how others might think" (Meister, Jehn, and Thatcher 2014, p. 493). In other words, salespeople under high levels of professional control are more likely to be concerned about how peers perceive them in terms of work competence (Meister, Jehn, and Thatcher 2014). Because peers may attribute work–family conflict to the salesperson's lack of skills and ability at work, a high level of professional control can exacerbate the salesperson's perceived stress.

In contrast, professional control is not expected to exacerbate the effect of family–work conflict on stress. Although family–work conflict can produce stress when a salesperson is overwhelmed by family responsibilities which compete for resources necessary to successfully perform job-related tasks (Netemeyer, Maxham III, and Pullig 2005), the source attribution perspective suggests that such conflict is usually attributed to the salesperson's family domain (Shockley and Singla 2011). That is, if the salesperson's performance is compromised as a result of family–work conflict, blame can be attributed to the salesperson's family as opposed to the salesperson's lack of competence at work. For example, it is conceivable that an otherwise high-performing salesperson can have difficulty maintaining top-notch performance if family-related responsibilities and issues reduce the salesperson's flexibility in scheduling customer visits.

Further, when there is a high level of professional control, co-workers have frequent informal interaction and communication with one another (Jaworski and MacInnis 1989), which can keep them apprised of a salesperson's challenges outside of work such as family–work

conflict. As such, peers may be empathetic and will not view the salesperson nearly as negatively as when work itself is the source of conflict. It is also important to note that professional control will not likely alleviate stress produced by family–work conflict as professional assistance and feedback from co-workers cannot help resolve family issues. Therefore, we do not expect professional control to moderate the relationship between family–work conflict and stress.

H1: Professional control amplifies the positive effect of work–family conflict on stress.

Self-control involves setting personal objectives for one's own work and career, monitoring their attainment, and adjusting behavior and strategy when necessary (Jaworski 1988). Whereas professional control constitutes a proximal environment with external regulation (albeit informally), self-control reflects an internal locus of control characterized by commitments to work and perceived controllability of job outcomes (Jaworski and MacInnis 1989). In her seminal work on cognitive appraisal theory, Folkman (1984) suggests that commitment to one's work can enhance a person's belief that he or she can control the outcome of a potentially stressful encounter, thereby effectively reducing perceived stress. Consistent with this argument, empirical evidence in sales research suggests that salespeople with an internal locus of control perceive the same stressor as less stressful and are better able to deal with stress (Roberts et al. 1997).

In the face of competing demands from work and family, individuals with high levels of self-control tend to attribute the experience of inter-role conflict to internal causes and resort to their own effort and strategy to resolve the issues. For example, a salesperson who has to reduce work hours due to family–work conflict may actively seek ways to improve lead qualification skills so he/she may close more sales within a given timeframe. Moreover, because salespeople

with a high level of self-control believe their work is inherently meaningful and focus on the intrinsic value of work, they can actually enjoy tackling challenging situations like work–family interface conflicts (Amabile et al. 1994; Ryan and Deci 2000). As such, salespeople with high levels of self-control are more confident that important aspects of their job and life can be managed simultaneously through their own behavior and strategy at work. Indeed, research on self-control suggests that people with higher levels of self-control are better able to balance work and life demands, are more likely to experience eustress rather than distress, and to achieve higher performance levels (Kuhnle et al. 2012). Therefore, self-control is expected to weaken the positive effects of work–family interface conflicts on stress.

H2: Self-control weakens positive effects of (a) work–family conflict and (b) family–work conflict on stress.

Effects of stress on salesperson behaviors (secondary appraisal)

As previously mentioned, we examine the extent to which stress may motivate positive (i.e., in-role behavior and extra-role behavior) as well as negative (i.e., unethical behavior) coping behaviors. We first discuss the main effects of stress on these coping behaviors before exploring the moderation effects of informal controls as a result of secondary appraisal.

To the extent that work stress is typically construed as a challenge (e.g., high workloads and time pressure) as opposed to a hindrance (e.g., organizational politics) demand (Crawford, LePine, and Rich 2010), such stress may actually enhance salesperson's job engagement through an active style of problem solving such as increased effort or adaptive selling because the salesperson may view stress as an opportunity for professional growth (Miao and Evans 2013). Consequently, the salesperson may exert more effort directed at in-role behavior under stress,

which is also a performance-protection strategy (Bakker and Demerouti 2007). Therefore, we expect a positive relationship between stress and in-role behavior.

We also expect a positive association of stress and extra-role behavior, which refers to the salesperson's discretionary behavior beyond the call of duty that benefits the customer during customer interactions (Chan and Wan 2012; Netemeyer, Maxham III, and Pullig 2005). Because performing voluntary acts of extra-role behavior is enjoyable and self-rewarding (e.g., through customer appreciation), salespeople might seek such self-gratifying experiences under high work stress because engaging in preferred behaviors can replenish self-regulation resources (Chan and Wan 2012).

Although work stress can elicit salesperson's in-role and extra-role behavior, it may also induce unethical behavior, hence the double-edged sword effects. In particular, high work stress may motivate salesperson's "instrumental intentions," where the salesperson proactively inflicts harm to the customer (e.g., lying to customers) to obtain a desired outcome (e.g., meeting sales quota), which is a dysfunctional behavior that is used to conserve resources under stressful work conditions, especially when relevant coping resources (e.g., organizational support) are lacking (Darrat, Amyx, and Bennett 2010; Penney, Hunter, and Perry 2011). As such, we expect a positive relationship between work stress and unethical behavior.

A central tenet of cognitive appraisal theory is that choice of coping behaviors is influenced not only by the actual demand (e.g., stress), but is also shaped by the resources the person has at his/her disposal (Folkman et al. 1986). That is, the perception of available resources to cope with stress can significantly alter the perceived controllability of coping outcomes and the actual coping behaviors (Duhachek and Iacobucci 2005; Folkman 1984; Tomaka et al. 1993).

Professional control is a social resource from which the salesperson can draw for work-related information, professional assistance, and feedback from co-workers. Unlike other traditional occupations (e.g., accounting), a unique characteristic of the sales job is the dynamic nature of customer and competitive intelligence that is fast changing. To perform their jobs effectively, salespeople must have customer knowledge creation capability (Menguc, Auh, and Uslu 2013). To the extent that customer- and competitor-related knowledge resides in each individual salesperson in the work unit, knowledge sharing and combination are essential for customer knowledge creation (Hughes, Bon, and Rapp 2013; Menguc, Auh, and Uslu 2013).

Professional control cultivates an environment in which knowledge and skills can be shared among co-workers through frequent interactions, communication, and feedback (Jaworski 1988; Jaworski and MacInnis 1989), which can boost the salesperson's confidence and motivate the salesperson to stay focused on in-role behavior due to enhanced customer knowledge and perceived controllability of outcomes. Without the presence of professional control, stress may be less likely to lead to in-role behavior due to lack of coping resources and uncertainty of coping outcomes.

By the same token, although stress may induce unethical behavior (Darrat, Amyx, and Bennett 2010; Penney, Hunter, and Perry 2011), we expect that professional control will reduce the tendency of unethical behavior induced by stress because customer- and competitor-related knowledge can be readily acquired from peers, which can significantly enhance the salesperson's effectiveness without depleting his/her resources (e.g., time or energy) that would otherwise have to be expended in the search, collection, analyzing, and interpretation of such intelligence.

As for extra-role behavior, recent research suggests that it is less likely to be impeded by work stress because extra-role behavior is voluntary and spontaneous which requires little

regulatory cognitive resources (Chan and Wan 2012). In fact, high stress can actually motivate extra-role behavior without any external coping resources because of the self-gratifying rewards therein (Chan and Wan 2012). Therefore, we do not expect professional control to moderate the effect of stress on extra-role behavior.

H3a: Professional control amplifies the positive effect of stress on in-role behavior.
H3b: Professional control weakens the positive effect of stress on unethical behavior.

Unlike professional control which is an extrinsically-valenced coping resource, self-control is an intrinsically-valenced psychological resource that can be drawn upon to sustain morale and problem-solving resolve (Folkman 1984). In particular, self-control reflects commitments to and importance of work to the salesperson, which give rise to the belief that work stress is a challenge for professional growth, thereby motivating the salesperson to take a more problem-focused coping approach through active planning and a higher level of optimism (Folkman 1984; Xanthopoulou et al. 2007). Therefore, the positive relationship between stress and in-role behavior should be stronger when self-control is high. Similarly, self-control can enhance the positive effect of stress on extra-role behavior because inherent value of work therein makes helping customers beyond the call of duty particularly self-rewarding and enjoyable (Chan and Wan 2012). Self-control is also expected to curtail unethical behavior induced by stress because such behavior is at odds with the meaning of work the salesperson holds dear to him/herself.

H4a: Self-control amplifies the positive effect of stress on in-role behavior.
H4b: Self-control amplifies the positive effect of stress on extra-role behavior.
H4c: Self-control weakens the positive effect of stress on unethical behavior.

Moderated incremental effects of family–work conflict

Beyond the mediated effects via stress, prior research suggests that work–family conflict and family–work conflict may also have incremental direct effects on coping behaviors. However, empirical findings are inconclusive at best with mixed results (Chelariu and Stump 2011; Frone, Yardley, and Markel 1997; Netemeyer, Maxham III, and Pullig 2005). We suggest that the effect of work–family conflict is more likely to be fully mediated, whereas the effect of family–work conflict partially mediated, by stress.

Work–family conflict is experienced when meeting work demands (e.g., out of town travel) makes it difficult to fulfill family responsibilities, thereby leading to higher levels of anxiety and stress at work. Because work–family conflict arises from disproportionate amount of time and/or efforts directed at work itself (Shockley and Singla 2011), work–family conflict is unlikely to directly interfere with salesperson work-related behaviors. Instead, work–family conflict mainly affects the salesperson's stress at work (e.g., elevated pressure to close sales quickly to allow for more family time), which subsequently influences salesperson behaviors. In other words, stress will likely fully mediate the effect of work–family conflict. In contrast, the source of family–work conflict is attributed to the family domain rather than work itself (Shockley and Singla 2011).

While family–work conflict can elevate stress at work, such conflict will also directly interfere with salesperson behaviors. For example, a salesperson may have to reduce time spent on customer service (e.g., training customer's employees on the customer location) in order to go home on time to fulfill family responsibilities (e.g., take kids to after school programs), leading to lower levels of in-role and extra-role performance. Moreover, when cognitive resources are being depleted by family-related issues and concerns, the benefits of unethical behavior (e.g., exaggerating product superiority to competitors' products) become more salient given its

16

instrumentality in conserving resources while meeting sales goals (Darrat, Amyx, and Bennett 2010; Penney, Hunter, and Perry 2011). Therefore, beyond the mediation effect by stress, family–work conflict can directly compromise the salesperson's in-role and extra-role behaviors while inducing unethical behavior directed at customers. We next consider the moderated incremental effects of family–work conflict through the lens of cognitive appraisal theory.[2]

According to cognitive appraisal theory, family–work conflict will likely be evaluated as a threat in primary appraisal because the demands created by family interfere with the performance of job-related tasks. In secondary appraisal, the salesperson will assess his/her ability to cope with such interference in light of available resources. Professional control, however, is not likely to facilitate coping in this scenario because work-related assistance (e.g., customer intelligence) cannot address the source of this conflict—the salesperson's family responsibilities and issues. On the contrary, professional control may exacerbate the negative effect of work–family conflict. Although professional control may not elevate stress under family–work conflict because peers may be more empathetic, the salesperson's need for maintaining a positive professional image in front of peers may still constitute a strong distraction that diverts cognitive resources away from work-related tasks (Meister, Jehn, and Thatcher 2014.), leading to poorer in-role behavior.

The same effect is expected on extra-role behavior. Although extra-role behavior does not require extensive self-regulation resources (Chan and Wan 2012), such aforementioned need for impression management and distraction are still expected to reduce the salesperson's energy and/or time to perform this discretionary customer-directed behavior. Further, because professional control does not provide helpful resources to cope with family–work conflict but

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[2] Although we do not expect incremental effects of work–family conflict, we nonetheless tested them empirically. Results corroborate our assertion as no incremental or moderation effects were found between work–family conflict and salesperson behaviors.

instead may further divert cognitive resources away from job activities, it is more likely that the

salesperson will be tempted to engage in unethical behavior directed at customers in order to

conserve resources when accomplishing sales tasks (Penney, Hunter, and Perry 2011).

H5a: Professional control amplifies the negative effect of family–work conflict on in-role
    behavior.
H5b: Professional control amplifies the negative effect of family–work conflict on extra-role
    behavior.
H5c: Professional control amplifies the positive effect of family–work conflict on unethical
    behavior.

    Self-control is a psychological resource that can give the salesperson a strong sense of

work value and meaning (Jaworski and MacInnis 1989). Those with strong self-control are better

able to stay focused on work-related activities (e.g., in-role behavior) despite constant

interference of family-related issues. Importantly, those with high self-control may actually

reinterpret family–work conflict as a challenge (as opposed to a threat) that provides an

opportunity to strengthen work commitment and professional competence (Duhachek and

Iacobucci 2005; Folkman 1984), thereby motivating them to exert more effort on in-role and

extra-role behaviors. Moreover, self-control reflects a strong intrinsic value of work, which

should also keep the salesperson from engaging in unethical behavior for short-term gains at the

expense of the customer interest and long-term customer relationship. Therefore, family–work

conflict is less likely to induce unethical behavior when self-control is high. We expect the

following:

H6a: Self-control weakens the negative effect of family–work conflict on in-role behavior.
H6b: Self-control weakens the negative effect of family–work conflict on extra-role behavior.
H6c: Self-control weakens the positive effect of family–work conflict on unethical behavior.

Research method

Sample and data collection

We collected dyadic data from salespeople and their customers in China via personal interviews with the help of a professional marketing research company. The vibrant transitional Chinese economy provides an excellent context for our research as firms, employees, salespeople, and their families are facing challenges and stress levels never experienced before. The prevalence of dual-career families, the rising cost of living, as well as the pressure to succeed in careers fuel the heightened level of work–family interface conflicts in China in recent years.

A mailing list of 2,500 manufacturers in a cross-section of industries was acquired from the professional marketing research firm, from which a random sample of 500 firms was drawn. To minimize potential selection biases from either salespeople or their customers, we randomly divided the 500 firms into two equal halves, with one designated as the salesperson list and the other as the customer list, and employed two complementary procedures to generate a matched salesperson–customer sample. The first procedure started with the sales departments of the 250 firms in the salesperson list by requesting the participation of one of their salespeople, who would respond to our survey and nominate four customers of different sizes: one from his or her largest customers (top 25%), one from the smallest customers (bottom 25%), and two from the medium-sized customers (remaining 50%). The size of the customer was defined by the purchase volume within the salesperson's customer portfolio. We then randomly selected one of the nominees as a respondent for the customer survey. If this customer could not be reached or declined to participate, we would then randomly select another customer from the remaining three nominees.

The second procedure began with purchasing departments of the 250 firms in the customer list to identify one buyer from each firm to participate. We followed the procedures from Ganesan (1994) and Johnson et al. (2004) to mitigate customers' tendency to choose

suppliers with whom they have a long-term relationship. We randomly assigned the buyers to one of four groups, such that a buyer would select a supplier that met one of the following criteria: (1) long relationship (two or more years) and very important purchase; (2) long relationship, moderately important purchase; (3) short relationship (less than a year), very important purchase; and (4) short relationship, moderately important purchase. Purchase importance was defined as the importance of the purchased product or component to the customer company. The marketing research company then collected survey data by contacting and interviewing the salespeople and customers we identified earlier. Respondents were guaranteed confidentiality and were offered aggregate results for their participation to motivate them to provide accurate responses.

We received a total of 320 completed and matched questionnaires, for an effective response rate of 64%. To assess non-response bias, we compared a random sample of 50 participating firms with nonparticipating firms for which we had data on annual sales in the previous year and number of employees; no significant differences were found. To assess potential selection bias, we also compared the means of all constructs based on the origin of the dyads (e.g., whether the salesperson was randomly selected by us or nominated by the customer) and found no significant differences, suggesting that selection bias is not likely a problem.

The majority (79%) of the respondents were male, 45% of whom had a college degree, with a mean age of 34 and an average company tenure of 5 years. Among the firms represented in our data, about 50% are privately owned, 22% publicly traded, and 6% owned by foreign companies. The mean firm sales volume in the year prior to the survey was approximately US$120 million, and the mean number of employees was 510.

Measurements

The surveys used scales adapted from existing literature. Four bilingual researchers followed the conventional translation–back translation procedure (Brislin 1980) to create the Chinese version for data collection. All multi-item measures were anchored on 7-point Likert scales with 1 = "strongly disagree" and 7 = "strongly agree," except for extra-role behavior, which ranged from 1 = "never" to 7 = "as often as possible."

We collected data on work–family conflict, family–work conflict, stress, and informal controls from the salespeople. We measured work–family conflict and family–work conflict with three items each from Netemeyer et al. (1996). We assessed salesperson stress with three items from House and Rizzo (1972). Professional control[3] (4 items) and self-control (3 items) were assessed with scales adapted from Jaworski and MacInnis (1989). Data on customer-directed sales behaviors (in-role, extra-role, and unethical behavior) were collected from the customers. In-role behavior was adapted from the SOCO scale (Saxe and Weitz 1982) as perceived by the customer. Extra-role behavior was measured with four items from Netemeyer et al. (2005) depicting salesperson's customer-directed effort beyond the call of duty. Unethical behavior was assessed with four items adapted from Roman and Ruiz (2005).

We also included five control variables in the empirical test: process control, output control, and three demographic variables (sales experience, age, and gender) as the literature suggests that they may also have effects on the intermediary and outcome variables in the model (Jaworski and MacInnis 1989). Specifically, we measured output control and process control using three items each from Jaworski and MacInnis (1989) to account for variations of formal

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[3] Similar to German companies (Workman, Homburg, and Gruner 1998), Chinese firms do not clearly distinguish between sales and marketing functions and tend to use them interchangeably. Therefore, as suggested by sales managers during our interviews, we used "sales and marketing professionals" instead of "sales professionals" to accommodate the idiosyncrasy of the empirical context.

controls across different industries and companies. Sales experience was measured by the number of years as a fulltime sales professional. We also controlled for the salesperson's age and gender. These control variables were modeled as antecedents of stress and sales behaviors.

Analysis and results

Measurement reliability and validity

We followed the established procedures to evaluate the psychometric properties of the measures (Churchill 1979; DeVellis 1991; Fornell and Larcker 1981). We first performed an exploratory factor analysis (EFA), which resulted in expected factor patterns. Next, we conducted a confirmatory factor analysis (CFA) with ten latent constructs, which exhibited an acceptable fit: χ^2 = 984.97 (df =482), root mean squared error of approximation (RMSEA) = .057, non-normed fit index (NNFI) = .95, confirmatory fit index (CFI) = .96, and standardized root mean square residual (SRMR) = .059 (Bagozzi and Yi 2012). Table 2 lists all the scale items with standardized factor loadings.

-- Table 2 about here --

We evaluated the measurement properties of the constructs in terms of their unidimensionality, convergent validity, reliability, and discriminant validity. All items load positively and significantly on their expected constructs, and modification indices suggest no significant cross-loadings, demonstrating convergent validity and construct unidimensionality (Anderson and Gerbing 1988). The average variances extracted (AVE) are all above the .50 threshold, and both the Cronbach's alpha and composite reliability measures exceed .70, suggesting adequate construct internal reliability (Bagozzi and Yi 1988).

For discriminant validity, we examined the squared correlation and the AVE of all pairs of latent constructs and found that in all cases the AVE exceeds the squared correlation (Fornell and Larcker 1981). We also conducted Chi-square tests for all possible pairs of constructs comparing a measurement model where the correlation between the two constructs was freely estimated versus a model where the correlation was constrained to unity. Results show that in all cases the unconstrained model fit the data better than the constrained model (Anderson and Gerbing 1988). In Table 3 we present the means, standard deviations, reliability estimates, and correlation matrix of all the variables.

-- Table 3 about here --

Hypothesis testing

Because all of our hypotheses involve latent variable interactions, we adopted the unconstrained latent indicator approach to interaction in structural equation modeling (Marsh et al. 2013). Compared with the constrained approach, the unconstrained approach does not impose any complicated non-linear constraints to defining relationships between product indicators and the latent interaction factors (Marsh et al. 2007). Moreover, because it relaxes the normality assumption, the unconstrained approach produces less biased estimates of the latent interaction effects than does the constrained approach (Marsh et al. 2013). Nonlinear products of manifest indicators in structural equation models are known to have non-normal distributions even when the two indicators themselves are normally distributed (Joreskog and Yang 1996). The constrained approach is based on the normality assumption, and as such, applying the constrained approach to non-normal data to estimate the nonlinear interaction effects produces biased estimates. The unconstrained approach, on the other hand, is robust in relation to the violations of the normality assumptions, in that it does not impose any constraints derived from

the multivariate normality assumption of the latent variables (Marsh et al. 2007; Marsh et al. 2013).

Following Cohen et al. (2003), we conducted hypothesis testing by estimating three models sequentially: a covariates-only model with the five covariates (outcome control, process control, and three demographic variables) and endogenous constructs, a main effects model with the main effects from exogenous constructs in addition to the covariates, and a full model with the hypothesized interaction effects. In all three models, we allowed the errors of the three salesperson behaviors to correlate (Jap 1999; Scheer et al. 2010), as they are all important facets of the salesperson's behaviors as perceived by the customer and should be correlated with each other (Netemeyer et al. 2005; Roman and Ruiz 2005; Umphress et al. 2010).

The model with covariates only had the following fit statistics: $\chi^2 = 452.39$ (df = 219), RMSEA = .058; NNFI = .95, CFI = .96, and SRMR = .057. The variances explained (R^2) in the endogenous constructs are: stress = .05, in-role behavior = .16, extra-role behavior = .11, and unethical behavior = .02. The control paths are presented in the SEM1 column of Table 4. The main effects model fit the data reasonably well: $\chi^2 = 1062.20$ (df = 554), RMSEA = .054; NNFI = .95, CFI = .95, and SRMR = .056. The variances explained (R^2) in the endogenous constructs are: stress = .25, in-role behavior = .32, extra-role behavior = .30, and unethical behavior = .21. The standardized path estimates and their t-values are presented in the SEM2 column of Table 4.

-- Table 4 about here --

Next, we estimated a full structural model with the hypothesized interaction terms using the unconstrained approach (Marsh et al. 2013). To form the product indicators, we first mean-centered all the manifest indicators and then used the matched pair method to calculate the product indicators based on two guidelines: use all of the information and do not reuse any of the

24

information. The model has fit indices as follows: $\chi^2 = 2480.43$ (df = 1213), RMSEA = .057; NNFI = .90, CFI = .92, and SRMR = .61. The model explains more variance in endogenous constructs than does the main effect model, with the following R^2 statistics: stress = .32, in-role behavior = .38, extra-role behavior = .35, and unethical behavior = .34. Modification indices do not suggest any fixed path that might be significant. All path coefficient estimates are presented in the SEM3 column of Table 4 and in Table 5 (interactions).

To facilitate interpretation of the results, we plot the significant interaction effects in Figure 2 using simple slope analyses.

-- Table 5 about here --

-- Figure 2 about here --

H1 predicts that professional control amplifies the positive effect of work–family conflict on stress. Results (SEM3) show that the interaction of work–family conflict and professional control is positive and significant (β = .42, $p < .01$), in support of H1. As we expected, the interaction of family–work conflict and professional control is not significant (β = -.12, *ns*). As shown in Figure 2 (Panel A), the effect of work–family conflict on stress is close to zero (β = -.09, *ns*) when professional control is low (one standard deviation below the mean), but it is positive and significant (β = .62, $p < .01$) when professional control is high (one standard deviation above the mean).

H2a posits that self-control alleviates the positive effect of work–family conflict on stress. The interactive effect of work–family conflict and self-control on stress is negative (β = -.17, $p < .05$); however, self-control does not significantly mitigate the positive effect of family–work conflict on stress (β = -.06, *ns*), albeit in the predicted direction. Figure 2 (Panel B) shows that the effect of work–family conflict on stress is close to zero (β = .10, *ns*) when self-control is high,

but is positive and significant when self-control is low (β = .42, p < .05). Thus, H2a is supported, but H2b is rejected.

H3a predicts that professional control amplifies the positive effect of stress on in-role behavior. There is a positive and significant interactive effect of stress and professional control on in-role behavior (β = .26, p < .01). Panel C in Figure 2 depicts that stress positively affects in-role behavior when professional control is high (β = .46, p < .01), but when professional control is low, stress has no impact on in-role behavior (β = .02, ns). Therefore, H3a is supported. As we expected, stress also has a positive effect on extra-role behavior (β = .24, p < .01) but there is no interactive effect of professional control and stress (β = .06, ns). H3b suggests that professional control weakens the positive effect of stress on unethical behavior. However, the interactive effect is not significant (β = -.06, ns), albeit in the predicted direction. H3b is rejected.

H4 predicts that when self-control is high, stress is more positively related to (a) in-role behavior, (b) extra-role behavior, and less positively related to (c) unethical behavior. The results show that stress and self-control have a positive interactive effect on in-role behavior (β = .14, p < .01) and extra-role behavior (β = .11, p < .05). Panel D of Figure 2 shows that when self-control is low, stress has no effect on in-role behavior, but when self-control is high, stress is positively related to in-role behavior (β = .37, p < .01). Similarly, Panel E depicts the moderating effect of self-control on stress and extra-role behavior relationship. Stress positively affects extra-role behavior only when the salesperson has a high level of self-control (β = .34, p < .01). The interactive effect on unethical behavior is also significant and in the predicted direction (β = -.11, p < .05). Panel F shows that stress is actually negatively related to unethical behavior when self-control is high (β = -.14, p < .05). Thus, H4a, H4b, and H4c are all supported.

H5a and H5b hypothesize that professional control amplifies the negative effects of family–work conflict on in-role behavior and extra-role behavior, respectively. We find that professional control has a negative interactive effect with family–work conflict on in-role behavior (β = -.21, p < .05) and extra-role behavior (β = -.26, p < .05) such that family–work conflict has a more detrimental effect on in-role and extra-role behaviors when professional control is high. Panel G of Figure 2 shows that family–work conflict has no effect on in-role behavior at low professional control (β = -.01, *ns*) but has a significant negative effect on in-role behavior at high levels of professional control (β = -.37, p < .01). Similarly, Panel H suggests family–work conflict negatively affects extra-role behavior when professional control is high (β = -.36, p < .05). These results support H5a and H5b. Professional control also seems to exacerbate the positive impact of family–work conflict on unethical behavior (β = .43, p < .01). In Panel I of Figure 2, we observe a positive relationship between family–work conflict and unethical behavior when professional control is high (β = .82, p < .01), but the relationship becomes non-significant when professional control is low (β = .08, *ns*). As such, H5c also received support.

H6a-c test the moderating effects of self-control on the linkage between family–work conflict and salesperson behaviors. Results indicate that self-control reduces the negative effect of family–work conflict on in-role behavior (β = .37, p < .01). As shown in Panel J, family–work conflict decreases in-role behavior when self-control is low (β = -.54, p < .01), but such effect disappears when self-control is high (β = .16, *ns*). Similarly, self-control attenuates the negative impact of family–work conflict on extra-role behavior (β = .31, p < .05). Panel K illustrates that when self-control is high, family–work conflict has virtually no effect on extra-role behavior (β = .16, *ns*), but when self-control is low, family–work conflict significantly reduces extra-role

behavior (β = -.44, $p < .01$). Self-control also significantly moderates the relationship between

family–work conflict and unethical behavior (β = -.55, $p < .01$). Panel L shows that family–work

conflict increases the occurrence of unethical behavior (β = .96, $p < .01$) only when self-control

is low. As such, H6a, H6b, and H6c are fully supported. Note that we do not expect moderated

incremental effects of work–family conflict, which we also confirmed with empirical results. As

Table 5 shows, none of the direct effects or moderation effects involving work–family conflict

are statistically significant.

Discussion

Theoretical implications

The boundary-spanning nature of the B2B sales occupation makes salespeople

particularly susceptible to work–family interface conflicts. Compared to other employees, B2B

salespeople often must work beyond regular business hours (e.g., extensive travel requirements)

and keep abreast with current customer and competitive intelligence in order to perform their

jobs effectively (Hughes, Bon, and Rapp 2013; Menguc, Auh, and Uslu 2013). While it is

generally assumed that work–family conflict and family–work conflict have negative

consequences in boundary-spanning employees' coping behaviors primarily through perceived

stress (e.g., Netemeyer, Maxham III, and Pullig 2005), it is unclear whether (1) effects of work–

family conflict and family–work conflict on stress vary across environmental and psychological

contexts and (2) work–family conflict and family–work conflict can actually motivate positive,

rather than negative, coping behaviors under certain conditions. The findings of this study

address these two important research questions, thereby providing new and relevant theoretical

and managerial implications.

Consistent with the central tenet of cognitive appraisal theory (Lazarus and Folkman 1984; Folkman et al. 1986), we find that the effects of work–family conflict and family–work conflict on stress do vary as a result of primary appraisal. Specifically, work–family conflict may result in particularly elevated levels of perceived stress in an environment with a high level of professional control. When professional control is present, a salesperson's performance will be highly visible to peers who will also likely make informal evaluations of the salesperson (Jaworski and MacInnis 1989). For example, when a salesperson has to visit more new customers each month to meet sales targets, he/she may worry that peers will infer that the salesperson's incompetence (e.g., inability to close sales effectively) is responsible for his/her work–family conflict. Moreover, peers may view a salesperson complaining of work–family conflict as someone less devoted to the organization. These concerns, in turn, will elevate perceived stress because favorable self-image at workplace is of much importance to salespeople who are constantly under peer monitoring and evaluation (Jaworski 1988). In contrast, family–work conflict does not have significant negative implications to the salesperson's professional competence because the source of such conflict is family-related issues. Moreover, peer salespeople may be more empathetic toward the salesperson when family issues are interfering with work. Consequently, professional control does not exacerbate the effect of family–work conflict on the salesperson's perceived stress.

Self-control is found to reduce the positive effect of work–family conflict on stress. Unlike professional control which is externally regulated by peers, self-control is intrinsically valenced, characterized by commitment to an intrinsic meaning of work (Chen and Silverthorne 2008; Jaworski and MacInnis 1989). Salespeople who have high levels of self-control tend to interpret work–family conflict as a challenge for developing their professional competence,

29

which can make such a work-related challenge inherently meaningful, enjoyable, and motivating (Amabile et al. 1994; Folkman 1984). Moreover, importance of work value and commitments give rise to a strong belief that the encounter outcome is controllable during the primary appraisal process (Folkman 1984). As a result, the effect of work–family conflict on perceived stress may be much lower when self-control is high, as the internal locus of control therein may direct the salesperson' attention to the more positive and enjoyable aspects of the challenge (Amabile et al. 1994; Duhachek and Iacobucci 2005).

Self-control, however, does not mitigate the positive effect of family–work conflict on stress. Instead, self-control is found to weaken the direct effects of family–work conflict on salesperson behaviors. A possible explanation is the different source attribution of family–work conflict versus that of work–family conflict (Shockley and Singla 2011). It is likely that self-control (e.g., commitment to work) can help reduce perceived work stress only when it can exert direct influence on the very source of the conflict (e.g., work). When the source of such conflict is not work itself, self-control does not alleviate work stress but instead directly regulates the salesperson's job-related behaviors. Nonetheless, these results reveal that at least the effect of work–family conflict on perceived stress is not monotonic but is contingent upon psychological and environmental contexts: professional control significantly raises the social stake of work–family conflict leading to elevated stress, whereas self-control mitigates stress because of perceived controllability of encounter outcome.

Although work stress may initially prompt the salesperson to initiate performance-protection strategies by exerting higher amounts of effort in required sales activities (i.e., in-role behavior), doing so may deplete the salesperson's cognitive, physical, and/or emotional resources (Bakker and Demerouti 2007; Chan and Wan 2012). Therefore, the extent to which

stress may lead to sustained problem-focused coping depends on the perceived availability of resources to implement the needed coping strategy (Folkman 1984). Both professional control and self-control are found to amplify the positive effect of stress on in-role behavior. It is interesting that professional control amplifies the positive effect of work–family conflict on perceived stress on the one hand (primary appraisal), but also strengthens the positive impact of stress on in-role behavior on the other hand (secondary appraisal). It appears that peer monitoring and evaluation are more salient in primary appraisal but information sharing and peer assistance stand out as useful resources during secondary appraisal.

In contrast, self-control is a psychological resource that bestows meaning of work and perceived controllability of coping outcomes (Folkman 1984; Jaworski and MacInnis 1989), thereby motivating salesperson's in-role behavior under work stress. While results confirm our expectation that stress can motivate extra-role behavior without intervention of external coping resources (i.e., professional control), the positive effect of stress on extra-role behavior is particularly strong when the salesperson has a high level of self-control (i.e., an internal resource) because of the self-rewarding experience therein (Chan and Wan 2012). We failed to find the predicted moderation effect of professional control on the relationship between stress and unethical behavior. Research has suggested that unethical behavior will most likely be curtailed when one experiences job satisfaction (Darrat, Amyx, and Bennett 2010). It appears that, although external resources such as professional control may facilitate active coping, its external locus of control does not enhance the sense of work value and job satisfaction. This speculation becomes more plausible when compared with the moderation effect of self-control, where stress induces unethical behavior *only* when self-control is low.

Results also reveal that family–work conflict has deleterious incremental effects on salesperson behaviors, but such effects are moderated by professional control vis-à-vis self-control in opposite fashion: family–work conflict significantly dampens in-role behavior and extra-role behavior while inducing unethical behavior when professional control is high, whereas self-control is found to reverse these patterns. Because family–work conflict occurs when the source of the conflict is the salesperson's family (Shockley and Singla 2011), peer feedback and support at work will not be able to address the source of the family–work conflict. On the contrary, needs for maintaining a professional image in front of peers become salient. Therefore, the salesperson may be further distracted by impression management at the expense of performing in-role and extra-role behavior, and be tempted to engage in unethical behavior to make the numbers, possibly as a way to conserve energy when cognitive resources are being stretched by self-monitoring and impression management (Penney, Hunter, and Perry 2011).

In contrast, when self-control is high, the deleterious effects of family–work conflict are curtailed. Although self-control may not solve family-related issues and lower associated stress, the internal locus of control therein may infuse positive meanings into the adverse event that "encourages active coping efforts as opposed to helplessness and passivity" (Folkman 1984, p. 849). Therefore, high levels of self-control can turn an otherwise adverse event (i.e., family–work conflict) into a more positive experience that serves to strengthen one's professional competence, thereby mitigating negative effects of family–work conflict on salesperson behaviors. Our results corroborate this line of reasoning in that salespeople with a high level of self-control are more likely to take family–work conflict head-on by expending more effort in in-role and extra-role behaviors while warding off the temptation of committing customer-directed unethical behavior.

This study refines our understanding of work–family conflict and family–work conflict in terms of their conditional effects on salespeople's coping behaviors through the theoretical lens of cognitive appraisal theory. Although prior research has unanimously uncovered negative consequences of work–family conflict and family–work conflict, we theorize and illustrate their double-edged sword effects given the presence of two contextual factors: professional control and self-control. Apparently, the effects of these work–family interface conflicts are not as simple as previously suggested; instead, these conflicts can have both positive and negative consequences, and professional control and self-control serve as critical boundary conditions for these divergent and even opposite results.

Managerial implications

Our results also provide important new insights that can inform managerial practice in professional selling. Although sales managers are well aware of the prevalence of work–family conflict and family–work conflict among their salespeople, these work–family interface conflicts seem to always worry sales managers due to their purported negative consequences in terms of salespeople's effectiveness at work. This study illustrates that there are conditions under which work–family interface conflicts can actually produce positive salesperson coping behaviors. Although work–family interface conflicts can elevate work stress, stress is not always a bad thing as it can motivate problem-focused coping behaviors. If the sales manager cultivates a work environment where peers actively engage in frequent communication and feedback on work-related issues, stress may actually motivate in-role behavior due to active sharing of customer- and competitor-related intelligence from peers. Moreover, hiring salespeople who are characterized by high levels of self-control will pay off under high work stress. This is because

when self-control is high, work is inherently meaningful and salespeople tend to have a strong internal locus of control, which will not only motivate them to exert more effort on in-role and extra-role behavior but also to refrain from committing unethical behavior directed at customers.

Managers, however, must beware that professional control carries its hidden cost when the salesperson is struggling with family–work conflict where the source of conflict comes from family-related issues. Professional control can actually exacerbate the negative effects of family–work conflict by dampening in-role and extra-role behavior while inducing more occurrences of unethical behavior. This is because professional control cannot solve family-related issues but may further distract the salesperson due to the need for impression management in such an environment. On the contrary, self-control appears to be able to curtail such deleterious effects of family–work conflict. Therefore, in sales organizations where salespeople frequently encounter family–work conflict, hiring and retaining those with a high level of self-control may be an effective means of managing this stressful situation. In summary, professional control seems to work well only in managing the salesperson's work–family conflict, whereas self-control is effective in managing both work–family conflict and family–work conflict.

Limitations and future research directions

Despite its contributions, our research is subject to some limitations. First, although we used salesperson–customer dyadic data, data concerning work–family conflict, family–work conflict, and stress came from the same source: the salesperson. However, our hypotheses involve both positive and negative interactive effects between work–family interface conflicts and informal controls, which cannot be artifacts of common method variance (Siemsen et al. 2010). Second, the empirical context is the B2B sales force in China, so the extent to which

results are generalizable to other cultural and empirical contexts cannot be assumed without further empirical examinations.

Our study also gives rise to some interesting questions for future research. First, we notice that in our results stress has positive main effects on in-role behavior and extra-role behavior, in stark contrast to Netemeyer, Maxham III, and Pullig (2005), who found negative effects of stress on in-role performance and extra-role performance. One possible explanation is the cultural and industrial difference since our data came from the Chinese B2B sales force, and Netemeyer et al.'s data came from the US service industry. Another speculation has to do with the construct of stress itself. In both studies, stress is operationalized as a global construct without differentiating between challenge stress and hindrance stress, which are two qualitatively distinct types of stress that may have opposite patterns of results (Van den Broeck et al. 2010). In particular, challenge stress may motivate positive coping behaviors (as in our results) whereas hindrance stress can divert salespeople away from problem-focused coping behaviors (as in Netemeyer et al.'s study). This is worth pursuing in future research.

Second, we found it intriguing that effects of family–work conflict on salesperson behaviors are partially mediated, but effects of work–family conflict are fully mediated, by stress. This suggests that additional mediating variables may be operative between family–work conflict and those coping behaviors. Future research can include other possible mediators such as perceived helplessness (Boichuk et al. 2014) as it may be much harder to handle family–work conflict than work–family conflict. Organizational, social, and individual resources that can effectively address those issues and facilitate salesperson's coping process deserve more research endeavor.

Third, while our study focused on three salesperson behaviors, we did not investigate other important salesperson outcome variables such as job satisfaction and organizational commitment. As prior research typically found that work–family interface conflicts have deleterious effects on salesperson's well-being (Carr, Boyar, and Gregory 2008), the extent to which professional control, self-control, and other coping resources can mitigate those negative effects provides avenues for future research inquiries.

Finally, our study brings promise that measures can be taken to manage work–family conflict and family–work conflict in the B2B sales profession. Additional contextual factors such as leadership characteristics (e.g., sales manager transformational leadership) that can guide salespeople's cognitive appraisal process and induce positive coping behaviors are worth future research endeavors.

TABLE 1
Summary of Illustrative Research on the Influence of Work-Family Conflict and Family-Work Conflict on Job-related Outcomes

Illustrative Research	Context	Type of Work-Family Interface Conflicts Examined	Moderator Variables	Mediator Variables	Positive Outcomes Examined	Negative Outcomes Examined	Key Findings
Anand et al. (2014)	Employees in several US industries such as manufacturing, information technology, and agriculture	Family interfering with work (FIW)	Agreeableness	Job stress	Job satisfaction, life satisfaction	None	A negative association between FIW and job/life satisfaction is fully mediated by job stress, which is moderated by employee agreeableness, such that FIW only increases job stress at low levels of agreeableness.
Anderson, Coffey, and Byerly (2002)	Wage and salaried employees of a nationwide cross-sectional sample in the US	Work-family conflict; family-work conflict	None	None	Job satisfaction	Turnover intention, stress, absenteeism.	Both work-family conflict and family-work conflict increase stress; work-family conflict decreases job satisfaction and induces turnover intention, whereas family-work conflict causes absenteeism.
Bande et al. (2015)	Industrial salespeople from fifteen industries in Spain	Work-family conflict	None	Emotional exhaustion	None	Turnover intention	Emotional exhaustion fully mediates the positive effect of work-family conflict on turnover intention.
Boles, Johnston, and Hair (1997)	Salespeople of a regional media firm in the US	Work-family conflict	None	Emotional exhaustion, job satisfaction	None	Propensity to leave	Work-family conflict increases emotional exhaustion and dampens job satsfaction, which fully mediate the positive effect of work-family conflict on propensity to leave.
Carr, Boyar, and Gregory (2008)	Employees of a manufacturing and assembly plant of subcomponents for durable consumer products in the US	Work-family conflict	Work centrality	None	Job satisfaction, organizational commitment	Voluntary turnover	Work-family conflict decreases job satisfaction and organizational commitment while increasing voluntary turnover; work centrality, however, buffers the detrimental effects of work-family conflict on job satisfaction and voluntary turnover.
Chelariu and Stump (2011)	Retail salespeople in a transitional economy (Hungary)	Work-family conflict, family-work conflict	Self-efficacy	Job stress	None	Turnover intention	Work-family conflict is strongly related to, and family-work conflict is marginally related to, job stress. Job stress fully mediates the effect of work-family conflict on turnover intention. Self-efficacy accentuates the positive effect of work-family conflict on job stress, but attenuates the effect of family-work conflict on job stress.
Darrat, Amyx, and Bennett (2010)	B2B salespeople of various industries in the US.	Work-family conflict	None	Job satisfaction	None	Interpersonal deviance, organizational deviance, and customer-directed deviance.	Work-family conflict has direct negative effects on interpersonal deviance and customer-directed deviance, whereas job satisfaction partially mediates the detrimental effect of work-family coflict on organizational deviance.
Frone, Yardley, and Markel (1997)	Emplyees who are married and/or are parents in a financial services firm in Canada	Work-family conflict, family-work conflict	None	Work distress, family distress	Work performance, family performance	None	Family-work conflict (work-family conflict) is negatively related to work (family) performance, but work (family) distress do not mediate these relationships.

Good, Page, and Young (1996)	Entry- and upper-level retail managers of a major multiunit department store (US)	Work-family conflict	None	Job satisfaction	Organizational commitment	Intent to leave	For entry-level retail managers, job satisfaction mediates effects of work-family conflict on organizational commitment (full mediation) and intent to leave (partial mediation).
Grandey, Cordeiro and Crouter (2005)	Dual career couples with young children, longitudinal study (US)	Work interfering with family (WIF), family interfering with work (FIW)	Gender	None	Job satisfaction	None	WIF is related to job satisfaction cross-sectionally for both men and women beyond the effect of FIW, but is predictive of job satisfaction over time only for women but not for men.
Martins, Eddleston, and Veiga (2002)	Professional managers from various industries (US)	Work-family conflict	Gender, age, minority gender status	None	Career satisfaction	None	Career satisfaction of women and that of older individuals of both genders who have a minority gender status is the most adversely affected by work-family conflict
Netemeyer, Brashear-Alejandro, and Boles (2004)	Retail salespeople from the U.S., Puerto Rico, and Romania.	Work-family conflict; family-work conflict	None	Job stress, in-role performance	Job satisfaction	Turnover intention	The effect of work-family conflict on turnover intention is partially mediated, whereas its effect on job satisfaction is fully mediated by job stress; effects of family-work conflict are fully mediated by job stress and in-role performance.
Netemeyer, Maxham III, and Pullig (2005)	US Customer service employees of an online electronics retailer (B2C)/US Service employees of technology-related equipment for retailers and financial service institutions	Work-family conflict; family-work conflict	None	Job stress	In-role performance; customer-directed extra-role performance; customer purchase intent	None	Job stress partially mediates the deleterious effects of work-family conflict on in-role performance, customer-directed extra-role performance, and customer purchase intent, whereas family-work conflict has a non-mediated direct negative effect on customer-directed extra-role performance, which subsequently lowers customer purchase intent.
Post et al. (2009)	Scientists and engineers emoloyed in US R&D laboratories	Work interfering with family (WIF), family interfering with work (FIW)	None	Work dissatisfaction	None	Turnover intention	FIW indirectly increases intentions to change organizations via work dissatisfaction; WIF does not affect directly or indirectly turnover intention.
Turner et al. (2014)	Medical staff of a public hospital (UK)/employees of manufacturing or service companies (US)	Work-family conflict; family-work conflict	None	Psychological distress	None	Workplace injuries	Work-family conflict and family-work conflict increase workplace injuries via the mediator psychological distress in the medical staff sample (partial mediation) and in the manufacturing and service industry sample (full mediation).
Zhao, Mattila, and Ngan (2014)	Full service hotel employees in Macau, China	Work interfering with family (WIF), family interfering with work (FIW)	None	Physical exhaustion, emotional exhaustion, mental	Role performance, customer satisfaction	Faking positive emotions	FIW is linked to physical, emotional, and mental exhaustion, but WFC is not. Physical and emotional exhaustion fully mediate effects of FIW on faking positive emotions, role performance, and customer satisfaction.

Table 2: Measurement Items and Standardized Factor Loadings

Construct		Measures	Factor Loading
Work–family conflict	1.	Due to work-related duties, I have to make changes to my plans for family activities.	.76
	2.	The amount of time my job takes up makes it difficult to fulfill family responsibilities.	.95
	3.	The demands of my work interfere with my home and family life.	.74
Family–work conflict	1.	The demands of my family interfere with work-related activities.	.84
	2.	Things I want to do at work do not get done because of the demands of my family.	.90
	3.	My home life interferes with my responsibilities at work, such as getting to work on time, accomplishing daily tasks, and working overtime.	.88
Professional control	1.	My sales department encourages cooperation between sales and marketing professionals.	.72
	2.	Most of the sales and marketing professionals in my department are familiar with each other's productivity.	.65
	3.	My department fosters an environment where sales and marketing professionals respect each other's work.	.70
	4.	My department encourages job-related discussions between sales and marketing professionals.	.80
Self-control	1.	The major satisfactions in my life come from my job.	.70
	2.	The work I do on my job is very meaningful to me.	.83
	3.	I feel that I should take credit or blame for the results of my work.	.65
Stress	1.	At the end of the day, my job leaves me "stressed-out."	.74
	2.	Problems associated with work have kept me awake at night.	.89
	3.	I feel fidgety or nervous because of my job.	.88
Customer-directed in-role behavior	1.	This salesperson tries to answer our questions about products as correctly as he/she can.	.66
	2.	This salesperson tries to bring us with a product that can help us solve a business problem.	.80
	3.	This salesperson tries to give us an accurate expectation of what the product will do for us.	.69
	4.	This salesperson tries to figure out what our needs are.	.73
Customer-directed extra-role behavior	1.	How often did this salesperson go above and beyond the "call of duty" when serving you as a customer?	.82
	2.	How often did this salesperson willingly go out his/her way to make you satisfied as a customer?	.92
	3.	How often did this salesperson voluntarily assist you as a customer even if it meant going beyond his or her job requirements?	.86
	4.	How often did this salesperson help you as a customer with problems beyond what was expected or required?	.77
Customer-directed unethical behavior	1.	This salesperson lies about product availability in order to make a sale.	.91
	2.	This salesperson lies about competition in order to make the sale.	.88
	3.	This salesperson gives answers when he/she doesn't really know the answers.	.72
	4.	This salesperson applies sales pressures even though he/she knows the product is not right for me.	.71
Outcome control	1.	Specific sales performance goals are established for my job.	.64
	2.	My immediate boss monitors the extent to which I attain my sales performance goals.	.74
	3.	If my sales performance goals were not met, I would be required to explain why.	.76
Process control	1.	My immediate boss monitors the extent to which I follow established sales	.76

procedures.

2.	My immediate boss evaluates the sales procedure I use to accomplish a given task.	.73
3.	My immediate boss modifies my sales procedures when desired results are not obtained.	.68

		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Work–family conflict	.68												
2.	Family–work conflict	.40	.76											
3.	Professional control	.08	-.24	.52										
4.	Self-control	-.12	-.14	.53	.53									
5.	Stress	.42	.30	.05	-.06	.70								
6.	In-role behavior	-.17	-.28	.43	.39	.10	.52							
7.	Extra-role behavior	-.10	-.13	.31	.48	.15	.59	.71						
8.	Unethical behavior	.13	.39	-.29	-.15	.10	-.49	-.24	.66					
9.	Outcome control	.05	-.16	.54	.37	.16	.38	.29	-.05	.51				
10.	Process control	-.08	.02	.57	.43	.12	.29	.26	-.08	.62	.52			
11.	Sales experience	.14	.04	.00	-.02	.04	-.11	-.05	-.01	.01	.07	--		
12.	Age	.21	.03	.06	-.07	.02	-.08	-.03	-.04	.00	.03	.84	--	
13.	Gender (Male=1, Female=0)	-.12	.05	.00	.17	-.08	.05	.09	-.06	.00	.40	.36	.37	--
	Mean	3.88	2.85	5.59	5.09	3.68	5.28	4.45	2.41	5.65	4.86	8.30	33.57	.79
	Standard deviation	1.20	1.09	.85	.94	1.27	.79	1.04	1.07	.90	1.01	4.99	6.87	.41
	Cronbach's alpha	.85	.91	.80	.75	.87	.79	.91	.88	.75	.74	--	--	--
	Composite reliability	.86	.91	.81	.77	.88	.79	91	.88	.76	.77	--	--	--

Notes: Correlations greater than .11 are significant at $p < .05$; correlations greater than .14 are significant at $p < .01$. Average variances extracted (AVEs) appear on the diagonal.

Path	SEM1 (controls only model)		SEM2 (main effects model)		SEM3 (full interaction model)	
Control Paths	Beta	t-value	Beta	t-value	Beta	t-value
Outcome control → Stress	.08	.66	.13	1.14	.08	.67
Outcome control → In-role behavior	.32	2.64	.17	1.48	.27	1.74
Outcome control → Extra-role behavior	.25	2.25	.12	1.07	.19	1.27
Outcome control → Unethical behavior	.01	.12	.18	1.64	.05	. 34
Process control → Stress	.14	1.02	.16	1.04	.26	1.67
Process control → In-role behavior	.09	.67	-.11	-.64	-.24	-1.08
Process control → Extra-role behavior	.07	.53	-.07	-.45	-.15	.73
Process control → Unethical behavior	-.11	-.82	-.04	-.27	.10	.45
Experience → Stress	.00	-.00	.08	.81	.02	.27
Experience → In-role behavior	-.16	-1.41	-.14	-1.33	-.17	-1.35
Experience → Extra-role behavior	-.17	-1.62	-.16	-1.62	-.15	-1.20
Experience → Unethical behavior	.13	1.21	-.03	.32	.14	.96
Age → Stress	-.22	-1.51	.13	-.73	-.14	-.94
Age → In-role behavior	.04	.28	.05	.57	.08	1.01
Age → Extra-role behavior	.09	.70	.10	1.02	.09	.81
Age → Unethical behavior	-.01	-.06	-.01	-.53	-.02	-.44
Gender → Stress	.09	-.79	-.09	-.73	-.12	-.87
Gender → In-role behavior	.04	.38	.07	.57	.18	.90
Gender → Extra-role behavior	.08	.72	.14	1.22	.18	.94
Gender → Unethical behavior	-.15	-1.29	-.06	-.53	-.19	-.86
Main Effect Paths						
Professional control → Stress			-.07	-.55	-.07	-.50
Professional control → In-role behavior			.27	2.14	.15	1.68
Professional control → Extra-role behavior			.03	.24	-.15	-.71
Professional control → Unethical behavior			-.26	-2.12	-.00	-.01
Self-control → Stress			-.06	-.72	-.11	-1.09
Self-control → In-role behavior			.20	2.22	.35	2.65
Self-control → Extra-role behavior			.44	4.99	.51	3.08
Self-control → Unethical behavior			-.02	-.25	-.15	-1.26
Work–family conflict → Stress			.35	4.42	.26	2.66
Work–family conflict → In-role behavior			-.21	-2.51	-.12	-1.20
Work–family conflict → Extra-role behavior			-.13	-1.74	-.11	-1.60
Work–family conflict → Unethical behavior			.01	.14	-.07	-.45
Family–work conflict → Stress			.15	1.82	.25	2.50
Family–work conflict → In-role behavior			-.12	-2.78	-.19	-2.94
Family–work conflict → Extra-role behavior			-.05	-.66	-.14	-1.33
Family–work conflict → Unethical behavior			.36	4.39	.45	3.12
Stress → In-role behavior			.22	2.99	.24	2.84
Stress → Extra-role behavior			.24	3.48	.24	3.03
Stress → Unethical behavior			-.02	-.33	-.04	-.44

Table 5: Results on Hypothesis Testing for Interactive Effects

Hypothesis	Path	Beta	t-value	Supported?
H1	Work–family conflict*Professional control → Stress	.42	2.34	Yes
--	Family–work conflict*Professional control → Stress	-.12	-.96	
H2a	Work–family conflict*Self-control → Stress	-.17	-1.97	Yes
H2b	Family–work conflict*Self-control → Stress	-.06	-.51	No
H3a	Stress*Professional control → In-role behavior	.26	2.73	Yes
--	Stress*Professional control → Extra-role behavior	.06	.88	
H3b	Stress*Professional control → Unethical behavior	-.06	-.84	No
H4a	Stress*Self-control → In-role behavior	.14	2.77	Yes
H4b	Stress*Self-control → Extra-role behavior	.11	1.99	Yes
H4c	Stress*Self-control → Unethical behavior	-.11	-1.77	Yes
--	Work–family conflict*Professional control → In-role behavior	-.06	-.47	
--	Work–family conflict*Professional control → Extra-role behavior	-.06	-.50	
--	Work–family conflict*Professional control → Unethical behavior	.07	.73	
H5a	Family–work conflict*Professional control → In-role behavior	-.21	-1.87	Yes
H5b	Family–work conflict*Professional control → Extra-role behavior	-.26	-2.03	Yes
H5c	Family–work conflict*Professional control → Unethical behavior	.43	2.38	Yes
--	Work–family conflict*Self-control → In-role behavior	-.02	.25	
--	Work–family conflict*Self-control → Extra-role behavior	.07	.38	
--	Work–family conflict*Self-control → Unethical behavior	-.11	-.45	
H6a	Family–work conflict*Self-control → In-role behavior	.37	2.72	Yes
H6b	Family–work conflict*Self-control → Extra-role behavior	.32	2.11	Yes
H6c	Family–work conflict*Self-control → Unethical behavior	-.55	-3.57	Yes

Figure 1: Effects of Work–Family Conflict and Family–Work Conflict

Salesperson Rated Variables | Customer Rated Variables

- Professional control
- Self-control

H1
H2a
H2b

Work-family conflict

H3a-b
H4a-c

Work stress

Family-work conflict

H5a-c
H6a-c

Control variables
- Outcome control
- Process control
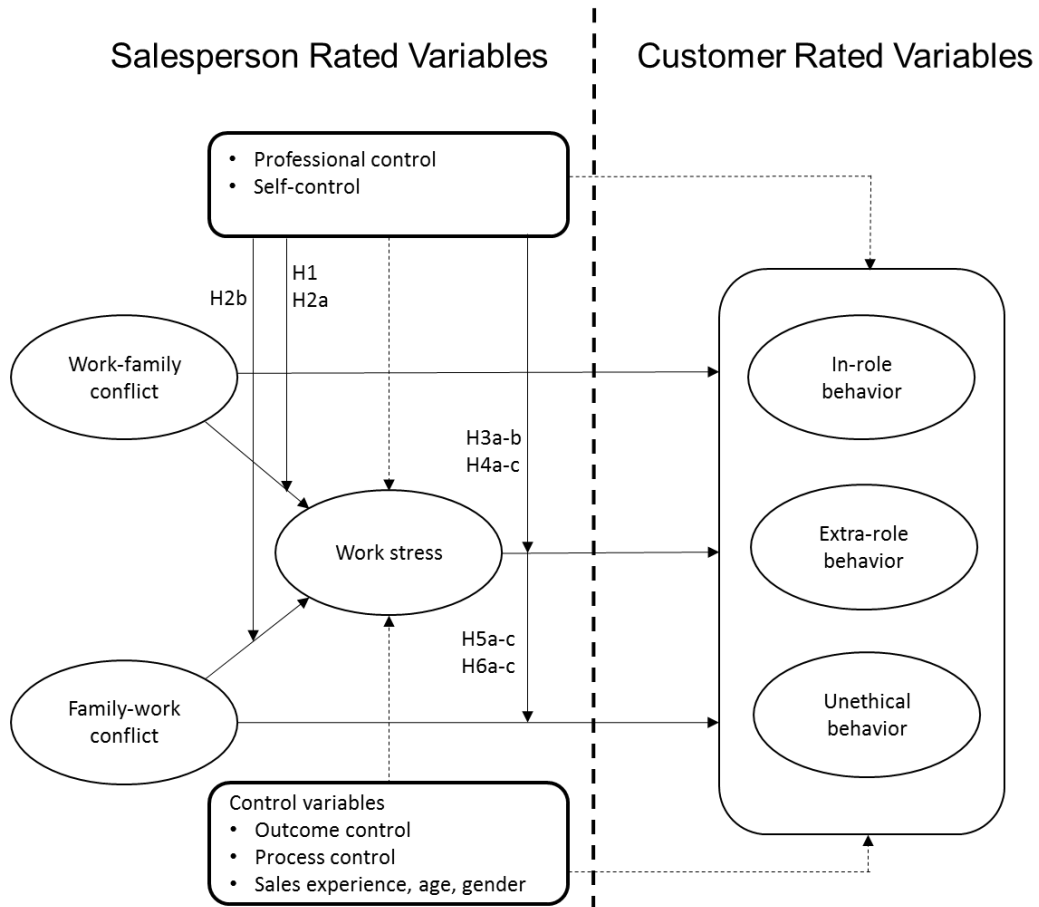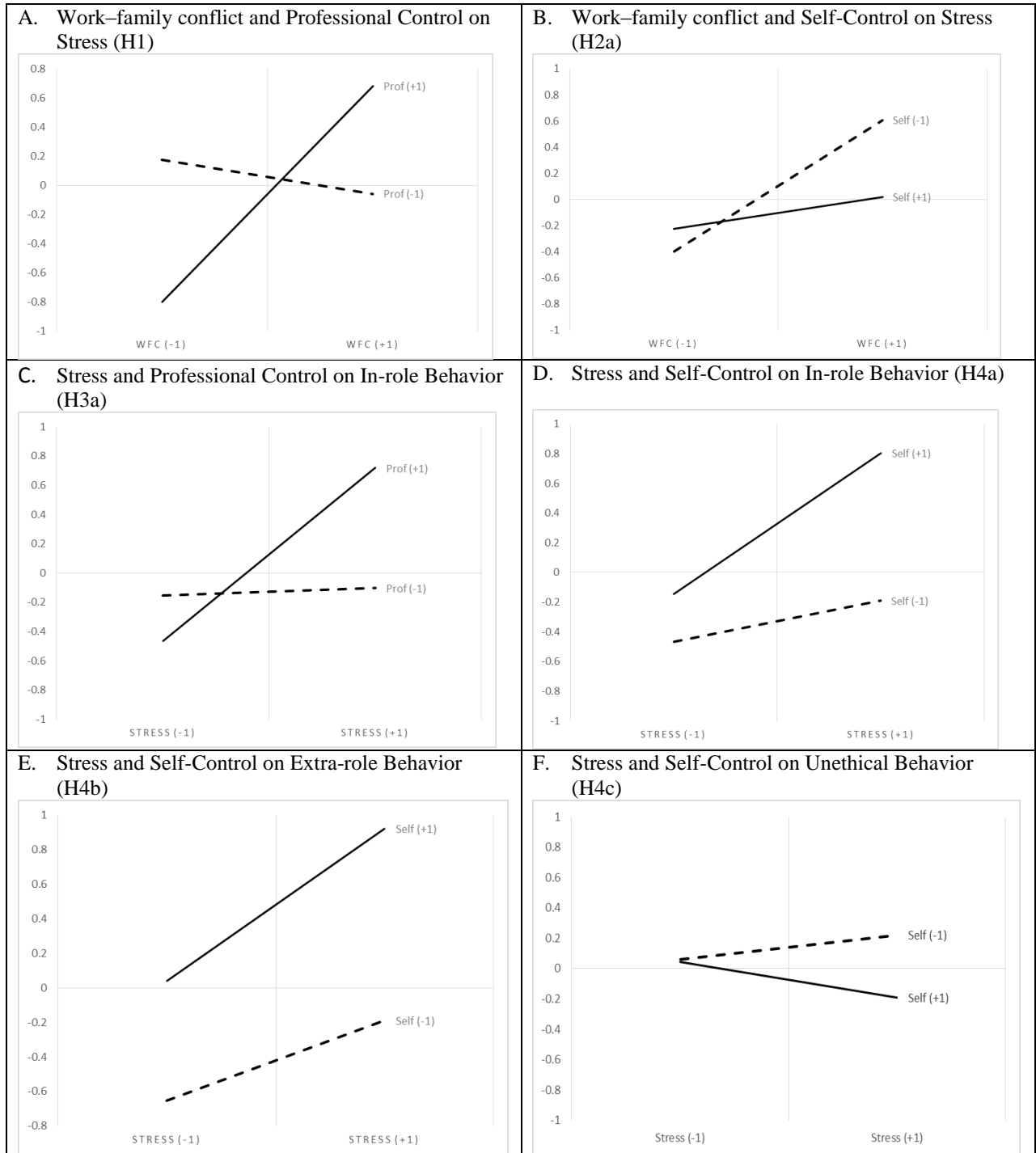- Sales experience, age, gender

In-role behavior

Extra-role behavior

Unethical behavior

Figure 2: Interaction Plots

A. Work–family conflict and Professional Control on Stress (H1)

B. Work–family conflict and Self-Control on Stress (H2a)

C. Stress and Professional Control on In-role Behavior (H3a)

D. Stress and Self-Control on In-role Behavior (H4a)

E. Stress and Self-Control on Extra-role Behavior (H4b)

F. Stress and Self-Control on Unethical Behavior (H4c)

G. Family–Work Conflict and Professional Control on In-role Behavior (H5a)
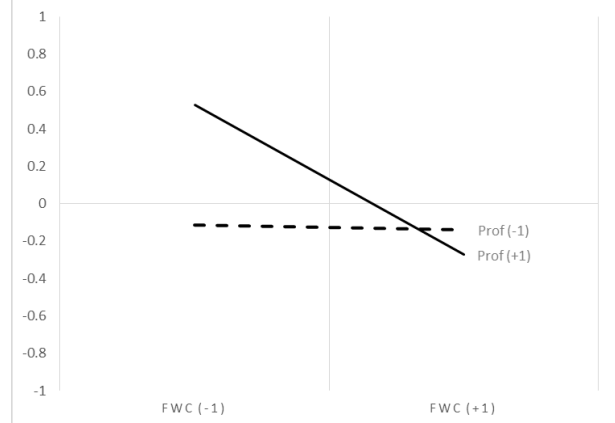
H. Family–Work Conflict and Professional on Extra-role Behavior (H5b)
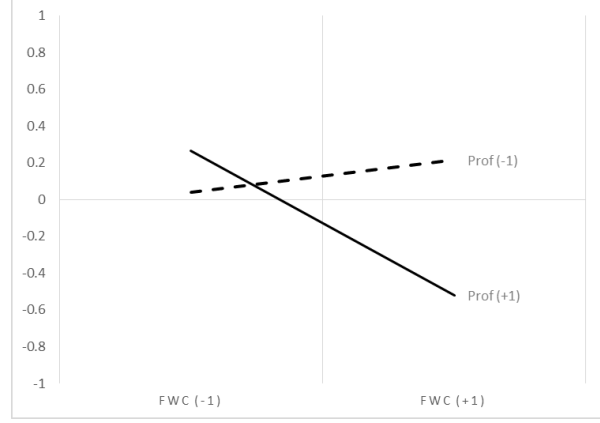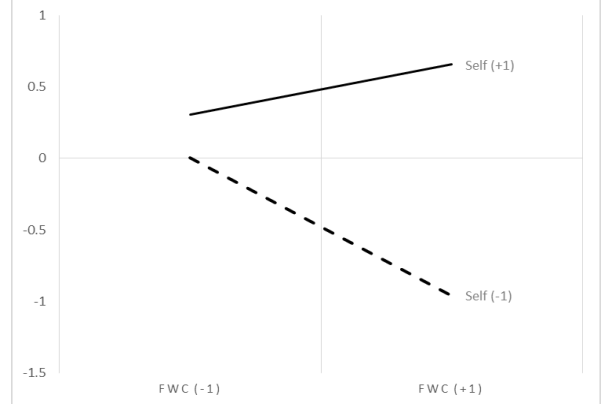

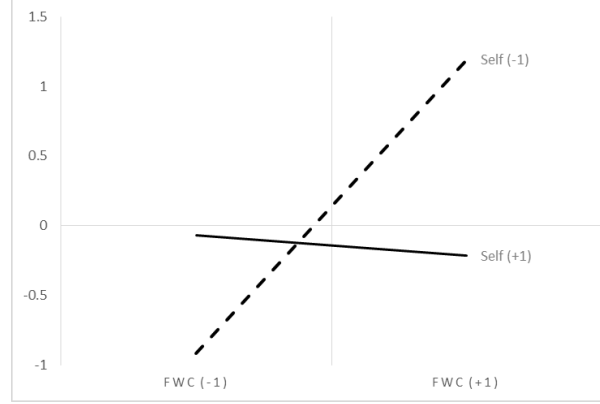**I.** Family–Work Conflict and Professional Control on Unethical Behavior (H5c)
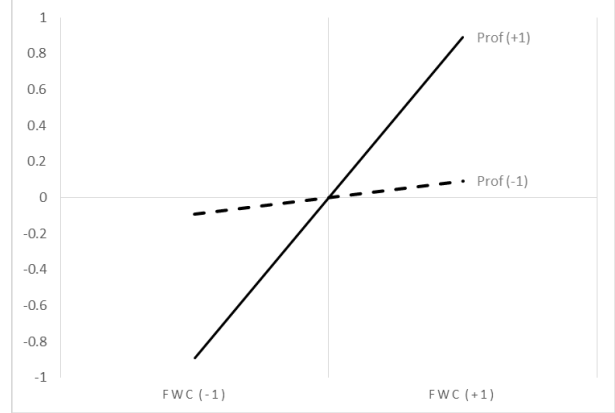
J. Family–Work Conflict and Self-Control on In-role Behavior (H6a)
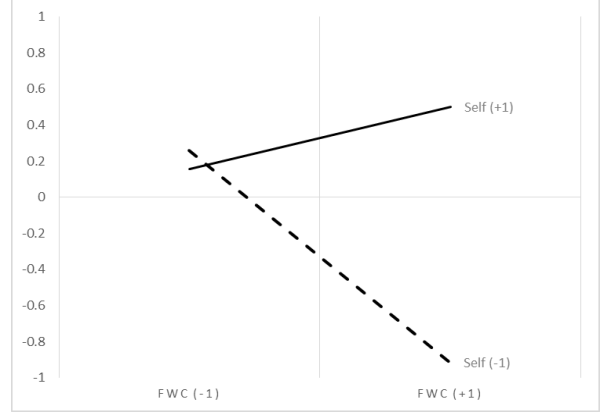
K. Family–Work Conflict and Self-Control on Extra-role Behavior (H6b)

L. Family–Work Conflict and Self-Control on Unethical Behavior (H6c)

References

Amabile, T. M., Hill, K. G., Hennessey, B. A., & Tighe, E. M. (1994). The work preference inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology, 66*(5), 950-967.

Anand, S., Vidyarthi, P., Singh, S., & Ryu, S. (2015). Family interference and employee dissatisfaction: Do agreeable employees better cope with stress? *Human Relations*, 68 (5), 691-708.

Anderson, S. E., Coffey, B. S., and Byerly, R. T. (2002). Formal organizational initiatives and informal workplace practices: links to work-family conflict and job-related outcomes. *Journal of Management*, 28 (6), 787-810.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411-423.

Arnold, T., Flaherty, K. E., Voss, K. E., & Mowen, J. C. (2009). Role stressors and retail performance: The role of perceived competitive climate. *Journal of Retailing, 85*, 194-205.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74-94.

Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science, 40*(1), 8-34.

Bakker, A. B. and Demerouti, E. (2007). The job demands-resources model: state of the art. *Journal of Managerial Psychology*, 22 (3), 309-328.

Bande, B., Fernandez-Ferrin, P., Varela, J. A., and Jaramillo, F. (2015). Emotions and salesperson propensity to leave: The effects of emotional intelligence and resilience. *Industrial Marketing Management*, 44, 142-153.

Boichuk, J. P., Bolander, W., Hall, Z. R., Ahearne, M., Zahn, W. J., & Nieves, M. (2014). Learned helplessness among newly hired salespeople and the influence of leadership. *Journal of Marketing, 78*(1), 95-111.

Boles, J. S., Johnston, M. W., & Hair Jr, J. F. (1997). Role stress, work-family conflict and emotional exhaustion: Inter-relationships and effects on some work-related consequences. *Journal of Personal Selling & Sales Management*, 17(1), 17-28.

Brislin, R. W. (1980). Translation and content analysis of oral and written materials. In H. C. Triandis & J. W. Berry (Eds.), *Handbook of cross-cultural psychology* (Vol. 2, pp. 389-444). Boston: Allyn & Bacon.

Bunk, J. A., Dugan, A. G., D'Agostino, A. L., & Barnes-Farrell, J. L. (2012). Understanding work-to-family conflict among self-employed workers: Utilizing a cognitive appraisal framework. *The Journal of Entrepreneurship, 21*(2), 223-251.

Carr, J. C., Boyar, S. L., and Gregory, B. T. (2008). The moderating effect of work-family centrality on work-family conflict, organizational attitudes, and turnover behavior. *Journal of Management*, 34 (2), 244-262.

Chan, K. W. and Wan, E. W. (2012). How can stressed employees deliver better customer service? The underlying self-regulation depletion mechanism. *Journal of Marketing*, 76 (July), 119-137.

Chelariu, C. and Stump, R. (2011). A study of work-family conflict, family-work conflict and the contingent effect of self-efficacy of retail salespeople in a transitional economy. *European Journal of Marketing*, 45 (11/12), 1660-1679.

Chen, J. and Silverthorne, C. (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Leadership and Organization Development Journal,* 29 (7), 572-582.

Churchill, G. A., Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research, 16*(February), 64-73.

Cohen, J., Cohen, P., West, S., & Aiken, L. (2003). *Applied multivariate regression/correlation analysis for the behavioral sciences.* Hillside, NJ: Lawrence Erlbaum Associates.

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95 (5), 834-848.

Dahm, P. (2015). *The effects of work-family conflict and enrichment on self-regulation, networking, and the creation of social networks.* (Ph.D. Dissertation), University of Minnesota. Retrieved from http://hdl.handle.net/11299/175412 The University of Minnesota Digital Conservancy database.

Darrat, M., Amyx, D., and Bennett, R. (2010). An investigation into the efects of work-family conflict and job satisfaction on salesperson deviance. *Journal of Personal Selling & Sales Management*, 30 (3), 239-251.

DeVellis, R. F. (1991). *Scale development: Theory and applications*. Newbury Park, CA: Sage.

Duhachek, A. and Iacobucci, D. (2005). Consumer personality and coping: testing rival theories of process. *Journal of Consumer Psychology*, 15 (1), 52-63.

Edwards, J. R., & Rothbard, N. P. (1999). Work and family stress and well-being: An examination of person-environment fit in the work and family domains. *Organizational Behavior and Human Decision Processes, 77*(2), 85-129.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46(4), 839-852.

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 50*, 992-1003.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(February), 39-50.

Frone, M. R., Yardley, J. K., and Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50, 145-167.

Ganesan, S. (1994). Determinants of long term orientation in buyer seller relationships. *Journal of Marketing, 58*(April), 1-19.

Gardner, D., & Fletcher, R. (2009). Demands, appraisal, coping and outcomes: Positive and negative aspects of occupational stress in veterinarians. *International Journal of Organizational Analysis, 17*(4), 268-284.

Gomes, A. R., Faria, S., and Goncalves, A. M. (2013). Cognitive appraisal as a mediator in the relationships between stress and burnout. *Work & Stress*, 27 (4), 351-367.

Good, L. K., Page, T. J., and Young, C. E. (1996). Assessing hierarchical differences in job-related attitudes and turnover among retail managers. *Journal of the Academy of Marketing Science*, 24 (2), 148-156.

Grandey, A. A., Cordeiro, B. L., & Crouter, A. C. (2005). A longitudinal and multi-source test of the work-family conflict and job satisfaction relationship. *Journal of Occupational and Organizational Psychology, 78*, 305-323.

House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance, 7*(3), 467-505.

Hughes, D. E., Bon, J. L., & Rapp, A. (2013). Gaining and leveraging customer-based competitive intelligence: the pivotal role of social capital and salesperson adaptive selling skills. *Journal of the Academy of Marketing Science*, 41, 91-110.

Jap, S. D. (1999). Pie-expansion efforts: Collaboration processes in buyer-supplier relationships. *Journal of Marketing Research, 36*(November), 461-475.

Jaworski, B. J., & MacInnis, D. J. (1989). Marketing jobs and management controls: Toward a framework. *Journal of Marketing Research, 26*(November), 406-419.

Johnson, J. L., Sohi, R. S., & Grewal, R. (2004). The role of relational knowledge stores in interfirm partnering. *Journal of Marketing, 68*(July), 21-36.

Joreskog, K. G., & Yang, F. (1996). Nonlinear structural equation models: The kenny-judd model with interaction effects. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 57-88). Mahwah, NJ: Erlbaum.

Kothandaraman, P., Dingus, R. E., & Agnihotri, R. (2014). Pursuing success in service recovery: A conceptual framework of salesperson's power in selling center. *Journal of Services Research*, 14 (1), 141-159.

Kuhnle, C., Hofer, M., & Killian, B. (2012). Self-control as a predictor of school grades, life balance, and flow in adolescents. *British Journal of Educational Psychology, 82*, 533-548. doi: 10.1111/j.2044-8279.2011.02042.x.

Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York: Springer.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Marsh, H. W., Wen, Z., Hau, K.-T., Little, T. D., Bovaird, J. A., & Widaman, K. (2007). Unconstrained structural equation models of latent interactions: Contrasting residual- and mean-centered approaches. *Structural Equation Modeling, 14*(4), 570-580.

Marsh, H. W., Wen, Z., Hau, K.-T., & Nagengast, B. (2013). Structural equation models of latent interaction and quadratic effects. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course*. Charlotte, NC: Information Age Publishing, Inc.

Martins, L. L., Eddleston, K. A., and Veiga, J. F. (2002). Moderators of the relationship between work-family conflict and career satisfaction. *Academy of Management Journal*, 45 (2), 399-409.

Matthews, R. A., Wayne, J. H., & Ford, M. T. (2014). A work-family conflict/subjective well-being process model: A test of comparing theories of longitudinal effects. *Journal of Applied Psychology, 99*(6), 488-512.

Meister, A., Jehn, K. A., and Thatcher, S. M. B. (2014). Feeling misidentified: The consequences of internal identity asymmetries for individuals at work. *Academy of Management Review*, 39 (4), 488-512.

Menguc, B., Auh, S., & Uslu, A. (2013). Customer knowledge creation capability and performance in sales teams. *Journal of the Academy of Marketing Science*, 41, 19-39.

Miao, C. Fred and Kenneth R. Evans (2013), "The Interactive Effects of Sales Control Systems on Salesperson Performance – A Job Demands-Resources Perspective," *Journal of the Academy of Marketing Science*, 41 (1), 73-90.

Moncrief, W. C. (1986). Selling activity and sales position taxonomies for industrial salespeople. *Journal of Marketing Research*, 23 (August), 261-270.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology, 81*(4), 400-410.

Netemeyer, R. G., Maxham, J. G., III, & Pullig, C. (2005). Conflicts in the work-family interface: Links to job stress, customer service employee performance, and customer purchase intent. *Journal of Marketing, 69*(2), 130-143.

Nonis, S. A., & Sager, J. K. (2003). Coping strategy profiles used by salespeople: Their relationships with personal characteristics and work outcomes. *Journal of Personal Selling & Sales Management*, 23(2), 139-150.

Nonis, S. A., Sager, J. K., & Kumar, K. (1996). Salespeople's use of upward influence tactics (UITs) in coping with role stress. *Journal of the Academy of Marketing Science*, 24 (1), 44-56.

Penney, L. M., Hunter, E. M., & Perry, S. J. Personality and counterproductive work behavior: using conservation of resources theory to narrow the profile of deviant employees. *Journal of Occupational and Organizational Psychology*, 84, 58-77.

Post, C., DiTomaso, N., Farris, G. F., & Cordero, R. (2009). Work-family conflict and turnover intentions among scientist and engineers working in r&d. *Journal of Business Psychology, 24*, 19-32.

Roberts, J. A., Lapidus, R. S., & Chonko, L. B. (1997). Salespeople and stress: The moderating role of locus of control on work stressors and felt stress. *Journal of Marketing Theory and Practice, 5*(3), 93-108.

Roman, S., & Ruiz, S. (2005). Relationship outcomes of perceived ethical sales behavior: The customer's perspective. *Journal of Business Research, 58*(4), 439-445.

Rotondo, D. M., & Kincaid, J. F. (2008). Conflict, facilitation, and individual coping styles across the work and family domains. *Journal of Managerial Psychology, 23*(5), 484-506.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.

Sagy, S. (2002). Moderating factors explaining stress reactions: comparing chronic-without-acute-stress and chronic-with-acute-stress situations.*The Journal of Psychology*, 136 (4), 407-419.

Saxe, R. and Weitz, B. A. (1982). The SOCO scale: A measure of the customer orientation of salespeople. *Journal of Marketing Research,* 19 (August), 343-351.

Scheer, L. K., Miao, C. F., & Garrett, J. (2010). The effects of supplier capabilities on industrial customers' loyalty: The role of dependence. *Journal of the Academy of Marketing Science, 38*, 90-104. doi: 10.1007/s11747-008-0129-6

Shockley, K. M. and Singla, N. (2011). Reconsidering work-family interactions and satisfaction: A meta-analysis.*Journal of Management*, 37 (3), 861-886.

Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods, 13*, 456-476.

Singh, J. (1998). Striking a balance in boundary-spanning positions: An investigation of some unconventional influences of role stressors and job characteristics on job outcomes of salespeople. *Journal of Marketing*, 62 (July), 69-86.

Tomaka, J., Blascovich, J., Kelsey, R. M., & Leitten, C. L. (1993). Subjective, physiological, and behavioral effects of threat and challenge appraisal. *Journal of Personality and Social Psychology, 65*(2), 248-260.

Turner, N., Hershcovis, M. S., Reich, T. C., and Totterdell, P. (2014). Work-family interference, psychological distress, and workplace injuries. *Journal of Occupational and Organizational Psychology*, 87, 715-732.

Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology, 95*(4), 769-780.

Van den Broeck, A., Cuyper, N. D., Witte, H. D., & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the job demands-resources model. *European Journal of Work and Organizational Psychology, 19*(6), 735-759.

Wilson, W. J. (1997). From the practitioner's desk: A comment on "Role Stress, Work-Family Conflict, and Emotional Exhaustion: Inter-Relationships and Effects on Some Work-Related Consequences". *Journal of Personal Selling & Sales Management*, 17(3), 51-52.

Workman, J. P., Homburg, C., & Gruner, K. (1998). Marketing organization: An integrative framework of dimensions and determinants. *Journal of Marketing*, 62 (July), 21-41.

Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Tans, T., and Schreurs, P. J. G. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22 (8), 766-786.

Zhao, X., Mattila, A. S., & Ngan, N. N. (2014). The impact of frontline employees' work-family conflict on customer satisfaction: The mediating role of exhaustion and emotional displays. *Cornell Hospitality Quarterly, 55*(4), 422-432.