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Serving the customer, serving the family, and serving the employee: Toward a comprehensive understanding of the effects of service-oriented high-performance work systems

Abstract

Accompanying the rise of the service economy, service-oriented high-performance work systems (SHPWS) have received increasing attention in HR research. However, existing research has predominately focused on the "bright side" of this system by highlighting its benefits to customer service outcomes as organizations hope and expect, while paying less attention to its potential costs to service employees. Using a "triple-service" perspective, this study examines how SHPWS is related to employees' customer service as well as their service to their families and to themselves. Drawing on the job demands-resources model, we propose an integrated model in which SHPWS has both beneficial and detrimental effects on service outcomes through two opposing pathways: by providing job resources (i.e., customer orientation) and by producing job demands (i.e., service workload). The structural equation modeling analyses of a two-wave, six-week time-lagged survey data set from 222 hotel frontline service employees supported all of our hypotheses. Although SHPWS can benefit employees' serving their customers (i.e., high service performance) by enhancing their customer orientation, it can also cause harm to employees' serving themselves (i.e., adverse health condition) via imposing a heavy service workload. Meanwhile, SHPWS has mixed effects on employees' serving their families (i.e., work-to-family interface) via customer orientation and service workload. These findings suggest that SHPWS works as a double-edged sword which has both bright side and dark side effects, depending on the underlying processes and the outcomes considered.

Key words: service-oriented high-performance work systems (SHPWS); customer orientation; service workload; service performance; employee health; work-to-family interface

1. Introduction

Well, I'd like to declare that our hotel is not bad. The guest is always right here, and we all keep this rule in our minds. The hotel trains us to satisfy guests' needs and to make them happy…… We have base pay, but the bonus depends on how well we serve guests, how many of our guests complain, and how well our department performs. I understand this policy……The competition is so intense that the hotel must place the highest priority on guests……I believe I did pretty well but working here I feel tired and I felt like I lost myself.

—— A hotel receptionist when asked about what she feels about her work

The service industry has become the driving force of the global economy, and the competition between service organizations is becoming intense. Against this background, more and more organizations are recognizing that serving customers to the fullest extent possible is their key strategic imperative, and thus are taking a variety of initiatives to manage frontline service employees (FSE) (Subramony et al., 2017). This is not surprising as FSE are boundary spanners that represent their organizations during service interactions with customers, and it is they who create profits for organizations (Bowen, 2016; Mascio, 2010). Among various management initiatives, service-oriented high-performance work systems (SHPWS) have probably been the most widely-used (Wirtz & Jerger, 2016). SHPWS is "a system of HR practices designed to enhance employees' competencies, motivation, and performance in providing high-quality service to customers" (Liao, Toya, Lepak, & Hong, 2009, p. 373). The widespread usage of SHPWS is largely promoted by the emerging studies demonstrating that SHPWS is effective in eliciting employees' service to customers, and in transforming individual service performance into financial outcomes (see Hong, Liao, Hu, & Jiang, 2013, for a meta-analytic review). In general, until now, both researchers and practitioners have taken for granted that SHPWS is beneficial and should be widely implemented to manage FSE.

In this study, we intend to revisit this widely-held belief and examine SHPWS' effectiveness in a more comprehensive manner. Our central idea is that the current understanding of SHPWS might be biased and incomplete because it is exclusively based on the positive impact of FSE customer service to the organization. However, given that there is often incompatibility between the interests of organizations and those of employees (Danford, Richardson, Stewart, Tailby, & Upchurch, 2008; Godard, 2001, 2004; Peccei, 2004; Ramsay, Scholarios, & Harley, 2000), that positive effect might be at the expense of employees' serving their families or themselves. Indeed, research has shown that FSE's demonstration of high-quality customer service is at the cost of their health and work-family balance in some situations (e.g., Drach-Zahavy, 2010; Greenbaum, Quade, Mawritz, Kim, & Crosby, 2014). As employees' service to customers, their families and themselves are all important to FSE and service organizations (Netemeyer, Maxham III, & Pullig, 2005; Wirtz & Jerger, 2016), examining the effectiveness of SHPWS by linking it with these three domains of service is worthwhile and needed. If the benefits of SHPWS to customer service are at the expense of employees' service to their families and themselves, the effectiveness of SHPWS should be re-evaluated and this system should be revised or used with caution.

This study examines this question. Using a triple-service perspective, this study theorizes and tests whether SHPWS has differential effects on employees' serving their customers, as well as their families and themselves. Specifically, based on the job demands-resources (JD-R) model (Bakker & Demerouti, 2013; Taris & Schaufeli, 2016), we posit that SHPWS provides job resources while also producing job demands, thus creating opposing effects across the three

service domains. To test these propositions, we used customer orientation and service workload as indicators of job resources and job demands, respectively. These two constructs are among the most typical job resources and job demands in the service setting (Zablah, Franke, Brown, & Bartholomew, 2012). We used employee's service performance and health to represent their service for customers and themselves. For service to families, we examined employees' experienced work-to-family interface as this construct captures the experience of employees as they interface with their families. Because the work-to-family interface has been conceptualized as both conflictive and enriching (Demerouti, Corts, & Boz, 2013), we evaluated the impact of SHPWS on both work-to-family enrichment (WFE) and work-to-family conflict (WFC). Taken together, the current study aims to examine whether SHPWS exerts differential effects on FSE's serving their customers (i.e., service performance), their families (i.e., WFE and WFC), and themselves (i.e. health) through two opposing pathways: providing job resources (i.e., customer orientation) and producing job demands (service workload).

We conducted this research in the hotel service sector in China where the context is appropriate for answering the question proposed above. First, hotels are typical service organizations that obtain financial outcomes by managing FSE to provide high-quality service to customers, and SHPWS has been widely used as a management initiative in these organizations (Hong, Jiang, Liao, & Sturman, 2017). This is particularly the case in China where the economy is transitioning from a manufacturing-based economy to a service-based one and the competition in the hotel sector is becoming intense (Li, Qin, & Gu, 2020). Second, the hotel industry is a typical labor-intensive service sector. Employees' service to customers

may deplete their resources that could have been directed towards themselves and family (see Zhao, 2016 for a review). This is more likely to happen in a collectivist society (e.g., China) where individuals tend to focus on others and are more embedded in social networks that include customers and family (Markus & Kitayama, 1998). Thus, clarifying whether SHPWS can achieve mutual gains or create conflict between serving customers and serving their families and themselves in such a context is practically important.

This study intends to make three contributions. First, by linking SHPWS with employees' service performance, health and work-to-family experience *simultaneously*, we provide the most comprehensive test for the effectiveness of SHPWS. By doing so, the study challenges the prevailing but incomplete viewpoint that SHPWS is always positive and helps to form a balanced understanding of this popular HR system. Second, as the first study relating SHPWS to employees' work-to-family experience, this study deepens the knowledge that SHPWS exerts influences on employees not only at work but also after work. It also extends the current limited and inconclusive understanding of how HPWS goes beyond organizations to influence employees' work-to-family interface (Carvalho & Chambel, 2016; Pichler, Livingston, Ruggs, & Varma, 2016). Third and more broadly, taking SHPWS as an illustration and demonstrating its complex effects on outcomes of both organizations' and employees' interests, our research sheds new light on the dispute between the mutual gains and the conflicting outcomes perspectives of HPWS in HR scholarship (see Peccei & Van De Voorde, 2019, for a recent review).

2. Theory: The JD-R model and its application in SHPWS

The JD-R model is a parsimonious and heuristic-based model that theorizes about how job resources and job demands exert differential effects on employees' performance and health. The core tenet of this model is that it identifies two separate and parallel underlying mechanisms behind these effects: the *motivational process* (i.e., job resources stimulate motivation and thus benefit performance) and the *strain process* or the *health-impairment process* (i.e., job demands induce strain and thus impair health) (Taris & Schaufeli, 2016). The JD-R model has been well-researched and validated (see Crawford, LePine, & Rich, 2010; Lesener, Gusy, & Wolter, 2019 for meta-analytic reviews). This model has also been expanded to describe the spillover process through which job resources and job demands in the work domain influence employees' experienced work-to-family interface and utimately family outcomes (Bakker & Demerouti, 2013). Similarly, two independent processes underlie the effects of job demands/resources on WFC/WFE, respectively: job demands lead to WFC via the strain process, whereas job resources leads WFE via the motivational process. This expanded model has also received empirical support (e.g., Bakker & Geuurts, 2004; Lu, Chang, Kao, & Cooper, 2015; Voydanoff, 2004). Thus, the complete version of the JD-R model theorizes about how job resources and job demands exert influences on employees' performance, health and work-to-family interface, which are exactly the three types of outcomes in this study.

The JD-R model has been used in HR research and recently has been adapted to disentangle the effects of SHPWS. However, existing studies have linked SHPWS with either job resources or job demands, but not both. For instance, Luu (2019) argued that SHPWS can

provide employees with service-related job resources, such as service skills, service-oriented values and opportunities to enhance these skills and values in their job. Based on this argument, the author hypothesized and found that SHPWS had beneficial effects such as enhancing employees' work engagement and fostering their service performance. In contrast, Wang, Xing, and Zhang (in press) regarded SHPWS as a job demand and illustrated its detrimental effects on employees' health. Clearly, prior research has only examined one side of the effects of SHPWS at a time, preventing a balanced and comprehensive understanding of the effectivness of SHPWS. Indeed, HR practices are both the providers of job resources and the producers of job demands, and thus may have both benefical and detrimental effects (Van De Voorde & Boxall, 2015). In a recent conceptual piece, Han, Sun, and Wang (2020) proposed that HPWS is positively related to employees' perceived job resources and perceived job demands, simultenously.

Incoporating the JD-R model into SHPWS research, we argue that SHPWS has two types of effects: it provides service-related job resources (i.e., customer orientation) and produces service-related job demands (service workload), which in turn exert differential effects on employees' service performance, work-to-family interface and health (e.g., Karatepe, Yavas, Babakus, & Deitz, 2018; van der Heijden, Demerouti, Bakker, & NEXT Study Group coordinated by Hans-Martin Hasselhorn, 2008). In what follows, our hypothesis development starts with the relationship between SHPWS and customer orientation/service workload, followed by the contrasting, indirect relationships between SHPWS and employee outcomes (i.e., service performance, work-to-family interface and health) through customer orientation/

service workload.

3. Hypotheses

3.1 SHPWS and customer orientation/service workload

SHPWS includes a bundle of HR practices specifically targeted at improving service performance — staffing, training, performance appraisals, rewards, and involvement/ participation — all with a particular focus on the delivery of high-quality service (Aryee, Walumbwa, Seidu, & Otaye, 2012; Chuang & Liao, 2010; Jiang, Chuang, & Chiao, 2015; Liao et al., 2009). Because their fundamental purpose is to focus employees' attention on serving the customer, SHPWS simultaneously enhances customer orientation (as a service-related job resource) and creates service workload (as a service-related job demands).

Customer orientation is "a work value that captures the extent to which employees' job perceptions, attitudes, and behaviors are guided by an enduring belief in the importance of customer satisfaction" (Zablah et al., 2012, p. 24). Employees' customer orientation is a critical job resource in the service setting (see Zablah et al., 2012 for a meta-analytic review) because it enables employees to handle potential conflicts during the service delivery process, accomplish service goals, and develop as service experts (Babakus, Yavas, & Ashill, 2009; Kelley, 1992; Susskind, Kacmar, & Borchgrevink, 2003), which are all consistent with the functions of job resources identified in the JD-R model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Given that SHPWS is designed to improve employees' customer service (Liao et al., 2009), HR practices within SHPWS signal that customer-focused perceptions, attitudes and behaviors are expected, supported and rewarded (Aryee, Walumbwa, Seidu, & Otaye, 2016; Schneider &

Bowen, 1993; Wang & Xu, 2017). Specifically, SHPWS can activate customer orientation through a series of particular HR practices. First, service-oriented staffing practices highlight the requirements for a customer-oriented mindset. Organizations that implemented these practices normally use this as a criterion when recruiting candidates. Thus, employees hired by these organizations are typically higher in customer orientation. This is especially the case in the Chinese star hotel sector where the labor supply outstrips labor demand and thus hotels have a large pool of candidates from which to select (Li et al., 2020). Second, performance appraisals and rewards practices link monetary rewards (e.g., bonus) and non-monetary rewards (e.g., Employee of the Month) with service performance. In order to acquire inducements, employees will direct more attention and effort to meeting customers' needs and expectations, therefore increasing their customer orientation (Lytle, Hom, & Mokwa, 1998). Third, training for service sets a particular focus on customer-oriented attitudes and behaviors, in turn making employees especially attuned to customers' needs (Conduit & Mavondo, 2001). Furthermore, involvement and participation practices within SHPWS may allow employees the discretion (e.g., the latitude to address customer complaints in the manner they see fit) required to deliver strong customer service, which can also stimulate a higher level of customer orientation (Chan & Lam, 2011; Chuang & Liao, 2010; Liao et al., 2009). Empirically, prior research has demonstrated that SHPWS enhances employees' customer orientation (Aryee et al., 2016; Wang & Xu, 2017).

H1: SHPWS will be positively related to employees' customer orientation.

Although SHPWS can be regarded as the provider of job resources in terms of customer orientation, the expectations for service excellence accompanying SHPWS may simultaneously

impose job demands for service employees. There is plenty of indirect support for this possibility as research has found that generic HPWS is positively related to employees' perceived workload (e.g., Jensen, Patel, & Messersmith, 2013; Kroon, Van De Voorde, & Van Veldhoven, 2009; Oppenauer & Van De Voorde, 2018; Ogbonnaya, Daniels, Connolly, & Van Veldhoven, 2017a; Ogbonnaya & Messersmith, 2019). In this study, we focused on service workload, which refers to one's perception of the amount of customer service work in terms of pace and volume (Spector & Jex, 1998).

Generally speaking, as a set of HR practices targeted at customer service, SHPWS highlights the importance of serving customers and asks employees to consider customers as the first priority, and to provide prompt, effective and individualized responses to customers' needs and requirements (Liao et al., 2009). Under this management system, employees are usually expected to lengthen their working time, quicken their service pace, and even go beyond the call of duty to satisfy customers' needs and expectations, thus creating time pressure and task overload. Specifically, each HR practice in SHPWS will impose service workload. Selecting highly service-oriented employees will raise management expectations and increase employees' overload (Oppenauer & Van De Voorde, 2018). Because training programs are implemented to optimize employees' service capability and often occupy regular working hours, employees may experience work overload and time pressure around task completion (Oppenauer & Van De Voorde, 2018; Topcic, Baum, & Kabst, 2016). Performance appraisals and rewards reflect a particular emphasis on service quality, highlighting the need for employees to put extra effort into their work in order to receive higher ratings (Conway, Fu,

Monks, Alfes, & Bailey, 2016; Ogbonnaya, Daniels, & Nielsen, 2017b; Oppenauer & Van De Voorde, 2018; Topcic et al., 2016). Involvement and participation provide employees with opportunities to make decisions in response to customer needs and to suggest improvements in service processes. Such malleability, however, requires additional cognitive effort from employees (e.g., dealing with unexpected customer demands), which can lead to overload (Chan & Lam, 2011; Ogbonnaya & Messersmith, 2019). Taken together, we hypothesize that SHPWS will create increased service workload for employees.

H2: SHPWS will be positively related to employees' service workload.

3.2 SHPWS, customer orientation/service workload, and employee service outcomes

As alluded to earlier, the JD-R model holds that job resources and job demands will have differential effects on employees' performance, health, and work-to-family interface through two independent processes: job resources enhance performance and WFE via the motivational process, whereas job demands induce health problems and WFC via the strain process (Bakker & Demerouti, 2013; Taris & Schaufeli, 2016). Parallel to the two processes and based on our arguments in H1 and H2, we expect that SHPWS will have differential, indirect effects on service performance, health, and WFE/WFC via two opposing pathways represented by customer orientation and service workload.

First, it is to be expected that SHPWS will foster employees' service performance by enhancing their customer orientation. This is because on the one hand, as proposed in H1, SHPWS is effective in prompting employees' customer orientation, and on the other hand customer orientation motivates employees attitudinally and behaviorally to engage themselves

in serving customers, thus obtaining high service performance. Indeed, the positive effect of customer orientation on service performance has been widely reported in the literature (e.g., Karatepe et al., 2018; Zhu, Lyu, Deng, & Ye, 2017), and has also been documented in a recent meta-analysis that is based on the JD-R model (Zablah et al., 2012). Thus, we expect that there will be a resource pathway and motivational process from SHPWS to service performance: SHPWS first activates customer orientation, a critical job resource for FSE whose job is serving customers; through the activated customer orientation, employees will deliver better service to their customers. Although not relying on the JD-R model and not conducted in the hotel sector, research has supported this effect (Aryee et al., 2016; Wang & Xu, 2017). Thus, we hypothesize:

H3: SHPWS will have a positive, indirect effect on employees' service performance through customer orientation.

We also propose that SHPWS will impair employees' health by inducing service workload. This indirect effect exists because SHPWS will be positively related to service workload (as hypothesized in H2) and service workload, as a typical job demand, will likely have a negative impact on service employees' health. Indeed, the negative effect of workload on employees' health has been consistenly observed in prior research (see Bowling & Kirkendal, 2012 for a narrative review). A recent meta-analysis on workload (Bowling, Alarcon, Bragg, & Hartman, 2015) revealed that employees' perceived workload is negatively related to their mental and physical health: the higher the workload, the greater the depression, distress, fatigue, and physical symptoms. In the service context, a high service workload depletes employees'

emotional, psychological and physical resources and could cause harm to their health (e.g., de Beer, Pienaar, & Rothmann, 2016; van der Heijden et al., 2008). Thus, we hypothesize that there will be a demand pathway and strain process from SHPWS to health: SHPWS produces service workload, which is a job demand for service employees; the service workload depletes employees' resources and thus impairs their health.

H4: SHPWS will have a negative, indirect effect on employees' health through service workload.

SHPWS also has effects on employees' service to their families (represented by WFE and WFC). It should be noted that, because WFE and WFC are two distinctive constructs with differential formation mechanisms, they have been theorized and demonstrated to be differentially related to job resources and job demands. In particular, WFE occurs because of resource generation and therefore is associated with job resources via the motivational process, whereas WFC happens due to resource depletion and thus is related to job demands via the strain process (Bakker & Demerouti, 2013; ten Brummelhuis & Bakker, 2012). Specific to the current study, we expect there will be two independent indirect effects from SHPWS to WFE and WFC.

On the one hand, SHPWS will foster WFE through customer orientation. Highly-activated customer orientation motivates employees to effectively fulfill their service work obligations and thus have available resources to put into family, thus leading to the positive spillover from work to family (Briggs, Jaramillo, & Noboa, 2015). Also, high customer orientation can generate emotional, psychological and motivational resources (e.g., vigor, feelings of

satisfaction, and service orientation, Zablah et al., 2012) that help employees better perform their family roles (Lapierre, Li, Kwan, Greenhaus, Direnzo, & Shao, 2018). Combining this evidence with H1, which proposes the positive effect of SHPWS on customer orientation, it is expected that SHPWS will enhance employees' customer orientation, which will, in turn, enhance their experienced work-to-family enrichment. For instance, in organizations which have implemented SHPWS, extensive training programs are provided to cultivate employees' service mindeset; the mindset learned and utilized to serve customers may also be effective in addressing family issues and promoting positive spillover from work to family.

H5: SHPWS will have a positive, indirect effect on employees' work-to-family enrichment through customer orientation.

On the other hand, SHPWS can lead to WFC through service workload. Research has consistently found that workload depletes employees' resources and prevents them from allocating resources to family issues and thus will lead to higher WFC (see Byron, 2005; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011, for reviews). Incorporating this evidence into HR research, recent research has articulated (although not empirically tested) how generic HPWS is positively related to WFC via work intensifaction, which is best represented by workload (e.g., Carvalho & Chambel, 2016; Pichler et al., 2016; White, Hill, McGovern, Mills, & Smeaton, 2003). This line of reasoning also applies to the relationship among service-oriented HPWS, service workload and WFC. For instance, in the service organizations that have implemented SHPWS, employees are rewarded extensively on individual performance in satisfying customers. To satisfy customers to the fullest extent possible,

employees may lengthen work time, quicken service pace, and even go the extra mile to deal with unexpected demands during service work. These emotional, psychological and physical resources put into work leave fewer resources for satisfying family, thus creating the conflict between the two domains (Huyghebaert, Fouquereau, Lahiani, Beltou, & Gillet, 2018; van der Heijden et al., 2008).

H6: SHPWS will have a positive, indirect effect on employees' work-to-family conflict, through service workload.

Figure 1 depicts our research model.

Insert Figure 1 here

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4. Method

4.1 Sample and procedures

We tested the hypotheses using two-wave, time-lagged data from frontline service employees in a large four-star hotel located in a medium-sized city in Northern China. As with other hotels (Hong et al., 2017), the hotel we sampled has adopted SHPWS in order to enhance service excellence. For instance, the hotel regards satisfying customers as the most important work guideline for employees (service-oriented performance appraisals), and gives special rewards (e.g., Employee of the Month) to employees who are excellent in serving customers (service-oriented rewards).

With the assistance of human resource managers, three trained research assistants collected data on site during paid work time. All participants were informed of the purpose of the study,

guaranteed that the data would remain confidential, and reminded that participation in the survey was completely voluntary. To minimize the distractions to the hotel and to promote our data collection, after the consent of the Chief HR Manager, research assistants distributed and collected the survey in a separate conference room and the participants were told that they could visit the room to fill out the survey whenever they were available from 7 am to 11 pm during the period of data collection. Because the JD-R model posits that the influences of job demands and job resources on employees emerge over time (Bakker & Demerouti, 2017), we collected data at two separate times. In the first wave (T1), participants reported on SHPWS, customer orientation, and service workload. Six weeks later (T2), participants reported on their service performance, health and work-to-family experience.

All frontline service employees (about 280) were invited to participate and a total of 242 and 237 employees completed the survey at T1 and T2, respectively. After matching responses at both points in time, we obtained a matched sample of 226 participants, of which 222 were found to be valid after four problematic cases were dropped (i.e. having a large amount of missing data and/or irregular responses). The valid response rate was about 79%. In the final sample, 59.07% of participants were female, the average age was 34.22 years, and the average tenure in this hotel was 2.99 years.

4.2 Measures

Because all measures were originally published in English, we followed a translation-back translation procedure (Brislin, 1980) to translate them into Chinese. Unless otherwise stated, participants indicated the extent to which they agreed with each item on a six-point Likert-type

scale (from 1 = strongly disagree to 6 = strongly agree).

4.2.1 SHPWS

SHPWS was assessed with Chuang and Liao's (2010) measure, which is among the most widely-used scales in the SHPWS research (Jiang et al., 2015; Luu, 2019). However, as with other alternative instruments (e.g., Hong et al., 2017), this scale combined generic HPWS and service-oriented HPWS and not all items are specific to customer service. Therefore, we only used 10 items (see Appendix) that specifically capture service-focused HRM activities (i.e., the items that involve "customer" or "service"), such as "The hotel gives special rewards to employees who are excellent in serving customers." and "Meeting customers' needs is emphasized in performance appraisals." The 10 items cover five HR practices (staffing, training, performance appraisals, rewards, and involvement/participation). Following convention (cf. Jiang, Lepak, Han, Hong, Kim, & Winkler, 2012), we calculated an index of SHPWS by averaging the score for each HR practice. Cronbach's α across five dimensions is .88 in this study.

4.2.2 Customer orientation

We measured customer orientation using Susskind et al.'s (2003) 5-item measure. A sample item is "When performing my job, the customer is the most important to me" (α = .74).

4.2.3 Service workload

Service workload was measured with 4 items used by Bakker, Demerouti, and Dollard (2008) who measured work overload. We slightly altered the wording of the original items to highlight the "service" workload. A sample item is "My service work requires working very

hard" (α = .84).

4.2.4 Service performance

Service performance was measured with a 5-item scale developed by Bettencourt and Brown (1997). As with prior research (e.g., Karatepe & Douri, 2012; Liao & Chuang, 2004; Moon, Hur, & Hyun, 2019), we asked participants to self-report their service performance using a six-point scale (from 1 = never to 6 = always). A sample item is "I frequently go out of my way to help a customer." (α = .83).

4.2.5 Work-to-family enrichment and conflict

Work-to-family enrichment (WFE) was measured with the 4 items used in Wayne, Casper, Matthews, and Allen (2013). A sample item is "My involvement in my work provides me with a sense of accomplishment and this helps me be a better family member." Work-to-family conflict (WFC) was measured with the 5-item scale developed by Netemeyer, Boles, and McMurrian (1996). A sample item is "The demands of my work interfere with my home and family life". The Cronbach's α of WFE and WFC were .94, and .92, respectively.

4.2.6 Employee health

Employee health was measured with 5 somatic symptoms abbreviated by Loh, Idris, Dollard, and Isahak (2018) from the Patient Health Questionnaire–15 (PHQ-15; Kroenke, Spitzer, & Williams, 2002). Compared with other health indicators, somatic symptoms are more objective and thus have been widely used to represent an individual's health. In our study, participants were asked to indicate how often they experienced each symptom on a five-point scale (from 1 = never to 5 = always) during the past six weeks. The five symptoms are

"headache", "muscular pain", "back pain", "fatigue", and "dizziness". We transformed the score, with the higher score indicting better health. Cronbach's α is .91.

4.2.7 Control variables

We controlled employees' age, gender, and organizational tenure in the current study, as they may influence employees' performance, work-family experience and health (e.g., Byron, 2005; Lapierre et al., 2018; Michel et al., 2011; Ng & Feldman, 2008, 2010; Roth, Purvis, & Bobko, 2012; Spector & Jex, 1998). According to the hotel's archival records, all FSE are full-time workers with legal working hours and scheduled work shifts, and more than 90% of these FSE received only high school education or below. Because of the low variance and restriction of range issues, these demographics were not expected to be related to employee outcomes. Thus, we did not collect this information nor include them as control variables.

4.3 Tests for common method bias

Because all variables in this study were self-reported by employees, there was potential for common method bias. Following Chang, van Witteloostuijn, and Eden's (2010) recommendations, we performed two sets of analyses to evaluate its impact on our findings. First, we conducted Harman's one factor analysis using confirmatory factor analyses. As SHPWS is a second-order construct which is represented by five first-order constructs (i.e., five HR practices), we followed convention in HR research to create five dimension-representative parcels for SHPWS (cf. Jiang et al., 2012). For the other six constructs, observed indicators were used. This yielded 33 indictors for seven latent constructs in the measurement model. The analysis of Harman's one factor analysis revealed that the one-factor model fit the data very

poorly ($\chi^2_{(495)}$ = 4013.95, CFI = .26, TLI = .21, RMSEA = .18, SRMR = .19), suggesting that common method bias was not a pervasive issue in our study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, we tested common method bias by controlling for the effects of an unmeasured latent methods factor (Podsakoff et al., 2003). The results indicated that the method factor explained only 7.7% percent of the total study variance, which is much lower than the criterion (25%) suggested by Williams, Cote, and Buckley (1989). The results also indicated that common method bias was not a serious confounding influence on our empirical results.

4.4 Analytical strategy

As our research model involves multiple mediators and dependent variables, we used structural equation modelling (SEM) to estimate the model and test all hypotheses simultaneously. Because SEM considers the measurement errors and the covariance among dependent variables, it yields more robust results relative to other analytical strategies such as path analysis or multiple linear regression. Following Anderson and Gerbing's (1988) recommendations, we employed a two-step procedure for SEM. Specifically, confirmatory factor analysis (CFA) was first conducted to assess the measurement model, followed by development and comparison of structural models. We included the effects of control variables (age, gender, and organizational tenure) in the structural models. Because controls were originally observed variables, we transformed them to latent variables with a single indicator by setting the loading to 1 and the measurement error to 0 (Enders, 2013). When evaluating the model fit, we used the chi-square statistic (χ^2), degrees of freedom (*df*), the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root-mean-square error of approximation

(RMSEA), and the standardized root-mean-square residual (SRMR). Model fit differences were determined using χ^2 difference tests (Bollen, 1989). Indirect effects were calculated with a 95% confidence interval based on 1,000 bootstrap samples. The indirect effects were significant if their 95% CI excluded 0. We performed the above analyses in Mplus 7.4 (Muthén & Muthén, 2012). The case-based bootstrapping function of Mplus makes it a powerful program for testing direct and indirect effects in a complex mediation model.

5. Results

5.1 Descriptive statistics and correlations

Means, standard deviations and correlations among the variables are presented in Table 1. The correlations between SHPWS and customer orientation ($r = .30$, $p < .01$) and service workload ($r = .30$, $p < .01$) were both significant and positive. Customer orientation was positively related to service performance ($r = .30$, $p < .01$) and WFE ($r = .26$, $p < .01$). Service workload was positively related to WFC ($r = .16$, $p < .05$), but had no relationship with employee health ($r = -.10$, *ns*). These results provide some preliminary support for the hypotheses.

Insert Table 1 here

5.2 Results of hypotheses tests

As described, we followed the classical two-step procedure to conduct the models and test the hypotheses. In the first step, we tested and supported the measurement model: the hypothesized 7-factor model fit the data adequately ($\chi^2_{(474)} = 894.81$, $p < .01$, CFI = .91, TLI

= .90, RMSEA = .06, SRMR = .06) and better than any other alternative measurement models (Table 2). This result also provided support for the distinctiveness of seven focal constructs examined in the current study.

Insert Table 2 here

Then, we tested the structural model. As with our predications, we first developed a full mediation structural model in which SHPWS influences customer orientation and service workload, which in turn impact service performance, work-family interface and health as hypothesized (i.e., Model 1 in Table 3). This model fit the data adequately ($\chi^2_{(560)} = 1023.83$, $p < .01$, CFI = .90, TLI = .89, RMSEA = .06, SRMR = .08). To examine potential partially mediated effects, we also modelled direct paths from SHPWS to outcomes. Fit indices indicated a satisfactory fit between the model and the data (Model 2 in Table 3, $\chi^2_{(556)} = 1000.19$, $p < .01$, CFI = .91, TLI = .90, RMSEA = .06, SRMR = .06). Results of the χ^2 difference test suggested there was a significant improvement of model fit compared to the fully mediated models ($\Delta\chi^2_{(4)} = 23.64$, $p < .01$). Therefore, we conclude that customer orientation and service workload only *partially* mediate the relationship between SHPWS and employee outcomes. Figure 2 and Table 4 provide the coefficients and bootstrapping confidence intervals of each effect, which can be used to test the hypotheses.

Insert Table 3, Figure 2, and Table 4 here

In support of H1 and H2, we found significantly positive estimates for the paths from SHPWS to customer orientation ($\beta = .32$, $p < .01$) and service workload ($\beta = .28$, $p < .01$). We

further tested the indirect effects between SHPWS and employee outcomes. As expected in H3 and H4, SHPWS had a positive, indirect effect on employee service performance through customer orientation (estimate = .09, 95% CI = [.01, .18]), and had a negative, indirect effect on employee health through service workload (estimate = -.05, 95% CI = [-.11, -.01]). H5 and H6 proposed the indirect effects of SHPWS on WFE and WFC through both customer orientation and service workload, respectively. Results indicated that SHPWS had a positive, indirect effect on WFE through customer orientation (estimate = .10, 95% CI = [.03, .20]), as well as a positive, indirect effect on WFC through service workload (estimate = .06, 95% CI = [.01, .13]). H5 and H6 received support.

5.3 Supplementary analysis

Although the JD-R model insists that job demands and job resources induce two independent processes and exert parallel effects on WFC and WFE respectively, there have been studies reporting the cross-path effects (e.g., Michel et al., 2011). For robustness, we also linked and tested two cross-path indirect effects (i.e., SHPWS → customer orientation → WFC, and SHPWS → service workload → WFE) that we did not hypothesize. As shown in Table 3, although the model with these cross-path effects (Model 3) fits the data adequately, the χ^2 difference with the preferred model (i.e., Model 2) was insignificant ($\Delta\chi^2_{(2)} = 4.04$, $p > .05$). Meanwhile, in this model neither the cross-path indirect effect from customer orientation to WFC ($\beta = .14$, *ns*) nor that from service workload to WFE ($\beta = -.02$, *ns*) was significant. Also, none of two cross-path indirect effects (estimate = .04, 95% CI = [-.01, .11] for SHPWS → customer orientation → WFC; estimate = -.01, 95% CI = [-.06, .04] for SHPWS → service

workload → WFE) was significant. These results support the core tenet of the JD-R model — the motivational process (starting from job resources) and the strain process (starting from job demands) are unique to WFE and WFC, respectively (Bakker & Demerouti, 2013), and consistent with a meta-analytic review's finding that workload was not related to WFE (Lapierre et al., 2018).

6. Discussion

In this study, we used the JD-R model to examine *whether* and *how* SHPWS is related to employees' service toward their customers, their families and themselves by suggesting two counterbalancing mechanisms wherein customer orientation and service workload serve as mediators. Consistent with our predictions, the results suggest that SHPWS has both bright side and dark side effects. Specifically, it benefits employees in serving their customers (i.e., high service performance) by enhancing their customer orientation, but harms employees in serving themselves (adverse health condition) via service workload. Meanwhile, SHPWS had mixed effects for employees serving their families via customer orientation and service workload. These findings have both theoretical and practical implications.

6.1 Theoretical implications

The key theoretical implication of this study is that it indicates that the current scholarly understanding of SHPWS' effectiveness is incomplete and biased. The mainstream, which is exclusively based on the research findings that SHPWS helps to increase employees' service performance, holds that SHPWS is beneficial and should be used in service organizations (see Hong et al., 2013, for a meta-analytic review; for recent studies, see Aryee et al., 2016; Hong et

al., 2017; Jiang et al., 2015; Luu, 2019). As with this research, we also recognized that SHPWS is beneficial, as our results showed that SHPWS had a positive effect on service performance through customer orientation. Despite these benefits, however, our study revealed that SHPWS has detrimental effects on employees serving their families and themselves via service workload, suggesting that the benefit to organizations is only half of the story. It is thus suspected that the existing scholarly understanding of SHPWS' effectiveness is biased because prior research has predominately focused on the "bright side" of this system by highlighting its benefits to high-quality customer service as organizations expect, while neglecting its potential costs to service employees. Altogether, as the first study which examines and illustrates both the bright side and the dark side of SHPWS simultaneously, this study provides a more complete and balanced understanding of the effectiveness of SHPWS. These findings suggest that in the service sector, the interests of organizations and those of employees are not always compatible and the service-oriented HPWS that was traditionally considered good has negative effects as well. This issue requires particular attention, given there is an emerging trend in examining service excellence from a multidisciplinary perspective (Bowen, 2016; Ostrom, Parasuraman, Bowen, Patrício, & Voss, 2015). Indeed, the marketing (e.g., internal marketing, Foreman & Money, 1995) and service management perspectives (e.g., service-profit chain model, Heskett, Jones, Loveman, Sasser, & Schlesinger, 1994) have made first efforts in recognizing the importance of HR practices in service delivery and emphasizing that organizations' HR practices should be subtly designed to manage service employees. Although researchers in HR field generally did so, our findings indicated that it is premature to conclude that

service-oriented HR systems are inevitably beneficial. In general, our study cautions theorists and researchers that the effectiveness of SHPWS should be evaluated in a more comprehensive manner, otherwise the scholarly understanding of this HR system will be one-sided.

Second, by illustrating the effects of SHPWS on employees' work-to-family interface experience, this study extends our knowledge about SHPWS' influences and complements the limited and inconclusive literature on the relationship between HPWS and work-to-family interface. On the one hand, we presented the first empirical evidence that organizations implementing service-oriented HPWS not only influence FSE's service to their customers, but also impact their service to their families. By doing so, we extend the scholarly understanding of SHPWS' positive effects. On the other hand, this study provides a lens to understand the equivocal findings on the relationship between HPWS and work-to-family interface. Reviewing the literature, there is research reporting that HPWS is good for work-to-family experience (e.g., Babic, Stinglhamber, & Hansez, 2019; Wattoo, Zhao, & Xi, 2020), but there is also research indicating that HPWS is bad for work-to-family experience (e.g., Shih, Chiang, & Hsu, 2010; White et al., 2003). Considering two forms of work-to-family interface (i.e., WFC and WFE) and two underlying mechanisms (i.e., the motivational process and the strain process), our research indicates that SHPWS both enhances WFE through customer orientation and induces WFC through service workload. These results imply that both the "good" and the "bad" viewpoints on the relationship between HPWS and work-to-family experience make sense but both are one-sided only. Indeed, together with, but extending recent contentions (Carvalho & Chambel, 2016; Ronda, Ollo-López, & Goñi-Legaz, 2016), our findings suggest that the effects

of HPWS on the work-to-family interface is much more complex than previously believed and reported, and it depends on both the forms and the underlying mechanism of the interface. It should be noted, however, this conclusion is based on the investigation of service-oriented HPWS and future research is quite needed to evaluate whether it is generalizable to the effects of generic HPWS.

Finally, by illustrating SHPWS' differential effects on different outcomes through different mechanisms, this study also sheds new and much-needed light on the dispute regarding the effects of HPWS. Indeed, there have been two opposing perspectives of HPWS (Peccei, Van De Voorde, & Van Veldhoven, 2013; Van De Voorde, Paauwe, & Van Veldhoven, 2012). The *mutual gains perspective* suggests that organizational goals are aligned with employees' interests, and that HPWS has positive outcomes for both the organization and the employees, whereas the *conflicting outcomes perspective* does not take for granted that organizational goals are always aligned with employees' interests and argues that HPWS benefits organizations while possibly harming employees (e.g., Godard, 2001, 2004; Ramsay et al., 2000). As a response to recent research calls (Guest, 2017; Kowalski & Loretto, 2017; Peccei & Van De Voorde, 2019), we linked SHPWS with both the organization's expected performance (service performance) and employees' well-being (work-to-family experience and health), and our results suggest an alternative, interesting perspective. To be specific, this study provides partial support for both the mutual gains (i.e., SHPWS increases organization-expected service performance and employees WFE through customer orientation) and the conflicting outcomes perspective (although SHPWS increases organization-expected service performance, it causes

employees WFC and adverse health through service workload). In general, our results indicate that HPWS is neither a "panacea" (Ashkanasy, Bennett, & Martinko, 2016, p. 308) nor a "wolf in sheep's clothing" (Pichler et al., 2016, p. 234) and illustrates the necessity of understanding HPWS' effects by using a paradoxical perspective and by moving beyond simple "good vs. bad" debates (Harley, Sargent, & Allen, 2010; Ho & Kuvaas, 2019; Loon, Otaye-Ebede, & Stewart, 2019; Ogbonnaya & Messersmith, 2019).

6.2 Practical implications

Our study provides several implications for service organizations. First, as with prior research, we found that SHPWS is an effective managerial practice in increasing frontline employees' service performance. Thus, organizations are encouraged to invest in service-oriented HR practices to sustain service excellence and profit. However, our study reveals that SHPWS also has negative effects on employees' well-being such as health and positive work-to-family experience, suggesting that organizations should employ a more nuanced view of SHPWS. Particularly, it is necessary to be aware of SHPWS' effects on employees' perceptions of increased service workload. Organizations should provide stress management programs to help employees handle work demands, as well as work-family support policies, such as on-site childcare and work flexibility, to solve potential conflicts between work and family obligations (Butts, Casper, & Yang, 2013). As suggested by this study and others (Jensen & Van De Voorde, 2016; Wang et al., in press), health promotion programs and practices are quite needed to protect employees from the harm stemming from the increased pressures of SHPWS. Meanwhile, it is also important for organizations to enhance employee

customer orientation, which helps to increase employees' service performance and work-to-family enrichment. We want to make it clear that the current study does not suggest that service organizations should abandon SHPWS when managing service employees; instead we suggest that SHPWS should be used with caution and organizations and managers should be clear about its potential costs and therefore take initiatives to provide better support to employees who work in a SHPWS environment. This is practically important because employees play the linking-pin roles in service delivery and their personal and work-to-family experiences matter to organizations' long-term profitability and sustainability.

6.3 Limitations and future research directions

This study is not without limitations. First, all variables were self-reported by employees and this may cause an over-reporting issue, especially for service performance. To minimize this possibility, we emphasized to participants that the data collection was anonymous, which could to some extent decrease their motivation to over-report. Statistically, the relationship between SHPWS and self-reported service performance observed in this study is consistent with that observed in research using other-reporting strategies such as managers' reports (Aryee et al., 2012; Liao et al., 2009; Luu, 2009), suggesting that over-reporting did not inflate our conclusion. Despite this, future researchers are encouraged to collect data from different sources to provide a more rigorous test of the effects of SHPWS.

Second, because of participants' concerns about providing family-related information, in this study we were unable to obtain employees' caring responsibilities (e.g., for parents, grandparents, children) and thus did not control for them in the analysis. Given that an

individual's caring responsibilities are somewhat related to his/her experienced work-to-family interface (Michel et al., 2011), this is indeed a limitation of our study. Meanwhile, given that in the hotel we sampled, all employees were full-time workers and most had little education, we did not control employees' employment status and education as control variables, which may limit the generalizability of our conclusions. We encourage that future research includes meaningful demographic variables to present more precise results. Third, although we collected data at two separate points of time, the time lag of six weeks was not long to detect the proposed effects. To rigorously disentangle how SHPWS creates job resources and induces job demands, which in turn influence employees, future research could use long time-lagged or longitudinal research.

Another limitation concerns the generalizability of our results to other contexts. We conducted this study in a singular service sector (i.e., hotel service) and a singular cultural context (i.e., China). Although the theoretical arguments in this study are not restricted to a particular context, we do believe that future research needs to explore whether there are sector and/or cultural variations in the relationship between SHPWS and employee outcomes (especially health and WFC/WFE) (Van De Voorde & Boxall, 2015). For one thing, the hotel service sector is a typical traditional service industry where the profits of service organizations are extremely tied to customers' satisfaction. As such, hotels place priority on customers and thus take initiatives to manage FSE to satisfy their needs and demands. Thus, it is more likely that in this context, SHPWS makes employees provide high-quality service for customers, but at the potential cost of their personal health and work-family balance. In contrast, in modern

service sectors (e.g., financial and healthcare service) which are characterized as being knowledge-intensive, such a trade-off maybe not so obvious. For another, it is worthwhile to replicate and extend our study in other societies given cultural differences. For instance, family is viewed as more of a duty in Asian culture than in highly individualist societies (Allen, French, Dumani, & Shockley, 2015). Therefore, it might be more likely that in Chinese society, organizations' implementing SHPWS create a larger conflict between employees' service to customers at work and their service to family after work. However, in Western societies which are more individualistic, people might care less about others including their customers and family members (Allen et al., 2015; Markus & Kitayama, 1998). The conflict between service to different entities due to SHPWS might thus be less serious. In general, this line of thinking suggests that cross-sector and cross-cultural investigations are very worthwhile.

Besides addressing the limitations above, there are several avenues for future research. In this study, we relied on the JD-R model and identified two opposing mechanisms to illustrate the complex effects of SHPWS. Alternatively, there might exist other mechanisms underlying such effects. For instance, from a social information processing and signaling perspective, SHPWS may lead employees to have different attributions (e.g., performance attribution vs. cost reduction attribution) toward the purpose of SHPWS, thus triggering their positive and/or negative responses (Van De Voorde & Beijer, 2015). This line of research is important and needed as our results showed only partial mediation, suggesting there may be other potential mechanisms as well. Another avenue is going beyond the double-edged sword effects of SHPWS and venturing into the identification of boundary conditions that could strengthen the

positive effects and at the same time alleviate the negative effects. Indeed, there will likely be personal and situational factors influencing such desirable and undesirable effects. For instance, resilience, because its functions of both enabling employees to utilize job resources provided by HPWS and enabling employees to deal with the work intensification and work stress induced by HPWS (Cooke, Cooper, Bartram, Wang, & Mei, 2019; Cooke, Wang, & Bartram, 2019), may maximize SHPWS' beneficial effects and minimize its detrimental effect simultaneously. This line of inquiry is critically important and quite needed as it would help organizations make better use of SHPWS: benefitting from its strengths and avoiding its weaknesses.

Appendix Items used to measure SHPWS

The following items refer to the managing practices of *customer-contact employees* employed by your hotel. Please indicate the extent of your agreement or disagreement about each statement.

1. Recruitment emphasizes traits and abilities required for providing high quality of customer services.
2. High quality of customer services is emphasized in training.
3. Performance appraisals are based on multiple sources (self, coworkers, supervisors, customers, etc.).
4. Satisfying customers is the most important work guideline.
5. Meeting customers' needs is emphasized in performance appraisals.
6. The hotel rewards employees for new ideas for improving customer services.
7. The hotel gives special rewards to employees who are excellent in serving customers.
8. Employees have discretion in handling customers' additional requests.
9. Employees have discretion in settling customer complaints without reporting to a supervisor or other specialists.
10. The hotel fully supports employees with necessary equipment and resources for providing high quality of customer services.

Note. The above 10 items were chosen from Chuang and Liao (2010, pp.191-193).

References

Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2015). Meta-analysis of work-family conflict mean differences: Does national context matter? *Journal of Vocational Behavior*, *90*, 90–100.

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.

Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otaye, L. E. (2012). Impact of high-performance work systems on individual-and branch-level performance: Test of a multilevel model of intermediate linkages. *Journal of Applied Psychology*, *97*(2), 287–300.

Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otaye, L. E. (2016). Developing and leveraging human capital resource to promote service quality: Testing a theory of performance. *Journal of Management*, *42*(2), 480–499.

Ashkanasy, N. M., Bennett, R. J., & Martinko, M. J. (2016). Understanding the high performance workplace: Future directions. In N. M. Ashkanasy, R. J. Bennet, & M. Martinko (Eds.), *Understanding the high performance workplace: The line between motivation and abuse* (pp. 301–309). New York: Routledge.

Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand-burnout-performance relationship: A surface-level trait perspective. *Journal of Retailing*, *85*(4), 480–492.

Babic, A., Stinglhamber, F., & Hansez, I. (2019). High-performance work systems and well-being: Mediating role of work-to-family interface. *Psychologica Belgica*, *59*(1), 301–320.

Bakker, A. B., & Demerouti, E. (2013). The spillover-crossover model. In J. G. Grzywacz & E. Demerouti (Eds.), *New frontiers in work and family research* (pp. 55–70). New York: Psychology Press.

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, *22*(3), 273–285.

Bakker, A. B., Demerouti, E., & Dollard, M. F. (2008). How job demands affect partners' experience of exhaustion: Integrating work-family conflict and crossover theory. *Journal of Applied Psychology*, *93*(4), 901–911.

Bakker, A. B., & Geurts, S. A. (2004). Toward a dual-process model of work-home interference. *Work and Occupations*, *31*(3), 345–366.

Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, *73*(1), 39–61.

Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.

Bowen, D. E. (2016). The changing role of employees in service theory and practice: An interdisciplinary view. *Human Resource Management Review, 26*(1), 4–13.

Bowling, N. A., Alarcon, G. M., Bragg, C. B., & Hartman, M. J. (2015). A meta-analytic examination of the potential correlates and consequences of workload. *Work & Stress*, *29*(2), 95–113.

Bowling, N. A., & Kirkendall, C. (2012). Workload: A review of causes, consequences, and potential interventions. In J. Houdmont, S. Leka, & R. R. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice* (Vol. 2, pp. 221–238). Chichester, UK: Wiley-Blackwell.

Briggs, E., Jaramillo, F., & Noboa, F. (2015). Explicating customer orientation's influence on frontline employee satisfaction. *The Service Industries Journal*, *35*(3), 133–151.

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

Butts, M. M., Casper, W. J., & Yang, T. S. (2013). How important are work-family support policies? A meta-analytic investigation of their effects on employee outcomes. *Journal of Applied Psychology*, *98*(1), 1–25.

Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, *67*(2), 169–198.

Carvalho, V. S., & Chambel, M. J. (2016). Perceived high-performance work systems and subjective well-being: Work-to-family balance and well-being at work as mediators. *Journal of Career Development*, *43*(2), 116–129.

Chan, K. W., & Lam, W. (2011). The trade-off of servicing empowerment on employees' service performance: Examining the underlying motivation and workload mechanisms. *Journal of the Academy of Marketing Science, 39*(4), 609–628.

Chang, S. J., van Witteloostuijn, A., & Eden, L. (2010). From the Editors: Common method variance in international business research. *Journal of International Business Studies*, *41*(2), 178–184.

Chuang, C.-H., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology, 63*(1), 153−196.

Conduit, J., & Mavondo, F. T. (2001). How critical is internal customer orientation to market orientation? *Journal of Business Research*, *51*(1), 11–24.

Conway, E., Fu, N., Monks, K., Alfes, K., & Bailey, C. (2016). Demands or resources? The relationship between HR practices, employee engagement, and emotional exhaustion within a hybrid model of employment relations. *Human Resource Management, 55*(5), 901–917.

Cooke, F. L., Cooper, B., Bartram, T., Wang, J., & Mei, H. (2019). Mapping the relationships between high-performance work systems, employee resilience and engagement: A study of the banking industry in China. *International Journal of Human Resource Management, 30*(8), 1239–1260.

Cooke, F. L., Wang, J., & Bartram, T. (2019). Can a supportive workplace impact employee resilience in a high pressure performance environment? An investigation of the Chinese banking industry. *Applied Psychology: An International Review*, 68(4), 695–718.

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.

Danford, A., Richardson, M., Stewart, P., Tailby, S., & Upchurch, M. (2008). Partnership, high performance work systems and quality of working life. *New Technology, Work and Employment*, *23*(3), 151–166.

de Beer, L. T., Pienaar, J., & Rothmann Jr, S. (2016). Work overload, burnout, and psychological ill-health symptoms: A three-wave mediation model of the employee health impairment process. *Anxiety, Stress, & Coping*, *29*(4), 387–399.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512.

Demerouti, E., Corts, I. M., & Boz, M. (2013). A closer look at key concepts of work-nonwork interface. In J. G. Grzywacz & E. Demerouti (Eds.), *New frontiers in work and family research* (pp. 34–53). New York: Psychology Press.

Drach-Zahavy, A. (2010). How does service workers' behavior affect their health? Service climate as a moderator in the service behavior-health relationships. *Journal of Occupational Health Psychology*, *15*(2), 105–119.

Enders, C. K. (2013). Analyzing structural equation models with missing data. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (2nd ed., pp. 493–520). Charlotte, NC: Information Age Publishing.

Foreman, S. K., & Money, A. H. (1995). Internal marketing: Concepts, measurement and application. *Journal of Marketing Management, 11*(8), 755–768.

Godard, J. (2001). High performance and the transformation of work? The implications of alternative work practices for the experience and outcomes of work. *Industrial and Labor Relations Review, 54*(4), 776–805.

Godard, J. (2004). A critical assessment of the high-performance paradigm. *British Journal of Industrial Relations, 42*(2), 349–378.

Greenbaum, R. L., Quade, M. J., Mawritz, M. B., & Kim, J. (2014). When the customer is unethical: The explanatory role of employee emotional exhaustion onto work family conflict,

relationship conflict with coworkers, and job neglect. *Journal of Applied Psychology*, *99*(6), 1188–1203.

Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal, 27*(1), 22–38.

Han, J., Sun, J. M., & Wang, H. L. (2020). Do high performance work systems generate negative effects? How and when? *Human Resource Management Review*, *30*(2), 100699.

Harley, B., Sargent, L., & Allen, B. (2010). Employee responses to 'high performance work system' practices: An empirical test of the disciplined worker thesis. *Work, Employment and Society*, *24*(4), 740–760.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard Business Review*, *72*(2), 164–174.

Ho, H., & Kuvaas, B. (2019). Human resource management systems, employee wellbeing, and firm performance from the mutual gains and critical perspectives: The well-being paradox. *Human Resource Management, 53*(3), 235–253.

Hong, Y., Jiang, Y., Liao, H., & Sturman, M. C. (2017). High performance work systems for service quality: Boundary conditions and influence processes. *Human Resource Management*, *56*(5), 747–767.

Hong, Y., Liao, H., Hu, J., & Jiang, K. (2013). Missing link in the service profit chain: A meta-analytic review of the antecedents, consequences, and moderators of service climate. *Journal of Applied Psychology, 98*(2), 237−267.

Huyghebaert, T., Fouquereau, E., Lahiani, F. J., Beltou, N., Gimenes, G., & Gillet, N. (2018). Examining the longitudinal effects of workload on ill-being through each dimension of workaholism. *International Journal of Stress Management*, *25*(2), 144–162.

Jensen, J. M., Patel, P. C., & Messersmith, J. G. (2013). High-performance work systems and job control: Consequences for anxiety, role overload, and turnover intentions. *Journal of Management, 39*(6), 1699–1724.

Jensen, J. M., & Van De Voorde, K. (2016). High performance at the expense of employee health? Reconciling the dark side of high performance work systems. In N. M. Ashkanasy, R. J. Bennet, & M. Martinko (Eds.), *Understanding the high performance workplace: The line between motivation and abuse* (pp. 63–84). New York: Routledge.

Jiang, K., Chuang, C.-H., & Chiao, Y.-C. (2015). Developing collective customer knowledge and service climate: The interaction between service-oriented high-performance work systems and service leadership. *Journal of Applied Psychology*, *100*(4), 1089–1106.

Jiang, K., Lepak, D. P., Han, K., Hong, Y., Kim, A., & Winkler, A. L. (2012). Clarifying the construct of human resource systems: Relating human resource management to employee performance. *Human Resource Management Review, 22*(2), 73–85.

Karatepe, O. M., & Douri, B. G. (2012). Does customer orientation mediate the effect of job resourcefulness on hotel employee outcomes? Evidence from Iran. *Journal of Hospitality and Tourism Management*, *19*(1), 133–142.

Karatepe, O. M., Yavas, U., Babakus, E., & Deitz, G. D. (2018). The effects of organizational and personal resources on stress, engagement, and job outcomes. *International Journal of Hospitality Management*, *74*, 147–161.

Kelley, S. W. (1992). Developing customer orientation among service employees. *Journal of the Academy of Marketing Science, 20*(1), 27–36.

Kowalski, T. H. P., & Loretto, W. (2017). Well-being and HRM in the changing workplace. *International Journal of Human Resource Management, 28*(16), 2229–2255.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2002). The PHQ-15: Validity of a new measure for evaluating the severity of somatic symptoms. *Psychosomatic Medicine*, *64*(2), 258–266.

Kroon, B., Van De Voorde, K., & Van Veldhoven, M. (2009). Cross-level effects of high-performance work practices on burnout: Two counteracting mediating mechanisms compared. *Personnel Review*, *38*(5), 509–525.

Lapierre, L. M., Li, Y., Kwan, H. K., Greenhaus, J. H., DiRenzo, M. S., & Shao, P. (2018). A meta-analysis of the antecedents of work-family enrichment. *Journal of Organizational Behavior*, *39*(4), 385–401.

Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, *33*(1), 76–103.

Li, B., Qin, Y., & Gu, H. (2020). The development and transformation of China's hotel industry. In Huang, S. & Chen, G. (Eds.), *Handbook of tourism and China* (pp. 159–171). Cheltenham, UK: Edward Elgar Publishing.

Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, *47*(1), 41–58.

Liao, H., Toya, K., Lepak, D. P., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology*, *94*(2), 371–391.

Loh, M. Y., Idris, M. A., Dollard, M. F., & Isahak, M. (2018). Psychosocial safety climate as a moderator of the moderators: Contextualizing JDR models and emotional demands effects. *Journal of Occupational and Organizational Psychology*, *91*(3), 620–644.

Loon, M., Otaye-Ebede, L., & Stewart, J. (2019). The paradox of employee psychological well-being practices: An integrative literature review and new directions for research. *International Journal of Human Resource Management*, *30*(1), 156–187.

Lu, L., Chang, T. T., Kao, S. F., & Cooper, C. L. (2015). Testing an integrated model of the

work-family interface in Chinese employees: A longitudinal study. *Asian Journal of Social Psychology*, *18*(1), 12–21.

Luu, T. T. (2019). Service-oriented high-performance work systems and service-oriented behaviours in public organizations: The mediating role of work engagement. *Public Management Review, 21*(6), 789–816.

Lytle, R. S., Hom, P. W., & Mokwa, M. P. (1998). SERV*OR: A managerial measure of organizational service-orientation. *Journal of Retailing*, *74*(4), 455–489.

Markus, H. R., & Kitayama, S. (1998). The cultural psychology of personality. *Journal of Cross-Cultural Psychology*, *29*(1), 63–87.

Mascio, R. D. (2010). The service models of frontline employees. *Journal of Marketing, 74*(4), 63–80.

Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior*, *32*(5), 689–725.

Moon, T. W., Hur, W. M., & Hyun, S. S. (2019). How service employees' work motivations lead to job performance: The role of service employees' job creativity and customer orientation. *Current Psychology*, *38*(2), 517–532.

Muthén, L. K., & Muthén, B. O. (2012). *Mplus user's guide* (7th ed.). Los Angeles: Muthén & Muthén.

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 III, J. G., & 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.

Ng, T. W., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, *93*(2), 392–423.

Ng, T. W., & Feldman, D. C. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, *63*(3), 677–718.

Ogbonnaya, C., Daniels, K., Connolly, S., & Van Veldhoven, M. (2017a). Integrated and isolated impact of high-performance work practices on employee health and well-being: A comparative study. *Journal of Occupational Health Psychology*, *22*(1), 98–114.

Ogbonnaya, C., Daniels, K., & Nielsen, K. (2017b). Does contingent pay encourage positive employee attitudes and intensify work? *Human Resource Management Journal, 27*(1), 94–112.

Ogbonnaya, C., & Messersmith, J. (2019). Employee performance, well-being, and differential effects of human resource management subdimensions: Mutual gains or conflicting outcomes? *Human Resource Management Journal, 29*(3), 509–526.

Oppenauer, V., & Van De Voorde, K. (2018). Exploring the relationships between high involvement work system practices, work demands and emotional exhaustion: A multi-level study. *International Journal of Human Resource Management*, *29*(2), 311–337.

Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patrício, L., & Voss, C. A. (2015). Service research priorities in a rapidly changing context. *Journal of Service Research, 18*(2), 127–159.

Peccei, R. (2004, January 15). *Human resource management and the search for the happy workplace*. ERIM Inaugural Address Series Research in Management. Retrieved from http://hdl.handle.net/1765/1108

Peccei, R., & Van De Voorde, K. (2019). Human resource management-well-being-performance research revisited: Past, present, and future. *Human Resource Management Journal, 29*(4), 539–563.

Peccei, R., Van De Voorde, K., & Van Veldhoven, M. (2013). HRM, well-being and performance: A theoretical and empirical review. In D. Guest, J. Paauwe, & P. M. Wright (Eds.), *HRM and performance: Achievements and challenges* (pp. 15–46). Chichester, UK: Wiley.

Pichler, S., Livingston, B. A., Ruggs, E. N., & Varma, A. (2016). The dark side of high performance work systems: Implications for workplace incivility, work-family conflict, and abusive supervision. In N. M. Ashkanasy, R. J. Bennet, & M. Martinko (Eds.), *Understanding the high performance workplace: The line between motivation and abuse* (pp. 231−251). New York: Routledge.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903.

Ramsay, H., Scholarios, D., & Harley, B. (2000). Employees and high-performance work systems: Testing inside the black box. *British Journal of Industrial Relations*, *38*(4), 501–531.

Ronda, L., Ollo-López, A., & Goñi-Legaz, S. (2016). Family-friendly practices, high-performance work practices and work-family balance. *Management Research, 14*(1), 2–23.

Roth, P. L., Purvis, K. L., & Bobko, P. (2012). A meta-analysis of gender group differences for measures of job performance in field studies. *Journal of Management, 38*(2), 719–739.

Schneider, B., & Bowen, D. E. (1993). The service organization: Human resources management

is crucial. *Organizational Dynamics*, *21*(4), 39–52.

Shih, H. A., Chiang, Y. H., & Hsu, C. C. (2010). High involvement work system, work-family conflict, and expatriate performance-examining Taiwanese expatriates in China. *International Journal of Human Resource Management*, *21*(11), 2013–2030.

Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, *3*(4), 356–367.

Subramony, M., Ehrhart, K., Groth, M., Holtom, B. C., Van Jaarsveld, D. D., & Yagil, D., et al. (2017). Accelerating employee-related scholarship in service management: Research streams, propositions, and commentaries. *Journal of Service Management, 28*(5), 837–865.

Susskind, A. M., Kacmar, K. M., & Borchgrevink, C. P. (2003). Customer service providers' attitudes relating to customer service and customer satisfaction in the customer-server exchange. *Journal of Applied Psychology*, *88*(1), 179–187.

Taris, T. W., & Schaufeli, W. B. (2016). The job demands-resources model. In S. Clarke, T. M. Probst, F. W. Guldenmund, & J. Passmore (Eds.). *The Wiley Blackwell handbook of the psychology of occupational safety and workplace health* (pp. 157–180). Chichester, UK: Wiley.

ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist*, *67*(7), 545–556.

Topcic, M., Baum, M., & Kabst, R. (2016). Are high-performance work practices related to individually perceived stress? A job demands-resources perspective. *International Journal of Human Resource Management, 27*(1), 45–66.

van der Heijden, B. I., Demerouti, E., Bakker, A. B., & NEXT Study Group coordinated by Hans-Martin Hasselhorn. (2008). Work-home interference among nurses: Reciprocal relationships with job demands and health. *Journal of Advanced Nursing*, *62*(5), 572–584.

Van De Voorde, K., & Beijer, S. (2015). The role of employee HR attributions in the relationship between high-performance work systems and employee outcomes. *Human Resource Management Journal*, *25*(1), 62–78.

Van De Voorde, K., & Boxall, P. (2015). Individual well-being and performance at work in the wider context of strategic HRM. In Van Veldhoven, M. & Peccei, R. (Eds.), *Well-being and performance at work* (pp. 95–111). London, UK: Psychology Press.

Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee well-being and the HRM-organizational performance relationship: A review of quantitative studies. *International Journal of Management Reviews, 14*(4), 391–407.

Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict

and facilitation. *Journal of Marriage and Family, 66*(2), 398–412.

Wang, Z., Xing, L., & Zhang, Y. (in press). Do high-performance work systems harm employees' health? An investigation of service-oriented HPWS in the Chinese healthcare sector. *International Journal of Human Resource Management*. DOI: 10.1080/09585192.2019.1579254.

Wang, Z., & Xu, H. (2017). How and when service-oriented high-performance work systems foster employee service performance: A test of mediating and moderating processes. *Employee Relations, 39*(4), 523–540.

Wattoo, M. A., Zhao, S., & Xi, M. (2020). High-performance work systems and work-family interface: Job autonomy and self-efficacy as mediators. *Asia Pacific Journal of Human Resources*, 58(1), 128–148.

Wayne, J. H., Casper, W. J., Matthews, R. A., & Allen, T. D. (2013). Family-supportive organization perceptions and organizational commitment: The mediating role of work-family conflict and enrichment and partner attitudes. *Journal of Applied Psychology*, *98*(4), 606–622.

White, M., Hill, S., McGovern, P., Mills, C., & Smeaton, D. (2003). 'High-performance' management practices, working hours and work-life balance. *British Journal of Industrial Relations*, *41*(2), 175–195.

Williams, L. J., Cote, J. A., & Buckley, M. R. (1989). Lack of method variance in self-reported affect and perceptions at work: Reality or artifact? *Journal of Applied Psychology, 74*(3), 462–468.

Wirtz, J., & Jerger, C. (2016). Managing service employees: Literature review, expert opinions, and research directions. *The Service Industries Journal, 36*(15-16), 757–788.

Zablah, A. R., Franke, G. R., Brown, T. J., & Bartholomew, D. E. (2012). How and when does customer orientation influence frontline employee job outcomes? A meta-analytic evaluation. *Journal of Marketing*, *76*(3), 21–40.

Zhao, X. (2016). Work-family studies in the tourism and hospitality contexts. *International Journal of Contemporary Hospitality Management, 28*(11), 2422–2445.

Zhu, H., Lyu, Y., Deng, X., & Ye, Y. (2017). Workplace ostracism and proactive customer service performance: A conservation of resources perspective. *International Journal of Hospitality Management, 64*, 62–72.

Table 1. Means, standard deviations, and correlations among variables

Variables	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Age	34.22	9.16									
2. Gender	.41	.49	-.18**								
3. Organizational tenure	2.99	2.95	.38**	.12							
4. SHPWS	4.57	.84	.05	.03	.12						
5. Customer orientation	5.06	.61	.08	-.17*	.05	.30**					
6. Service workload	3.52	1.15	.07	.16*	.09	.30**	.05				
7. Service performance	4.69	.76	.15*	-.11	.07	.27**	.30**	.05			
8. Work-to-family enrichment	4.68	.96	.13	-.02	.03	.31**	.26**	.07	.40**		
9. Work-to-family conflict	3.73	1.22	.06	.03	.19**	-.14*	.07	.16*	.06	-.20**	
10. Employee health	3.59	1.05	.08	.03	-.02	.17*	.03	-.10	.01	.26**	-.53**

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

Table 2. Comparison of measurement models

Models	χ^2	*df*	$\Delta\chi^2$ (Δdf)	CFI	TLI	RMSEA	SRMR
Model 1: SHPWS, CO, SW, SP, WFE, WFC, EH	894.81	474	-	.91	.90	.06	.06
Model 2: SHPWS, CO + SW, SP, WFE, WFC, EH	1322.88	480	428.07 (6)**	.82	.80	.09	.09
Model 3: SHPWS, CO, SW, SP, WFE + WFC, EH	1707.84	480	813.03 (6)**	.74	.71	.11	.12
Model 4: SHPWS, CO, SW, SP + WFE + WFC + EH	2768.58	489	1873.77 (15)**	.52	.48	.15	.16
Model 5: SHPWS + CO + SW, SP + WFE + WFC + EH	3501.17	494	2606.36 (20)**	.36	.32	.17	.18

Note: All alternative models were compared with the hypothesized model (i.e., Model 1).
SHPWS= Service-oriented high-performance work systems, CO = Customer orientation, SW = Service workload, SP = Service performance, WFE = Work-to-family enrichment, WFC = Work-to-family conflict, EH = Employee health.
** $p < .01$.

Table 3. Comparison of structural models

Models	χ^2	*df*	CFI	TLI	RMSEA	SRMR	$\Delta\chi^2(\Delta df)$
M1: Proposed full structural model (all paths are free to estimate)	1023.83	560	.90	.89	.06	.08	-
M2: Based on M1, adding direct paths linking SHPWS to all outcomes	1000.19	556	.91	.90	.06	.06	23.64, $p < .01$
M3: Based on M2, adding paths linking customer orientation to WFC, and from service workload to WFE	996.15	554	.91	.90	.06	.06	4.04, $p > .05$

Table 4. Standardized coefficients estimates and confidence intervals of effects

		Estimate	95% CI
Direct effects			
H1	SHPWS → Customer orientation	.32	[.14, .47]
H2	SHPWS → Service workload	.28	[.11, .42]
Indirect effects			
H3	SHPWS → Customer orientation → Service performance	.09	[.01, .18]
H4	SHPWS → Service workload → Employee health	-.05	[-.11, -.01]
H5	SHPWS → Customer orientation → Work-to-family enrichment	.10	[.03, .20]
H6	SHPWS → Service workload → Work-to-family conflict	.06	[.01, .13]

Note: CI = confidence interval.

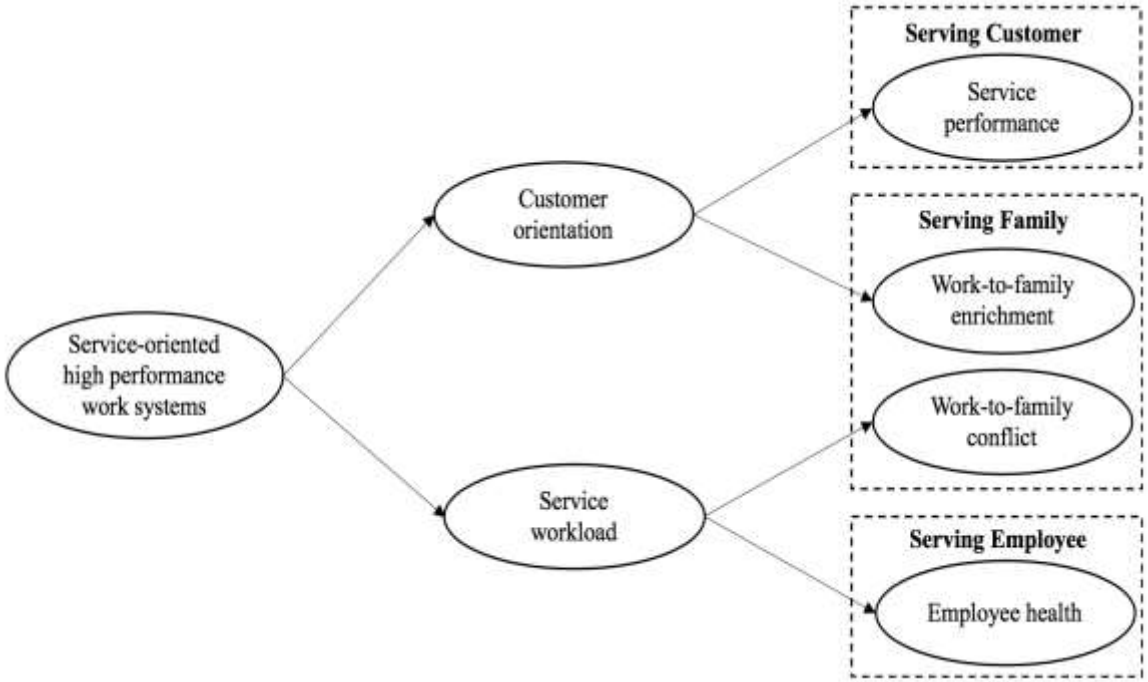

Figure 1. Research model

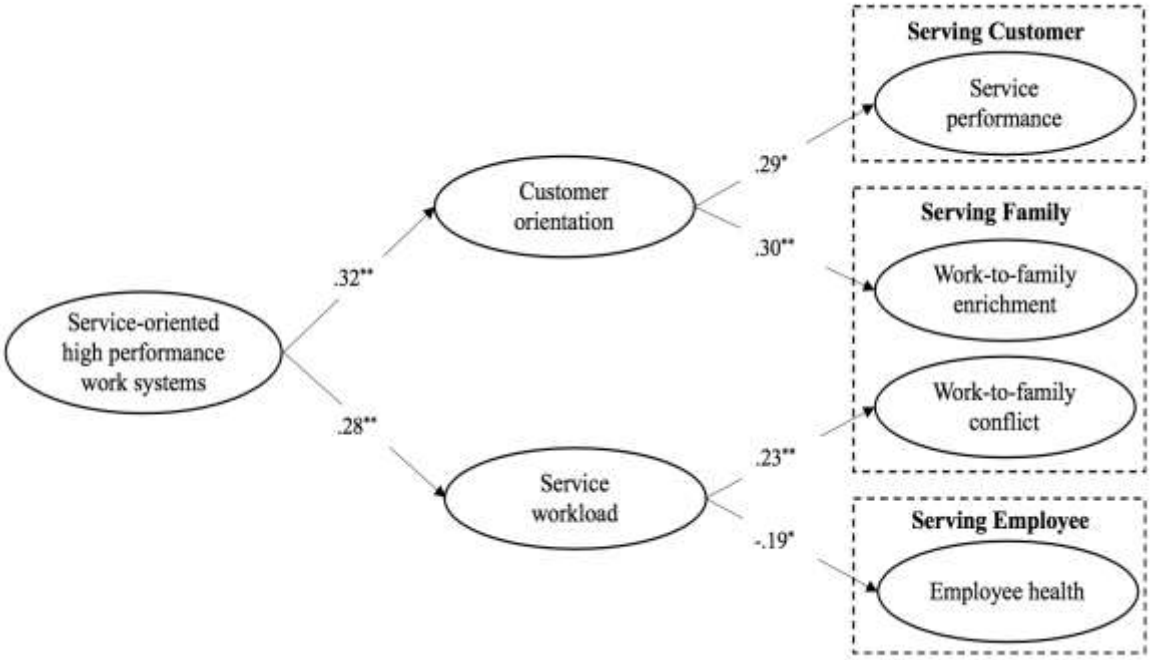

Figure 2. Standardized parameter estimates

Note: For simplicity, estimates of paths from control variables to mediators and outcomes are not shown in the Figure. The estimates of direct paths from SHPWS to outcomes are .21* (service performance), .24** (work-to-family enrichment), -.24** (work-to-family conflict), and .24** (employee health), all significant.

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

Table Captions

Table 1. Means, standard deviations, and correlations among variables

Table 2. Comparison of measurement models.

Table 3. Comparison of structural models.

Table 4. Standardized coefficients estimates and confidence intervals of effects.

Figure Captions

Figure 1. Research model.

Figure 2. Standardized parameter estimates.