

## Mediating role of job stress between work-family conflict, work-leisure conflict, and employees' perception of service quality in the hotel industry in France

Sari Mansour & Dima Mohanna

To cite this article: Sari Mansour & Dima Mohanna (2018) Mediating role of job stress between work-family conflict, work-leisure conflict, and employees' perception of service quality in the hotel industry in France, *Journal of Human Resources in Hospitality & Tourism*, 17:2, 154-174, DOI: [10.1080/15332845.2017.1340755](https://doi.org/10.1080/15332845.2017.1340755)

To link to this article: <https://doi.org/10.1080/15332845.2017.1340755>



Published online: 05 Jul 2017.



Submit your article to this journal [↗](#)



Article views: 110



View related articles [↗](#)



View Crossmark data [↗](#)



# Mediating role of job stress between work-family conflict, work-leisure conflict, and employees' perception of service quality in the hotel industry in France

Sari Mansour and Dima Mohanna

Teluq, School of Administration, University of Quebec, Montréal, QC, Canada

## ABSTRACT

This study investigates the relationships among work-family conflict (WFC), work-leisure conflict (WLC), job stress, and quality of service. This study examines the mediating role of WLC between WFC and job stress. Also, it tests the mediator effect of job stress between WFC, WLC, and quality of service. Data were collected from employees in interaction with customers (648) in the hotel industry in France. The results indicate that WFC and WLC have a positive influence on job stress. The analyses of indirect effects tests based on a bootstrap analysis (Preacher & Hayes, 2004) showed an indirect effect between WFC and job stress. Similarly, the results demonstrated that job stress mediates the relationship between WFC, WLC, and quality of service. The results of the study provide implications for managing employees in the hospitality and tourism industries.

## KEYWORDS

Job stress; quality of service; work-family conflict (WFC); work-leisure conflict (WLC)

## Introduction

In recent years, economic and social changes and increased competition among companies have caused an increase in terms of costs, flexibility, quality, and time. Thus, developing a strategy for quality of goods, services, and customer relationship is a way to build a competitive advantage. Given the importance of customer-employee interaction within the industry service in general and in the hospitality industry in particular, staff who are in interactions with customers in the hospitality industry have a key role to play in ensuring good service quality (Haynes & Fryer, 2000). Likewise, employee attitudes and behaviors may influence hotel guest attitudes (Lin, Wong, & Ho, 2013).

Kim, Shin, and Umbreit (2007) indicated that working conditions in the hotel industry are difficult and stressful. Other authors investigated irregular working hours, low wages, and excessive workload in the hospitality sector, including hotel industry (Babin & Boles, 1998; Faulkner & Patiar, 1997; Karatepe, 2008; Karatepe

& Aleshinloye, 2009, Mansour, 2012; Zohar, 1994). Similarly, Parent-Thirion, Fernández Macías, Hurley, and Vermeylen (2007) show that about 75% of workers in the hospitality industry indicate the need to perform their work under pressure; 66% must meet strict deadlines; and about 48% do not have enough time to do their job. In the same vein, Lin et al. (2013) suggest that poor working conditions prevent workers in the hospitality industry to have enough time for leisure activities. Namasivayam and Zhao (2007) and Yavas, Babakus, and Karatepe (2008) highlight the difficulty for staff in the hospitality industry to combine work and family life. These researchers indicate that work-family conflict leads to more stress at work, thus affecting their performance and customers' evaluations (Molpus, 2003; Netemeyer, James, & Chris, 2005).

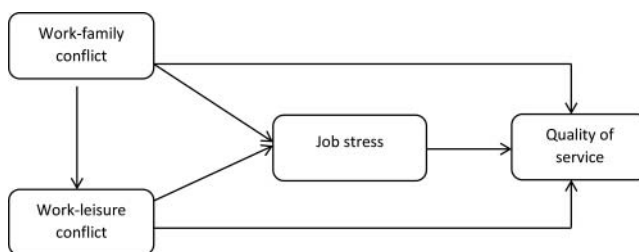
The prevalence of job stress is widely acknowledged in the hotel and catering industry (Kim et al., 2007; Wildes, 2007). Furthermore, the direct effects of work-family conflict (WFC) on job stress or burnout have been extensively explored. However, to date, the effects of WFC on job stress, employee performance, and customer outcomes are unreliable (Netemeyer et al., 2005). Indeed, working conditions can “also require much time and energy of service employees, leaving less opportunity to engage in leisure activities in their time off” (Wong & Lin, 2007). These researchers have extended research from work-non-work conflict to work-leisure conflict, which occurs when the demands at work interfere with the ability of employees to participate in leisure activities.

Studying work-leisure conflict is at the core of research in the field of hospitality and tourism research (Lin, Huang, Yang, & Chiang, 2014), as it concerns clients as well as employees. “The quest to balance leisure and work, including how to do it and maintain standards of excellence continues to be a topic of interest” (Taneja, 2013, p. 113). This is one of the reasons we conducted this study. Moreover, the attitudes and behaviors of hotel employees may affect customer satisfaction and loyalty (Lin et al., 2013). It is indeed important to examine the potential effects from WFC and work-leisure conflict (WLC)<sup>1</sup> on job stress and on quality of service in the hotel industry, as an essential segment of hospitality industry.

The purpose of this study was to investigate the difficulty between work and private life, including family responsibilities and free time for leisure activities, experienced by employees in the hospitality industry in France. More specifically, the research objectives were to: (1) identify if WFC and WLC contribute to employee stress in the hospitality industry; (2) test the effect of WFC on job stress with WLC as a mediator; (3) verify the direct effect of stress on quality of service; and (4) examine the mediating role of job stress between WFC and WLC and employees' perception of quality of service.

## Literature review

Figure 1 presents two models of the relationships between WFC, WLC, job stress, and quality of service. The model is derived from the theory of conservation of



**Figure 1.** Research model.

resources (Hobfoll, 1989, 2002). According to this theory, individuals seek to obtain and maintain resources (Grandey & Cronpazano, 1999). A potential or actual loss of resources creates stress or burnout.

### **Work-family conflict**

The conflict between work and non-work roles takes place when the roles are unbalanced at work and in life (Greenhaus & Beutell, 1985). Work-family conflict is a form of inter-role conflict according to which the demands created by the job interfere with family responsibilities (Netemeyer et al., 2005).

### **Work-leisure conflict**

As an extension of work-family conflict, work-leisure conflict means that employees spend more time and energy on work roles than they spend on other aspects of life; that consumes energy and diminishes the time and prospects for leisure (Wong & Lin, 2007). Sheng-Hshiung, Ying-Wen, and Huei-Ju (2012) define work-leisure conflict as a form of inter-role conflict that occurs when pressure or requests for work roles and leisure roles are mutually incompatible.

### **Job stress**

Two basic approaches of stress at work are distinguished in the literature: the transactional approach (the models of Lazarus & Folkman, 1984 and Siegrist, 1996) and the interactionist approach (the model of Karasek, 1979, and the person-environment fit model of French, Caplan, & Harrison, 1982). Recently, another approach has focused on the factors that enable individuals to deal with the demands of work situations. This is the theory of conservation of resources of Hobfoll (1989). This theory defines psychological stress as “a reaction to the environment that leads to (a) the threat of loss of resources, (b) the net loss of resources, or (c) a lack of resource gain following a significant investment of resources” (Hobfoll, 1989, p. 516).

### **Service quality**

Researchers are interested in the concept of service quality and the concept of quality of service perceived by customers, particularly in the field of marketing services

(Sabadie, 2003; Sirieix & Dubois, 1999), including the hotel sector (Farivar, Khanbashi, & Esmaelinezhad, 2011; Hayes, Ninemeier, & Miller, 2011).

There seems to be a consensus in the literature around the multidimensional aspect of the concept of service quality (Eiglier & Langeard, 1987; Frost & Kumar, 2000; Getty & Getty, 2003; Grönroos, 1984; Parasuraman, Zeithaml, & Berry, 1985, 1988). Basically, two approaches dominate the literature: Grönroos's approach defines the quality of service in three dimensions (technical quality, functional quality, and image quality) and Parasuraman identifies five dimensions (tangibles, reliability, responsiveness, assurance, and empathy), combined in a variable called SERVQUAL. It should be noted that it has been used by various researchers to measure the dimensions of the quality of internal and even external service (Frost & Kumar, 2000; Varey, 1995). However, although the original SERVQUAL has been revised and changed over time (Parasuraman, Zeithaml, & Berry, 1994), the operationalization of quality dimensions of service raises controversial debates (see, e.g., Galloway, 1998).

In the hotel sector and more broadly in the service industry, the quality of service is inherent in the interaction between contact personnel and the customer (Hoque, 1999). This can be defined from two perspectives: that of the provider and the client. The majority of researchers are interested in the quality of service perceived by the customer and few studies deal with the quality of service perceived by employees in contact work. Researchers (Ross, 1993; Silvestro, Johnston, Fitzgerald, & Voss, 1990) indicate that the quality of service can be evaluated from internal data (perception of personal contact, direction) or external data (customers). Recently, the work of Farivar et al. (2011) demonstrates that the quality of service perceived by customers and employees is the same. In this research, only the perception of the quality of service perceived by the contact employees will be evaluated.

### **Effects of WFC and WLC on job stress**

The theory of roles (Kahn & Byosiere, 1992) contends that WFC should have an effect on job stress because of the rival demands that WFC puts on time, energy, cognitive, psychological, and emotional resources, which are necessary to fulfill both work and family roles (Frone, Russell, & Cooper, 1992). This is consistent with the theory of conservation of resources (Hobfoll, 2002). The interface between work and family, or work and leisure may result either in conflict (that is to say, a tension created by the loss of family resources or leisure, a low emotional support from family or loss of leisure activities that is important for well-being) or an enrichment of roles. Thus, the family or/and leisure may present themselves either as a resource or as a constraint (and a loss of resources).

Consequently, WFC and/or WLC lead to job stress because resources are lost in the process of managing both work and family or leisure, creating higher levels of stress at work. However, as highlighted by St-Onge, Renaud, Guérin, and Caussignac (2002), although the WFC can generate negative stress at work, our

research was more interested in the determinants of work and non-work conflict than its effects. Namasivayam and Zhao (2007) and Yavas et al. (2008) highlight the difficulty for staff in the hospitality industry to combine work and family life, which leads to more stress at work. The investigation by Karatepe, Sokmen, Yavas, and Babakus (2010), conducted in the hotel sector in Turkey, shows a positive relationship between work-family conflict and burnout for frontline staff.

In the same vein, Lin et al. (2013) conducted a research to explore how the delivery system of leisure affects life quality of frontline employees in the hospitality and tourism industry in Taiwan. The results show that work-leisure conflict results in a negative quality of life and satisfaction while the delivery system of leisure influences positively quality of life. More recently the findings of Lin et al. (2014) show that the work-leisure conflict is associated with higher levels of burnout and, hence, low well-being at work. According to Hobfoll (1998, 2014), based on the principal of spiral of loss, the initial loss of resources such as time and energy spent at work can lead to future losses such as loss of leisure or support from family, which in turn could translate into other losses such as job stress. Therefore, the following hypotheses were put forward for this research in the hospitality sector in France:

*Hypothesis 1: WFC is associated positively with job stress.*

*Hypothesis 2: WLC is associated positively with job stress.*

### **WFC as an antecedent of WLC**

According to Hobfoll (2001), an individual with more resources is less vulnerable to resource loss and more prone to resource gains, while those who lack resources are not only vulnerable to loss, but the initial loss creates a future loss, also known as a loss spiral. Work is supposed to be a major obstacle to have enough time for family (Zurbrick, Silburn, Burton, & Blair, 2000). Thus, staff that is in contact with customers in the hotel industry, confronted with high demands of work and more particularly to high mental and physical workload, lose their valuable resources (time, energy) and become unable to meet their professional and family roles, resulting in a WFC. This result is consistent with those of Greenhaus and Beutell (1985), Carlson, Kacmar, and Williams (2000), and Zurbrick et al. (2000).

In other words, work-family conflict presents a likely barrier to the valuable use of time within the family. This conflict generates a potential loss of family resources (loss of support from family). This loss of family resources may produce a future loss in leisure resources, which are an essential aspect to improve well-being

Despite the potential effect of leisure on individual well-being, it is a neglected area of studies on stress at work and more specifically in the hotel industry. The following hypothesis explores the mediating effect of WLC in the relationship between WFC and job stress.

*Hypothesis 3: WLC has a mediating effect on the relationship between WFC and job stress.*

## Job stress and service quality

Stress at work may affect the quality of service and employee performance (Hon, 2013). However, few studies have examined this relationship. For example, Varca (1999) showed that stress can decrease the quality of service. Indeed, most research analyzes the relationship between stress (especially burnout) and job performance. For example, the findings of the study of Rod and Ashill (2009) conducted in a call center show that burnout and more specifically emotional exhaustion and depersonalization negatively affect the recovery of service and the treatment of customer dissatisfaction. Williams (2000) indicates, however, that stress has little influence on customer satisfaction with the service. Recently, Hon (2013) has examined, among employees working in the hotel industry, tourism, sales, and marketing in China, the relationship between job stress and performance of the service as an important factor that determines the quality of service. The results demonstrate a significant link between stress and service performance. Chan and Wan (2012) reported that the quality of service for staff having high levels of stress was lower than for the staff that is less stressed. Thus, if more employees are stressed, their performance shall be less in dealing with customer complaints. In the same vein, Kim, Paek, Choi, and Lee (2012) conducted a study in the tourism sector in Korea, and have revealed a negative relationship between emotional exhaustion and service recovery. Although the quality of service is a key concern for hotel companies, very few studies have examined the antecedents and consequences of service quality (Singh, 2000). Therefore, the following hypothesis was proposed:

*Hypothesis 4: Job stress is associated negatively with the perceived quality of service.*

## Mediating role of stress between WFC and WLC and service quality

There has been little research on the mediating role of stress (or burn out) between job demands or job inter-roles and quality of service. For example, the work of Rod and Ashill (2009) concludes that depersonalization (a facet of burnout) mediates the relationship between the demands of work and service recovery. In the same vein, Lang, Thomas, Bliese, and Adler (2007) show that psychological stress (psychological strain) mediates the relationship between job demands and performance. Job stress is a mediator of the effects of WFC and WLC, as work stressors, on performance (Netemeyer et al., 2005). Family and leisure are valued in contemporary society with an increased interest for personal well-being, in a context confronted with globalization, computerization, lack of time, and changes in lifestyles. Thus, “people seem to have forgotten the idea of leisure as part of their day-to-day schedules” (Taneja, 2013, p. 113). This makes leisure time increasingly be in competition with work domains and makes it all the more important to pursue research on WLC. Indeed, theoretical and empirical research in the field of work and leisure has not been numerous (Tsaur, Liang, & Hsu, 2012) and studies on WLC are also sparse (Lin et al., 2014).



According to the theory of conservation of resources, including the spiral of loss of resources, WFC and/or WLC constitute a loss of resources available to individuals and can lead to further losses including loss of well-being. Consequently, the service quality will be degraded leading to the following hypotheses:

*Hypothesis 5: Job stress has a mediating effect on the relationship between WFC and perceived service quality.*

*Hypothesis 6: Job stress has a mediating effect on the relationship between WLC and perceived service quality.*

## **Methodology**

### ***Procedure and sample***

The study was conducted in the hotel industry in France with a sample of staff dealing with customers (receptionists, housekeepers, concierges, hotel restaurant servers, chief of receptionists, chiefs of housekeepers ...). In order for the sample to be as representative as possible of the hotel industry, professional social networks (Viadéo and LinkedIn) were used to contact persons working in different hotel categories, including independent or franchised, located in every region of France. More precisely, advanced search function in LinkedIn and Viadéo were used. Several criteria were researched. Especially, the country (France), the industry (hotel), and the job (receptionists, housekeepers, concierges, hotel restaurant server, etc.). These networks showed a list of employees meeting these criteria. Then researchers made a check of each profile by clicking the name of each person displayed on the site. Each profile displayed the current and previous function of each person. Thus, if the current position of the person fit the types of people wanted by the researchers, a message was sent asking him to participate in the survey. This message included a number of qualifying questions, which included: Are you currently working in the hotel sector in France? Are you in contact with customers? Do you want to participate to this study? This message included also the purpose of the research and a link to the survey. Although these networks permit targeting people's workplaces often posted on each profile, the questionnaire, which included a question on the type of hotel (independent or franchised), has been sent to a random sample of hotels. The majority of responses were from the Viadeo's network.

### ***Instrument***

Each participant was asked to complete a short survey questionnaire including four parts. The first part included five questions about WFC and five others about WLC. WFC was measured with five items from the scales of Netemeyer, McMurrain, and Boles (1996). WLC was measured with five items from Wong and Lin (2007). The second part had to do with job stress. This variable was measured with eight questions from the psychological stress measure of Lemyre and Tessier



(2003). The third part contained 10 questions to measure perceived quality of service.

The SERVQUAL scale developed by Parasuraman et al. (1985, 1988) was chosen for two reasons: (1) it has been used and tested in the hotel sector (Al Roussan, 2011; Boon-itt & Rompho, 2012; Chen, 2013; Hartline & Ferrell, 1996; Sarangarajan & Tamilenth, 2012; Wilkins, Merrilees, & Herington, 2007) and (2) researchers use it to test the quality of service perceived by customers (Al Roussan, 2011; Boon-itt & Rompho, 2012; Cronin & Taylor, 1992; Hartline & Ferrell, 1996; Parasuraman, Berry, & Zeithaml, 1991; Parasuraman et al., 1985; Sarangarajan & Tamilenth, 2012; Wilkins et al., 2007) or by personnel, which are in interaction with customers (Babakus, Yavas, Karatepe, & Avci, 2003; Boshoff & Tait, 1996; Chen, 2013; Malhotra, Mavondo, Mukherjee, & Hooley, 2012; Singh, 2000, Vella, Gountas, & Walker, 2009). Therefore, the researcher chose to use the version of the SERVQUAL scale modified by Hartline and Ferrell (1996; 10 items) to suit the measurement of the quality of service perceived by employees. Finally, in the fourth part, participants were asked to complete a short biographical questionnaire that collected demographic information, such as age, gender, marital status, as well as information about their work history, hotel category, and type.

All responses were collected according to a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). We asked people to indicate their age, gender, marital status, hotel category, and hotel type. These variables were statistically controlled in this study. Composite scores for each measure were obtained by averaging scores across items representing that measure. Table 2 shows the correlation matrix, means, and standard deviations of all variables investigated in this study.

### Data analysis

All measures were subjected to confirmatory factor analysis to provide support for the issues of dimensionality, convergent and discriminant validity (Anderson & Gerbing, 1988). The research hypotheses were tested using AMOS version 20 (Arbuckle, 2011). The effective sample size was 648. The results of confirmatory

**Table 1.** Sample characteristics.

| Industry                 | Hospitality   |
|--------------------------|---|
| Sample size              | 648   |
| Hotel classification (%) | 0–1 star: 2%; 2 star: 6.2%; 3 star: 17.4%; 4 star: 43.2%; 5 star: 31.2%   |
| Gender (%)               | Women: 59.1%; Male: 40.9%   |
| Age (in%)                | Under 20 years: 1.7%; 20–30 years: 60.8%; 31–40 years: 29.3%; 41–50 years: 5.4%; > 50 years: 2.8%   |
| Position (in%)           | Server: 7.3%; Chief of front office: 15.7%; Concierge: 7.7%; Housekeeper: 8.3%; Chief of housekeeper: 9.3%; Butler: 9.4%; Receptionist: 37%; Night receptionist: 5.2% |
| Time worked per week (%) | Less than 35 hours: 4.3%; 35–39 hours: 22.1%; 40–44 hours: 32%; 45–50 hours: 17.6%; over 50 hours: 24%  |

**Table 2.** Means, standard deviations, and correlations.

| Variable        | M    | SD   | 1        | 2        | 3        | 4        | 5       | 6       | 7       | 8      | 9    |
|-----------------|------|------|----------|----------|----------|----------|---------|---------|---------|--------|------|
| Age             | 2.47 | 0.75 | —        |          |          |          |         |         |         |        |      |
| Gender          | 1.59 | 0.49 | -0.173** | —        |          |          |         |         |         |        |      |
| Marital status  | 0.45 | 0.50 | 0.175**  | 0.023    | —        |          |         |         |         |        |      |
| Hotel type      | 1.44 | 0.45 | 0.153**  | -0.098*  | -0.103** | —        |         |         |         |        |      |
| Hotel category  | 1.75 | 0.44 | -0.016   | -0.193** | 0.095*   | -0.192** | —       |         |         |        |      |
| WFC             | 3.69 | 1.11 | 0.051    | 0.083*   | 0.183**  | -0.111** | 0.126** | 0.89    |         |        |      |
| WLC             | 3.39 | 1.12 | -0.015   | 0.114**  | 0.184**  | -0.239** | 0.093*  | 0.681** | 0.88    |        |      |
| Job stress      | 3.35 | 1.05 | -0.027   | 0.137**  | 0.167**  | -0.116** | 0.116** | 0.595** | 0.56**  | 0.92   |      |
| Service quality | 3.94 | 0.85 | -0.038   | -0.077   | 0.017    | 0.049    | -0.03   | -0.15** | -0.13** | -0.2** | 0.94 |

Note. Cronbach's alpha appears along the diagonal. Two-tailed tests.

\* $p < 0.05$ ; \*\* $p < 0$ .

factor analysis are shown in Table 3. The reliability of the scales selected has been tested by calculating composite reliability (CR) of Joreskog.

## Results

A total of 2,150 emails were sent to staff, 648 were returned and all had complete responses across all study variables, yielding a return rate of 30.13%. The characteristics of the sample are presented in Table 1.

The majority of the respondents are staff in interaction with customers (heads of reception, receptionists, housekeepers ...), working in 4-star hotels (74.4%), franchised (56%) or independent (44%), relatively young (60.5% are between 20 and 30 years) and they work from 40 to 44 hours per week (32%). The results of preliminary analyses are shown in Table 2. This table presents mean, standard deviations, and correlation between variables of the model. Also, Cronbach's alpha appears along the diagonal.

## Measurement model

The items of each scale were subjected to a series of confirmatory factor analyses for a rigorous psychometric assessment (Jöreskog & Sörbom, 1996). To assure the reliability and validity of the questionnaires, the measurement model was assessed with all 648 effective samples and examined by maximum likelihood. The initial results of the confirmatory factor analysis provided low model fit statistics. Therefore, according to the modification indices in Amos, several items were deleted<sup>2</sup> because of low standardized loadings (<0.50), high standard residues, or correlation measurement errors. Also, covariances between measurement errors were added. Specifically, two items from job stress and one item each from the work-leisure conflict and perceived quality of service were removed from further analysis.

Item reliability was confirmed by a standardized factor loading between 0.48 and 0.9, indicating that the significance level ( $t > 1.96$ ) is achieved. In the analysis of constructs reliability (Table 3) of the dimensions, composite reliability exceeded 0.70 (range, 0.87–0.94), which indicated adequate internal consistency. Moreover,

**Table 3.** Reliability of scales selected.

| Variable              | IR   | CR    | AVE  |
|-----------------------|------|-------|------|
| Work-family conflict  | WFC1 | 0.9   | 0.65 |
|                       | WFC2 | 0.76  |      |
|                       | WFC3 | 0.845 |      |
|                       | WFC4 | 0.816 |      |
| Work-leisure conflict | WFC5 | 0.793 |      |
|                       | WLC1 | 0.803 |      |
|                       | WLC2 | 0.756 | 0.67 |
|                       | WLC3 | 0.74  |      |
| Job stress            | WLC4 | 0.772 |      |
|                       | J51  | 0.87  |      |
|                       | J52  | 0.824 | 0.92 |
|                       | J53  | 0.727 |      |
|                       | J54  | 0.748 |      |
|                       | J55  | 0.899 |      |
|                       | J57  | 0.752 |      |
|                       | J59  | 0.77  |      |
|                       | SQ1  | 0.845 |      |
|                       | SQ2  | 0.795 | 0.94 |
| Service quality       | SQ3  | 0.484 |      |
|                       | SQ4  | 0.896 |      |
|                       | SQ5  | 0.89  |      |
|                       | SQ7  | 0.902 |      |
|                       | SQ8  | 0.839 |      |
|                       | SQ9  | 0.851 |      |
|                       | SQ10 | 0.795 |      |
|                       |      | 0.88  |      |
|                       |      |       |      |
|                       |      |       |      |

Note: SEF: Standardized coefficient; IR: Item reliability; CR: Composite reliability; AVE: Average variance extracted.  $p < 0.05$ .

in the assessment of convergent and discriminant validity, the average variance extracted (AVE) is used to estimate the average explained variance of measurement to scales; values above 0.5 signify a good convergent validity (Fornell & Larcker, 1981). In Table 3, AVE of each dimension exceeded 0.05 (range, 0.64–0.8).

### Structural model

To test the effects of mediation, the method of indirect effects test based on a bootstrap analysis (Preacher & Hayes, 2004) was employed. This method overcomes the limitations of the approach of Baron and Kenny (1986) traditionally used in the analysis of mediation, specifically the problem of statistical power (Edwards & Lambert, 2007) and the decrease in type I error (Preacher & Hayes, 2008).

The analyses are based on 2,000 replications generated by the bootstrap method with a confidence interval of 95%. These analyses were complemented by a Sobel test of indirect effects in case of normal distribution (Sobel, 1982). All of these analyses were conducted using AMOS v. 20 software.

Goodness-of-fit index (GFI) calculates the proportion of variance that is accounted for by the estimated population covariance (Tabachnick and Fidell, 2007, cited in Hooper et al., 2008); comparative fit index (CFI) considers sample size (Byrne, 1998); root mean square error of approximation (RMSEA) means fit the population covariance matrix (Byrne, 1998). The results in Table 4 indicate that models 1 and 2 fit the data well (e.g.,  $\chi^2/\text{d.f.} = 4.283$ ; GFI = 0.9; CFI = 0.87; RMSEA = 0.07 in model 1).

### Test of research hypotheses

All of the five hypotheses were supported. These results will be presented below.

H1 stated that WFC is positively associated with job stress. This hypothesis is supported. As predicted, Table 5 shows that WFC has a significant and positive effect on job stress ( $\beta = 0.626$ ,  $p = 0.001$ ), explaining 35% of the variance in job stress. When there is a higher level of work-family conflict, the level of job stress increases.

H2 stated that WLC is positively associated with job stress. This hypothesis is supported. Results demonstrated that WLC increases job stress because it has a significant and positive effect on job stress ( $\beta = 0.602$ ,  $p = 0.001$ ), explaining 35% of the variance in this variable. That is, when the level of work-leisure conflict is high, the level of job stress increases.

**Table 4.** Results of the confirmatory factor analysis.

| Index  | $\chi^2/\text{dl}$ | GFI  | RMSEA | NFI  | CFI  |
|--|--------------------|------|-------|------|------|
| Model 1 ( $R^2 = 0.62$ in WLC, $R^2 = 0.62$ in job stress)                             | 4.283              | 0.90 | 0.07  | 0.90 | 0.92 |
| Model 2 ( $R^2 = 0.35$ in job stress and $R^2 = 0.38$ in perceived quality of service) | 4.485              | 0.89 | 0.07  | 0.89 | 0.87 |

**Table 5.** Results of bootstrap: Model 1: WLC as mediator.

| Variable              | Standardized parameter estimates |                       |                     |        |                 |                   |          |      |
|-----------------------|----------------------------------|-----------------------|---------------------|--------|-----------------|-------------------|----------|------|
|                       | WLC                              |                       | Job stress          |        | Indirect effect | Type of mediation | Z-values | P    |
| $\beta$ direct effect | t-Values                         | $\beta$ direct effect | t-Values            |        |                 |                   |          |      |
| Age                   | -0.06*                           | -1.969                | -0.024              | -0.738 | —               | —                 |          |      |
| Gender                | 0.053 <sup>ns</sup>              | 1.755                 | 0.067*              | 2.101  | —               | —                 |          |      |
| Marital status        | 0.032 <sup>ns</sup>              | 1.064                 | 0.057 <sup>ns</sup> | 1.788  | —               | —                 |          |      |
| Hotel type            | -0.145***                        | -4.756                | 0.03 <sup>ns</sup>  | 0.897  | —               | —                 |          |      |
| Hotel category        | 0.038 <sup>ns</sup>              | 1.253                 | 0.075*              | 2.353  | —               | —                 |          |      |
| WFC                   | 0.77***                          | 16.21                 | 0.39***             | 6.017  | 0.232***        | Partial           | 4.376    | 0.00 |
| WLC                   | —                                | —                     | 0.301***            | 4.525  | —               | —                 |          |      |

Note. N = 648 (standardized coefficients are reported). Gender was coded as a binary variable (0 = male and 1 = female). Marital status was coded as a binary variable (0 = single or divorced and 1 = married). Hotel type was also coded as a binary variable (0 = chain hotel and 1 = independently/family-owned and -operated hotel) and hotel category was coded as (0 = one, two, and three stars; 1 = four stars and 2 = five stars).

\* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ .

H3 stated that WLC has a mediating effect on the relationship between WFC and job stress. This hypothesis is supported. The results of the bootstrap presented in Table 5 show that the indirect effect of WFC, through WLC, on job stress ( $\beta = 0.232, p = 0.001$ ) is significant. The Sobel test reaffirms this finding ( $z = 4.376, p = 0.001$ ). As shown in Table 5, the impact of WFC on stress after introducing WLC is still significant ( $\beta = 0.39, p = 0.001$ ). The results indicate that WFC explained large portions of the variance in WLC ( $R^2 = 0.62$ ) and in job stress ( $R^2 = 0.44$ ). Collectively, these results indicate that WLC partially mediates the impact of WFC on job stress. In other words, when the level of work-family conflict is high, the level of work-leisure conflict increases and this will in turn increase the level of job stress. WLC will thus transmit the effect of WFC on job stress.

H4 stated that job stress is associated negatively on perceived quality of service. This hypothesis is supported. The findings show that job stress is significantly and negatively related to perceived quality of service ( $\beta = -0.2, p = 0.001$ ). When the level of job stress is high, the level of quality of service decreases. In other words, more stress leads to less quality.

H5 stated that job stress has a mediating effect on the relationship between WFC and perceived service quality. This hypothesis is supported. The bootstrap analysis shown in Table 6 reveals that the indirect effect of WFC on perceived quality of service, through job stress, is significant ( $\beta = -0.118, p = 0.01$ ), explaining 7% of the variance in perceived quality of service. In addition, the Sobel test indicates the same result ( $z = -3.167, p = 0.001$ ). This result signifies that when the level of work-family conflict is high, the level of job stress increases causing a decrease in the level of quality of service. In other words, the job stress will transmit the effect of WFC on quality of service.

H6 stated that job stress has a mediating effect on the relationship between WLC and perceived service quality. This hypothesis is supported. Results of the indirect effect demonstrated that WLC has an indirect effect on perceived

**Table 6.** Results of bootstrap: Model 2 job stress as mediator.

| Variable       | Standardized parameter estimates |          |                              |          |                       |                   | Test of Sobel |      |
|----------------|----------------------------------|----------|------------------------------|----------|-----------------------|-------------------|---------------|------|
|                | Job stress                       |          | Perceived quality of service |          | Indirect effect       | Type of mediation | Z-Values      | P    |
|                | $\beta$ direct effect            | t-Values | $\beta$ direct effect        | t-Values |                       |                   |               |      |
| Age            | -0.042                           | -1.283   | 0.063 <sup>ns</sup>          | -1.57    | —                     | —                 |               |      |
| Gender         | 0.083 <sup>**</sup>              | 2.544    | -0.075 <sup>*</sup>          | -1.838   | —                     | —                 |               |      |
| Marital status | 0.068 <sup>*</sup>               | 2.102    | 0.038 <sup>ns</sup>          | 0.952    | —                     | —                 |               |      |
| Hotel type     | -0.015 <sup>ns</sup>             | -0.449   | 0.037 <sup>ns</sup>          | 0.93     | —                     | —                 |               |      |
| Hotel category | 0.084 <sup>**</sup>              | 2.564    | 0.011 <sup>ns</sup>          | 0.263    | —                     | —                 |               |      |
| WFC            | 0.626 <sup>***</sup>             | 14.282   | -0.032 <sup>ns</sup>         | -0.578   | -0.118 <sup>**</sup>  | Complete          | -3.167        | 0.00 |
| WLC            | 0.602 <sup>***</sup>             | 13.33    | -0.05 <sup>ns</sup>          | -0.876   | -0.144 <sup>***</sup> | Complete          | -3.748        | 0.00 |
| Job Stress     | —                                | —        | -0.26 <sup>***</sup>         | -3.4     | —                     | —                 |               |      |

Note.  $N = 48$  (standardized coefficients are reported).

\* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ .

quality of service with job stress as a mediator ( $\beta = -0.144$ ,  $p = 0.001$ ) and the Sobel test supports this finding ( $z = -3.748$ ,  $p = 0.001$ ). This result means that when the level of work-leisure conflict is high, the level of job stress increases, which in turn will diminish the level of quality of service decreases. Thus, the job stress will transmit the effect of WFC on quality of service.

## Discussion

The results of this study show that WFC and WLC could influence frontline workers' job stress. These results are consistent with the first objective of this research, which stated that these two types of conflict influence stress. This finding supports the assumption of the theory of roles (Kahn & Byosiere, 1992), indicating that WFC should have an effect on job stress. Additionally, the relationship between inter-role conflict and job stress is consistent with the theory of conservation of resources (Hobfoll, 2002). Faced with high demands of work, staff in the hospitality industry lose valuable resources (time, physical and mental energy) and become unable to meet their professional and family roles or leisure life, resulting in a work-family conflict and/or work-leisure conflict. These conflicts create a potential loss of resources (including family stability and leisure life), which develops stress.

These results are consistent with the theory of scarcity of resources and the principle of "spiral of loss of resources" of Hobfoll (1998). This result also corresponds to Namasivayam and Zhao (2007) and Yavas et al. (2008) highlighting that WFC leads to more stress at work. They converge with the investigation by Karatepe et al. (2010), showing a positive relationship between WFC and burnout for frontline staff.

As to the link between WLC and job stress, it is consistent with the finding of Lin et al. (2014) indicating that the work-leisure conflict is associated with a higher level of burnout and, hence, low well-being at work. Also, this research finds that work-leisure conflict partially mediates the impact of WFC

on job stress. This result is also in line with the theory of conservation of resources and the principle of “spiral of loss of resources” of Hobfoll (1989, 1998, 2011, 2012). This finding is interesting. This loss of family resources may produce a future loss; leisure resources are an essential factor to increase well-being at work and away from work. In other words, the WLC transmits the effects of WFC on stress and plays a mediating role. This result responds to the second objective of this study.

Another interesting result of this study is the relationship between job stress and service quality, which was a third objective of this investigation. The results indicate that job stress has a negative influence on the quality of service in the hospitality industry. The more employees are stressed, the more their performance will be reduced in dealing with customer complaints and in offering high quality of service. This result is in conformity with Varca (1999) who showed that stress can decrease the quality of service. Similarly, the findings of Rod and Ashill (2009) in a call center show that burnout and more specifically emotional exhaustion and depersonalization negatively affect service recovery and the treatment of customer dissatisfaction. Chan and Wan (2012) indicated that the quality of service for staff having high levels of stress was lower than for less stressed staff. In the same vein, Kim et al. (2012) have revealed a negative relationship between emotional exhaustion and service recovery. Recently, Hon (2013) demonstrated a significant link between stress and service performance. The results of Williams (2000) indicate, however, that stress has little influence on customers’ satisfaction with the services.

Finally, this study indicates that WFC and WLC have negative effects on service quality through job stress. This was the fourth objective of this research. This finding is consistent with the conclusion of Rod and Ashill (2009), indicating that depersonalization mediates the relationship between the demands of work and service recovery. In the same vein, the results of Lang et al. (2007) show that psychological stress (psychological strain) mediates the relationship between job demands and performance. It also confirms those of Netemeyer et al. (2005) showing that job stress is a mediator of the effects of WFC and WLC as work stressors on performance. The theory of Hobfoll (1998) allows to explain this finding. Faced with a loss of resources because of the WFC and WLC, which result in stress at work, employees adopt defensive strategies to protect their resources and to not fall into situations of malaise at work. These strategies include disengagement, which leads to reduced performance at work, including the perceived quality of service.

## **Conclusions and implications**

The findings of the current study have important implications for theorists and practitioners as it has examined the antecedents and underlying mechanisms that lead to increased job stress and decreased perception of the quality of service. The results can be useful for many reasons. First, the results of this study reveal that WFC and WLC produce stress among front line employees in the hotel industry.



Indeed, staff in contact with customers has a crucial role to play in providing exceptional service and that is a significant competitive advantage in the hospitality industry. Therefore, it seems appropriate to focus on the effects of working conditions, and more specifically the effects of WFC and WLC on job stress and, in turn, on perceived quality of service. Indeed, despite the potential effect of leisure on individual well-being, it is a neglected area of studies on stress at work and more specifically in the hotel industry. This research has filled this gap. Additionally, this study is the first to investigate the effects of WFC and WLC on the quality of service via stress. This can increase knowledge in this field by supporting the theory of conservation of resources of Hobfoll (1989, 1998) and its principles, such as the loss of resources.

The findings of this study can also be helpful for practitioners. To alleviate the WFC and WLC, as job stressors, human resource managers or hotel managers must attempt to implement measures facilitating the reconciliation between work and personal life. More specifically, family friendly practices (child care in the workplace, holidays for personal or family reasons, flexible hours, and voluntary part-time) could reduce the WFC and the resulting stress. Employees spend a lot of time at work in the hospitality industry; thus, they need to have more time to fulfill their private obligations. For example, sharing information between managers and employees about how to reallocate their work-related problem-solving behaviors in their home (Karatepe & Kilic, 2015) can be useful to help workers to manage work and family life. Similarly, human resource departments can establish leisure options such as “extended vacation time, compensatory time-off, and subsidized recreation” (Lin et al., 2013, p. 185) to offer an appropriate life-family balance, to promote work-leisure balance, and to help employees mitigate work-family-leisure conflict, which can decrease job stress (Lin et al., 2014), and improve quality of service provided by employees in the hospitality and tourism industry.

To decrease WLC, many hotels already have leisure facilities and could make them available to their employees when there are less client's present, especially during low season. Also, developing and implementing practices such as a reduction in working time could give workers more time for leisure activities and/or family life. Furthermore, while the technological developments make it possible to communicate more easily with other people (friends, family, etc.), “virtual workplaces” (Taneja, 2013, p. 119) could be another interesting measure to facilitate the balance between work and leisure life. These different practices could be installed in hotel chains, which have normally enough money, but what about smaller independent hotels with lower budgets for these measures? Managers in these hotels should be more supportive to the questions of work and family or private life. For example, meeting not only with married employees with or without children who suffer from WFC and stress, but even with single, childless, and widowed employees who often have family and social commitments to their parents, siblings, or relatives who may even have greater responsibilities placed on them, could help to understand their difficulties and allow them to feel that management supports

them and cares about their well-being. Managers can also give more autonomy to employees who have urgent requests (go pick up a child at daycare, illness of a child) to reorganize their working hours and private life.

Likewise, employers could give more freedom, flextime, or part-time to all employees to choose the period of leave or vacation that best suits their needs. This would allow parents to spend the holidays with their children or at least take care of them during that period if they do not have money to send them to daycare elsewhere. This could also permit employees who need care for the elderly or their spouse, or even siblings or relatives, and who do not have children, to accomplish responsibilities for their own aging, elderly parents or relatives. This could be effective, especially for firms that do not have budgets to invest in childcare in the workplace. These practices can be considered as a resource to help employees to gain more resources and to reallocate more time and more energy to fulfill their family obligations and allow employees to perceive less conflict between work and private life, and benefit from a better well-being at work. These practices can be useful even if employees do not have responsibilities for their elderly parents, children, or relatives because “although some of these programs may not be applicable to all employees, if a variety of programs are made available, an employee will hopefully take advantage of them if and when needed” (Fiksenbaum, 2014, p. 667).

While these policies may be seen to be expensive, the consequences of WFC and/or WLC, including burnout and poor quality of service, are all the more expensive for the individual and the organization. For example, depersonalized employees are likely to treat customers as if they were impersonal objects and not to really care what happens to them. Indeed, following the results of this study, it appears that degradation of the quality perceived by employees can cause a loss of meaning at work and contribute to their disengagement and social dysfunction, which contribute to customer dissatisfaction and loss of work performance, including perceived quality of service. Hotel managers need to realize that employee satisfaction is critical to customer satisfaction. It is therefore essential that hotel managers treat their employees as internal customers by providing a supportive work environment with social support, rewards, and advancement. In addition, providing family-friendly measures allow an organization to be competitive for attracting and retaining engaged and productive employees (Fiksenbaum, 2014).

This research is not without limits, and these constitute possible avenues of research. The evaluation of the quality of service perceived by customers and managers could enrich the results. In the same vein, a multidimensional view of the quality of service could enable us to refine the managerial recommendations. Similarly, the quantitative methods used in this study may not have revealed the views of employees on some subjects. Future studies could realize in-depth interviews to close this gap. Future research should test the model of research in other business sectors for external validation. Additionally, to confirm cross validation of scales, future research is recommended to verify the validity and reliability by two-phase

sampling, the first being exploratory factor analysis in a small sample, and the next proceeding in a large sample with confirmatory factor analysis.

Finally, the sample is not representative of all the hotel industry even if the questionnaire was administered throughout France, and for all types of hotels, including luxury, chain, and independent hotels. However, the majority of responses are from 4- and 5-star hotels although the sample was random. This is a limit of the data collection method, which was done through LinkedIn and Viadéo. Apparently, very few people working in 2- or 3-star hotels are on these networks contrarily to people working in 4- and 5-star hotels, which are very numerous. We need to conclude that it would have been desirable to have more questionnaires from 2- and 3-star hotels. Likewise, only employees working in hotel restaurants were contacted, but the industry also includes independent restaurants. It would be interesting to investigate this segment in future research. Also if one wishes to obtain information on the whole sector, this would require sending the survey to hotel managers. In this research, the focus was only on personnel, which is in contact with customers. It could be interesting to investigate managers and to compare them with other categories since their working conditions are very different.

## Notes

1. WFC: work family conflict; WLC: work leisure conflict.
2. Items deleted: WLC5 = I have never been in a suitable frame of mind to participate in leisure activities because of my job; JS6 = I feel full of energy and keen; JS8 = I have difficulty controlling my reactions, emotions, moods, or gestures; SQ6 = I am able to answer customer questions.

## References

- Al Roussan, R. M. R. (2011). Hotel service quality and customer loyalty in Jordanian hotels: A case study of Marriott hotels chain. University Saiance Malaysia, Penang, Malaysia.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Arbuckle, J. L. (2011). *IBM SPSS Amos 20 user's guide*. Crawfordville, FL: Amos Development Corporation; Chicago, IL: SPSS Inc.
- Babakus, E., Yavas, U., Karatepe, O., & Avci, T. (2003). The effect of management commitment to service quality on employees' affective and performance outcomes. *Journal of the Academy of Marketing Science*, 31, 272–286.
- Babin, B., & Boles, J. (1998). Employee behavior in a service environment: A model and test of potential differences between men and women. *Journal of Marketing*, 62, 77–91.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Boon-itt, S., & Rompho, N. (2012). Measuring service quality dimensions: An empirical analysis of thai hotel industry. *International Journal of Business Administration*, 3, 52–63.
- Boshoff, C., & Tait, M. (1996). Quality perceptions in the financial services sector: The potential impact of internal marketing. *International Journal of Service Industry Management*, 17, 5–31.

- Byrne, B. M. (1998). *Structural equation modeling with LISREL, PRELIS and SIMPLIS: Basic concepts, applications and programming*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Carlson, D. S., Kacmar, M. K., & Williams, L. J. (2000). Construction and validation of a multi-dimensional measure of work–family conflict. *Journal of Vocational Behavior*, 56, 249–276.
- Chan, K. W., & Wan, E. W. (2012). How can stressed employees deliver better customer service? The underlying self-regulation depletion mechanism. *Journal of Marketing*, 76, 119–137.
- Chen, W. J. (2013). Factors influencing internal service quality at international tourist hotels. *International Journal of Hospitality Management*, 35, 152–160.
- Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55–68.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12, 1–22.
- Eiglier, P., & Langeard, E. (1987). *SERVUCTION—Le marketing des services, Stratégie et Management*. Paris: McGraw-Hill.
- Farivar, F., Khanbashi, M., & Esmaeelinezhad, O. (2011). The analysis of different customers and employees' perceptions from service quality in the insurance industry of Iran. *International Journal of Business and Management*, 6(12), 103–108.
- Faulkner, B., & Patiar, A. (1997). Workplace induced stress among operational staff in the hotel industry. *International Journal Hospitality Management*, 16, 99–117.
- Fiksenbaum, L. M. (2014). Supportive work–family environments: implications for work–family conflict and well-being. *The International Journal of Human Resource Management*, 25(5), 653–672.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18, 39–50.
- French, J. R., Caplan, R. D., & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. London, UK: Wiley.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77, 65–78.
- Frost, F. A., & Kumar, M. (2000). INTSERVQUAL: An internal adaptation of the GAP model in a large service organization. *Journal of Service Marketing*, 14, 358–377.
- Galloway, L. (1998). Quality perceptions of internal and external customers: A case study in educational administration. *TQM Magazine*, 10(1), 20–26.
- Getty, J. M., & Getty, R. L. (2003). Lodging quality index (LQI): Assessing customers' perceptions of quality deliver. *International Journal of Contemporary Hospitality Management*, 15, 94–104.
- Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work–family conflict and strain. *Journal of Vocational Behavior*, 54(2), 350–370.
- Grandey, A. A., Dickter, D. N., & Sin, H. P. (2004). The customer is not always right: Customer aggression and emotion regulation of service employees. *Journal of Organizational Behavior*, 25, 397–418[AU]:Please cite [Grandey et al., 2004] in text or delete reference..
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family. *Academy of Management Review*, 10, 76–88.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18, 36–44.
- Hartline, M. D., & Ferrell, O. C. (1996). The management of customer-contact service employees: An empirical investigation. *Journal of Marketing*, 60, 52–70.
- Hayes, D. K., Ninemeier, J. D., & Miller, A. A. (2011). *Foundations of lodging management*. Upper Saddle River, NJ: Pearson Education, Inc.

- Haynes, P., & Fryer, G. (2000). Human resources, service quality and performance: A case study. *International Journal of Contemporary Hospitality Management*, 12, 240–248.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524.
- Hobfoll, S. E. (1998). *Stress, culture, and community*. New York, NY: Plenum Press, USA.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337–421.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6, 307–324.
- Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84, 116–122.
- Hobfoll, S. E. (2012). Conservation of resources and disaster in cultural context: The caravans and passageways for resources. *Psychiatry: Interpersonal and Biological Processes*, 75, 227–232.
- Hobfoll, S. E. (2014). *Stress, social support, and women* (p. 225). Florence, KY: Taylor & Francis.
- Hon, A. (2013). Does job creativity requirement improve service performance? A multilevel analysis of work stress and service environment. *International Journal of Hospitality Management*, 35, 161–170.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Hoque, K. (1999). Human resource management and performance in the UK hotel industry. *British Journal of Industrial Relations*, 37(3), 419–443.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8 user's reference guide*. Uppsala, Sweden: Scientific Software International.
- Kahn, R. L., & Byosiene, P. B. (1992). Stress in organizations. In M. D. Dunnette & L. M. Hugh (Eds.), *Handbook of industrial and organizational psychology* (pp. 571–650). Palo Alto, CA: Consulting Psychologists Press.
- Karasek, R. A. (1979). Job demands, job latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285–308.
- Karatepe, O. M. (2008). Work-family conflict and facilitation: Implications for hospitality researchers. *Handbook of hospitality human resources management* (pp. 237–264). Oxford: Butterworth, Heinemann, Elsevier.
- Karatepe, O. M., & Aleshinloye, K. D. (2009). Emotional dissonance and emotional exhaustion among hotel employees in Nigeria. *International Journal of Hospitality Management*, 28, 349–358.
- Karatepe, O. M., & Kilic, H. (2015). Does manager support reduce the effect of work-family conflict on emotional exhaustion and turnover intentions? *Journal of Human Resources in Hospitality & Tourism*, 14(3), 267–289.
- Karatepe, O. M., Sokmen, A., Yavas, U., & Babakus, E. (2010). Work-family conflict and burnout in frontline service jobs: Direct, mediating and moderating effects. *E & M Ekonomie & Management*, 13, 61–72.
- Kim, H. J., Shin, K. H., & Umbreit, W. T. (2007). Hotel job burnout: The role of personality characteristics. *International Journal of Hospitality Management*, 26, 421–434.
- Kim, T. T., Paek, S., Choi, C. H., & Lee, G. (2012). Frontline service employees' customer-related social stressors, emotional exhaustion, and service recovery performance: Customer orientation as a moderator. *Service Business*, 6, 503–526.
- Lang, J., Thomas, J. L., Bliese, P. D., & Adler, A. B. (2007). Job demands and job performance: The mediating effect of psychological and physical strain and the moderating effect of role clarity. *Journal of Occupational Health Psychology*, 12, 116–124.

- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.
- Lemyre, L., & Tessier, R. (2003). La mesure de stress psychologique en recherche de première ligne: Concept, modèle et mesure. *Canadian Family Physician—Le Médecin de Famille Canadien*, 49, 1166–1168.
- Lin, J. H., Wong, J. Y., & Ho, C. H. (2013). Promoting frontline employees' quality of life: Leisure benefit systems and work-to-leisure conflicts. *Tourism Management*, 36, 178–187.
- Lin, Y. S., Huang, W. S., Yang, C. Z., & Chiang, M. J. (2014). Work-leisure conflict and its associations with well-being: The roles of social support, leisure participation and job burnout. *Tourism Management*, 45, 244–252.
- Malhotra, N., Mavondo, F., Mukherjee, A., & Hooley, G. (2012). Service quality of frontline employees: A profile deviation analysis. *Journal of Business Research*, 66, 1338–1344.
- Mansour, S. (2012). L'influence des conditions de travail sur le stress professionnel du personnel en contact avec la clientèle: Le cas du secteur hôtelier en Syrie, XXIIIème Congrès de l'AGRH. Nancy, France: Association Francophone de la Gestion des Ressources Humaines.
- Molpus, D. (2003, January 6). Customers frustrated with customer service. National Public Radio, Morning Edition).
- Namasivayam, K., & Zhao, X. (2007). An investigation of the moderating effects of organizational commitment on the relationship between work-family conflict and job satisfaction among hospitality employees in India. *Tourism Management*, 28, 1212–1223.
- Netemeyer, R. G., James, G. M., & Chris, P. (2005). Conflicts in the work-family interface: Links to job stress, customer service employee performance, and customer purchase intent. *Journal of Marketing*, 69, 130–143.
- Netemeyer, R. G., McMurrian, R., & Boles, J. S. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81, 400–410.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67, 420–450.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implication. *Journal of Marketing*, 49, 41–50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 61, 12–40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *Journal of Marketing*, 58, 111–124.
- Parent-Thirion, A., Fernández Macías, E., Hurley, J., & Vermeylen, G. E. (2007). *Fourth European working conditions survey*. Dublin, Ireland: Publications Office of the European Union.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717–731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Rod, M., & Ashill, N. (2009). Symptoms of burnout and service recovery performance: The influence of job resourcefulness. *Managing Service Quality*, 19, 60–84.
- Ross, J. (1993). *Total quality management: Text, cases and readings*. Delray Beach, FL: St. Lucie Press.
- Sabadie, W. (2003). Conceptualisation et mesure de la qualité perçue d'un service public. *Recherche et Applications en Marketing*, 18(1), 1–24.



- Sarangarajan, V., & Tamilenth, S. (2012). A study on quality on service management in hotel industry by an application of structural equation modeling. *International Journal of Current Research*, 4, 98–101.
- Sheng-Hshiang, T., Ying-Wen, L., & Huei-Ju, H. (2012). A multidimensional measurement of work-leisure conflict. *Leisure Sciences*, 34, 395–416.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1, 27–41.
- Silvestro, R., Johnston, R., Fitzgerald, L., & Voss, C. (1990). Quality measurement in service industries. *International Journal of Service Industry Management*, 1(2), 54–66.
- Singh, J. (2000). Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing*, 64, 15–34.
- Sirieux, L., & Dubois, P. L. (1999). Vers un modèle qualité-satisfaction intégrant la confiance?. *Recherche et Applications en Marketing*, 14(3), 1–22.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation model's. *Sociological Methodology*, 13, 290–313.
- St-Onge, S., Renaud, S., Guérin, G., & Caussignac, E. (2002). Vérification d'un modèle structurel à l'égard du conflit travail-famille. *Relations Industrielles*, 57, 491–516.
- Taneja, S. (2013). Sustaining work schedules: Balancing work and leisure. *Academy of Strategic Management Journal*, 12(2), 113–122.
- Varca, P. H. E. (1999). Work stress and customer service delivery. *The Journal of Services Marketing*, 13, 229–241.
- Varey, R. J. (1995). Internal marketing: A review and some interdisciplinary research challenges. *International Journal of Service Industry Management*, 6(1), 40–63.
- Vella, P. J., Gountas, J., & Walker, R. (2009). Employee perspectives of service quality in the supermarket sector. *Journal of Services Marketing*, 23, 407–421.
- Wildes, V. J. (2007). Attracting and retaining food servers: How internal service quality moderates occupational stigma. *International Journal of Hospitality Management*, 26, 4–19.
- Wilkins, H., Merrilees, B., & Herington, C. (2007). Towards an understanding of total service quality in hotels. *International Journal of Hospitality Management*, 26, 840–853.
- Williams, K. L. (2000). The relationship between shared employee perceptions, attitudes and quality outcomes and customer satisfaction. *Dissertation Abstracts International, Section B: The Sciences and Engineering*, 61, 3314.
- Wong, J. Y., & Lin, J. H. (2007). The role of job control and job support in adjusting service employee's work-to-leisure conflict. *Tourism Management*, 28, 726–735.
- Yavas, U., Babakus, E., & Karatepe, O. M. (2008). Attitudinal and behavioral consequences of work-family conflict and family-work conflict: Does gender matter?. *International Journal of Service Industry Management*, 19, 7–31.
- Zohar, D. (1994). Analysis of job stress profile in the hotel industry. *International Journal of Hospitality Management*, 13, 219–231.
- Zubrick, S. R., Silburn, P. B., Burton, P., & Blair, E. (2000). Mental health disorders in children and young people: Scope, cause and prevention. *Australian and New Zealand Journal of Psychiatry*, 34, 570–578.