Contents lists available at ScienceDirect



### International Journal of Hospitality Management

journal homepage: www.elsevier.com/locate/ijhm

## Hosnitality Managemen Managemen

# Hotel employee job crafting, burnout, and satisfaction: The moderating role of perceived organizational support



Jui-Chang Cheng<sup>a</sup>, Yi O-Yang<sup>b,\*</sup>

<sup>a</sup> Department of Leisure and Recreation Management, National Taichung University of Science and Technology, No. 129, Sanmin Road, Sec. 3, Taichung 404, Taiwan, ROC

<sup>b</sup> Department of Industrial Education and Technology, National Changhua University of Education, No.2, Shi-Da Road, Changhua 500, Taiwan, ROC

#### ARTICLE INFO

Keywords: Job crafting Job burnout Job satisfaction Perceived organizational support Hotels

#### ABSTRACT

Given the pivotal role of job crafting in the hospitality industry, this study investigates the relationship of job crafting to job satisfaction and the mediating effect of job burnout along with the moderating effect of perceived organizational support. Survey data from 355 frontline hotel employees in Taiwan show job crafting is positively related to job satisfaction, while job burnout negatively mediates the relationship between job crafting and job satisfaction. Furthermore, perceived organizational support moderates the relationships among job crafting, burnout, and satisfaction. These findings suggest courses of action for human resource managers as well as future research directions.

#### 1. Introduction

Consumers' point of contact with the hotel industry is most often the moments of truth during service interactions with frontline employees (Ustrov et al., 2016). This makes these employees especially important, but their jobs are not easy. According to Kim (2008), service employees frequently encounter demanding and difficult customers. Frontline hotel positions involve excessive workloads and role stress, often resulting in employee burnout (Karatepe et al., 2012; Min et al., 2015). Job burnout is defined as "a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform" (Maslach et al., 1996p.20). Chalkiti and Sigala (2010) showed that job burnout can occur in all types of jobs, including frontline service in the hospitality industry, which threatens job satisfaction (Lee and Ok, 2012). Job satisfaction refers to "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976p.1300). Yang (2010) found that greater job satisfaction substantially reduces employee absenteeism and is an important factor in alleviating employee turnover. Therefore, decreasing job burnout and enhancing job satisfaction are crucial for the hospitality industry.

Recently, many scholars have sought to solve the problems of employee burnout from the perspective of job design (Despoina et al., 2007; Oreyzi and Ahmadi, 2014), and put forward the concept of job crafting (Schaufeli et al., 2009; Tims et al., 2013). Job crafting refers to "the physical and cognitive changes individuals make in the task or relational boundaries of their work" (Wrzesniewski and Dutton, 2001p.179). Based on the job demands-resources (JD-R) model, Tims et al. (2013) found that job crafting, by employees, led to increased job resources. Job resources refer to the physical, psychological, social, or organizational aspects of the job (Demerouti et al., 2001). Over time, more job resources improve job satisfaction and decrease burnout. Numerous studies report employees have higher job engagement and lower burnout when they are able to craft their own job demands and resources (Bakker and Costa, 2014; Bakker et al., 2016). Additionally, Slemp and Vella-Brodrick (2014) have shown job crafting is an approach employees use to satisfy their needs at work, enabling them to shape their work experience and increase job satisfaction. Because job crafting is so helpful for frontline employees, managers should focus on encouraging job crafting behaviors in the hospitality industry (Chen et al., 2014).

Job crafting behavior can decrease burnout, since burnout comes from psychological strain, as the JD-R model shows (Tims et al., 2012). Such burnout and strain negatively impact job satisfaction (Lee and Ok, 2012; Lewin and Sager, 2007). Employee engagement in job crafting behaviors is negatively associated with job burnout, which in turn is negatively associated with job satisfaction. Therefore, job burnout may be mediated by a relationship between job crafting and job satisfaction.

Hur et al. (2013) found that perceived organizational support (POS) plays a contingent role in determining employees' attitudes and behaviors. The extent to which employees' feel an organization values their work contributions, while also caring about their well-being, is the

https://doi.org/10.1016/j.ijhm.2018.01.005

Received 21 October 2016; Received in revised form 3 November 2017; Accepted 3 January 2018 Available online 03 February 2018

0278-4319/ $\ensuremath{\textcircled{}}$  2018 Elsevier Ltd. All rights reserved.

<sup>\*</sup> Corresponding author. E-mail addresses: jccheng@nutc.edu.tw (J.-C. Cheng), oyangyi0722@nutc.edu.tw (Y. O-Yang).

foundation of POS (Eisenberger et al., 1986). Han et al. (2016) found that organizational support moderates the relationship between customer incivility and employee burnout. Stamper and Johlke (2003) demonstrated that POS has a moderating effect on the relationship between boundary spanner role stressors and job satisfaction. These relationships weaken as employee perceives improved organizational support. Therefore, POS may moderate the relationships among job crafting, burnout, and job satisfaction.

In view of the literature, this study examined the relationships among job crafting, burnout, and job satisfaction. We explored the mediating role of burnout in the relationship between job crafting and job satisfaction, while also examining whether POS moderates these relationships. The results suggest strategic directions for hotel managers in human resource management and organizational behaviors.

#### 2. Literature review and research hypotheses

#### 2.1. Job crafting

Job crafting describes changes employees make in their work, including tasks, relationships, and cognitions (Wrzesniewski and Dutton, 2001). Redefining and redesigning their work makes the job more meaningful to employees (Berg et al., 2013; Tims et al., 2016). According to Leana et al. (2009), job crafting takes two forms: individual crafting and collaborative crafting. Individual crafting occurs when an employee plays an active role in altering the boundaries of his/her task while shaping the actual way of working. Collaborative crafting refers to employees who work together to determine how to change the task boundaries in order to fulfill shared work goals. Based on the JD-R model, Berg and Dutton (2008) reported that job crafting focuses on shaping a job in line with the individual's preferences, skills, and abilities. The JD-R model describes how employee well-being is based on numerous workplace characteristics, including job demands (physical, social, or organizational, requiring sustained physical or psychological effort) or job resources (characteristics of the job that reduce job demands and help with achieving work goals and/or encourage personal growth, learning, and development) (Bakker and Demerouti, 2007). Four types of job crafting behaviors include: increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering job demands (Tims et al., 2012). Job crafting encompasses proactive employee behaviors that include actions preceding of a specific situations. Such crafting also includes concurrent efforts to control or influence a situation as it unfolds (Parker and Collins, 2010). Through job crafting employees change the tasks and relational boundaries of their jobs, which makes them more engaged in their jobs (Chen et al., 2014). Thus, job crafting behaviors are crucial in determining job-related employee outcomes.

#### 2.2. Job satisfaction

Job design's impact on job satisfaction is a traditional organizational behavior topic that has received much attention (Parker et al., 2001). Job satisfaction is determined by feelings toward the job (Spector, 1997). These feelings encourage positive and pleasurable emotional states when positive job values are promoted (Locke, 1976). Wider positive attitudes toward the profession improve job satisfaction (Organ, 1990). This profession level attitude increases individual productivity, ensures physical and mental health, and improves morale—all of which contribute to life satisfaction and the quicker learning of new job skills (Moghimi, 2006). Employees with a sense of achievement exhibit a favorable attitude toward the workplace, leading to better commitment to the organization (Bufquin et al., 2017). Ultimately, such employees have a lower intention to quit (Kim et al., 2015; Tongchaiprasit and Ariyabuddhiphongs, 2016).

#### 2.3. Job crafting and job satisfaction

Job crafting alters the meaning of work by changing its tasks and relationships in such a way that employees can reframe the purpose of the job in a wider context (Wrzesniewski and Dutton, 2001). Based on the JD-R model, the motivational process assumes that resources have a motivational potential. Employees in possession of resources will mobilize those resources to gain even more resources. This leveraging, when taken advantage of, results in the employee experiencing better well-being (Bakker and Demerouti, 2007). The JD-R model was used by Janssen et al. (2004) to investigate relationships between job resources and job satisfaction. In their study, job control was included as a measure for job resources. Job control includes the skill and creativity required to do one's job, and includes organizationally mediated opportunities to make decisions about the job (Karasek et al., 1998). Job control and job crafting overlap, given that both represent aspects of employee autonomy at work. The level of perceived control at the job is likely to differentiate job experiences and the personal understanding of job meaning and work relationships. Active employees shape their workplace and, as a result, experience enhanced feelings of well-being due to increased control over the environment and future outcomes. Job crafting enables individuals to gain resources from coworkers, resulting in greater feelings of well-being (Bakker and Demerouti, 2007; Slemp et al., 2015). Such employees tend to change their jobs in order to increase their available resources, thereby increasing their level of job satisfaction (Tims et al., 2013).

Although the association between job crafting and job satisfaction has been examined among manufacturing firms (Tims et al., 2013), scant attention has been paid to the service sector. Service experience includes results of interactions among organizations' processes, service employees, and customers (Bitner et al., 1997). Service employees play a crucial role in creating a delightful service experience for customers. Hospitality employee work is often characterized by considerable levels of human interaction. The hospitality industry requires service employees to deliver superior service that is customized to satisfy various customers' needs. To our knowledge, no studies have previously investigated how job crafting influences employee job satisfaction within the field of hospitality research. Thus, differences in context may influence this relationship in important ways, a topic not currently well understood, warranting further investigation within the domain of JD-R theory (Bakker and Demerouti, 2016). Based on this research thread, we propose the first hypothesis:

H1. Job crafting is positively related to job satisfaction

#### 2.4. Mediating role of job burnout

Job burnout has been dubbed the twenty-first century's greatest occupational hazard (Leiter and Maslach, 2005). Previous studies reported service workers tend to exhibit higher levels of job burnout (Lu and Gursoy, 2016). Job burnout includes serious psychological and/or physical issues that result from long periods of stress and/or frustration at work (Maslach et al., 1996). The maslach burnout inventory (MBI) categorizes burnout into three components: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach and Jackson, 1981). Emotional exhaustion implies being excessively burdened due to one's work. Depersonalization is the impersonal feeling or reaction toward service receivers. Diminished personal accomplishment refers to an individual's sense of ineptitude and lack of accomplishment (Maslach et al., 1996).

Based on the JD-R model, individuals who increase their job resources are more engaged in their job and show lower levels of burnout (Bakker and Demerouti, 2016). Tims et al. (2013) showed employee job crafting lowers burnout rates by the changes made in job demands and resources. Crafting a challenging job or minimizing job demands leads to increased feelings of well-being as measured by lower levels of burnout (Crawford et al., 2010). Furthermore, when employees increase their job resources, they are able to deliver superior job performance. People tend to seek out, obtain, retain, and protect what they value, according to conservation of resources (COR) theory (Hobfoll, 1989). Individuals who job craft increase their resources, preventing resource depletion, which leads to lower levels of burnout (Nielsen and Abildgaard, 2012; Petrou et al., 2015). Therefore, job crafting is negatively related to job burnout.

Studies have also documented that job burnout is a risk to job satisfaction (Lu and Gursoy, 2016). Job satisfaction has been shown to be negatively impacted by feelings of emotional depletion, cynicism, and a lack of efficacy in the workplace (Maslach and Jackson, 1981; Talachi and Gorji, 2013). Considering job burnout's link to decreasing job satisfaction (Lee and Ok, 2012), we can assume it plays a role in the relationship between job crafting and job satisfaction: if employee job crafting reduces job burnout, then job satisfaction will also be affected. Building upon COR theory, we propose that employees who job craft, in order to increase their resources and prevent resource depletion, will report lower levels of burnout while exhibiting higher levels of job satisfaction. Job burnout may be a mediating variable linking job crafting and job satisfaction. Therefore, we theorize the relationship between job crafting and job satisfaction is mediated by job burnout.

**H2.** Job burnout negatively mediates the relationship between job crafting and job satisfaction

#### 2.5. Moderating effect of perceived organizational support

According to organizational support theory, when an employer is perceived as valuing and supporting employees, employees believe their organization values and cares about their well-being (Eisenberger et al., 1986). Therefore, POS can act as a metric of an organization's benevolent intent (Lynch et al., 1999). Supervisory behaviors that are supportive and developmental, such as providing helpful feedback or being available to discuss particular challenges at the workplace, encourage employees to reshape their job boundaries (Leana et al., 2009). Following this logic, job crafting opportunities are greater if there is high POS. Furthermore, POS provides emotional support, positive selfesteem, approval, and affiliation (Lee and Peccei, 2007), all of which improve work engagement (Zacher and Winter, 2011). Applying the principle of reciprocity, employees with high POS feel an obligation to respond to the organization with positive job attitudes and helpful organizational behaviors (Rhoades and Eisenberger, 2002). Thus, high POS is negatively related to job burnout while positively related to job satisfaction (Riggle et al., 2009).

Previous studies have shown POS is important in moderating organizational relationships (Cheng et al., 2016; Han et al., 2016; Hur et al., 2013). Consistent with the COR theory (Hobfoll, 1989), POS is a valued resource that bolsters employee confidence in coping with role demands (Lazarus, 1991). Strong organizational support entails aiding employees not only socioemotionally but also by providing equipment, funding, technology, ideas, and physical assistance (Eisenberger et al., 1986). Thus, strong organizational support provides employees with resources, better enabling accomplishment of work goals (Hochwarter et al., 2006; Karatepe, 2015). Furthermore, high POS improves communication and cooperation among coworkers, often taking the form of mutual assistance (Erdogan et al., 2004; Rhoades and Eisenberger, 2002). As a result, coworkers engage in mutually beneficial actions. Without such resources, a low POS context, achieving high-quality performance expectations is difficult.

Employee perception of high POS complements a perception of increased access to various resources. Based on the COR theory, it is expected that relationships across job crafting, job burnout, and job satisfaction are stronger when higher levels of POS are present due to increased availability of resources. Therefore, POS may play a contingent role in the relationships among job crafting, job burnout, and job satisfaction. We hypothesize that the relationships among job crafting, job burnout, and job satisfaction are stronger for high POS than for low POS. Accordingly, we propose the following hypothesis:

**H3.** POS moderates the relationships among job crafting, job burnout, and job satisfaction

#### 3. Research methods

#### 3.1. Sampling

We collected data from employees at international hotels targeting the tourist market (four- or five-star equivalents) in Taiwan. Prior to the date of collection, we conducted a pilot test with a sample of 50 employees from an international tourist hotel to ensure that the questionnaire was clear, robust, and thorough. After the pilot test, the researchers modified some wording in the questionnaire. The main survey included 73 such hotels as listed by the Taiwan Tourism Bureau (2015). The researchers contacted 24 human resource managers from this list, requesting their assistance in this study. Questionnaires were given to a range of front (front desk and reservation) and back (housekeeping and food service) office full-time employees to ensure they were adequately represented in this study. Human resource managers returned the completed questionnaires, using an attached return envelope, directly to the researcher. Out of 400 distributed questionnaires, 355 usable responses were collected, representing a response rate of 89%.

#### 3.2. Measures

Each variable of interest was measured with a previously developed scale. Job crafting was measured using 12 items proposed by Leana et al. (2009), while individual crafting and collaborative crafting were each measured with six items. This scale exhibits good reliability and has been used to measure job crafting in the hospitality literature (Chen et al., 2014). Individual crafting was measured with items such as, "Introduce new approaches on your own to improve your work" and "Change minor work procedures that you think are not productive on your own." Collaborative crafting was measured with items such as, "Work together with your coworkers to introduce new approaches to improve your work" and "Decide together with your coworkers to change minor work procedures that you think are not productive."

Job satisfaction employed a five-item scale (Johlke and Duhan, 2000), including: "I feel that my job is valuable" and "In my job, I feel that I am doing something worthwhile." This scale was chosen because it is reliable and has been used in previous studies (Lee et al., 2015; Yen et al., 2013). We used the MBI (Maslach et al., 1996) to measure job burnout, which is composed of 22 items across three dimensions: emotional exhaustion (9 items), depersonalization (5 items), and reduced personal accomplishment (8 items). The MBI is the most commonly used measure of job burnout and has been validated by Prentice et al. (2013). Some items include: "I have become less enthusiastic about my work" and "I have become more cynical about whether my work contributes anything." POS was measured using an eight-item scale (Eisenberger et al., 1997) with items such as, "My organization really cares about my well-being" and "My organization cares about my opinions." This scale was selected because of its use in measuring POS constructs within the hospitality literature (Hemdi, 2009).

All constructs were measured using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." Questions relating to demographic data—such as gender, age, education, marital status, organizational tenure, and personal monthly income—were also included in questionnaire.

#### 4. Results

#### 4.1. Sample characteristics

The valid sample of 355 questionnaires revealed that 42.8% of the hotel employees were male (n = 152) and 57.2% were female (n = 203), and 59.7% (n = 212) were unmarried. Their ages ranged from 20 to 65 years (mean average: 35.4 years) and their work experience ranged from 1 to 35 years (mean: 8.8 years). Slightly less than half had completed a 4-year college degree (49.9%; n = 177) degree, and 31.8% (n = 113) were graduates of 2-year colleges.

#### 4.2. Psychometric properties of the measures

Construct validity was estimated with confirmatory factor analysis (CFA) (Gerbing and Anderson, 1988). Since the resulting chi-square fit statistic is sensitive to sample size, the current study relied on other indices in testing model validity (Hair et al., 2006). All factor loadings were significant (p < 0.001), with all measurement items loading on their expected factors. The results for adaptability were  $\chi^2 = 752.27$ , df = 36,  $\chi^2/df$  = 2.08, GFI = 0.87, AGFI = 0.85, RMSEA = 0.06, SRMR = 0.05, NNFI = 0.93, CFI = 0.94, and IFI = 0.94, which were above the model adaptability standard suggested by Hair et al. (2006), supporting the unidimensionality of the scales.

#### Table 1

Results of Confirmatory Factor Analysis.

Гal	ble	2	
<b>n</b> -			

Correlation	Analysis.

Dimension	Mean	SD	1	2	3	4
1.Job Crafting 2.Job Burnout 3.Job Satisfaction 4.Perceived Organizational Support	4.16 2.31 4.06 3.35	0.52 0.57 0.59 0.74	1 -0.29** 0.47** 0.24**	1 -0.55** -0.48**	1 0.38 <sup>***</sup>	1

\*\* p < 0.01.

Table 1 shows that the composite reliability score was high (0.87–0.92) compared with the Hair et al. (2006) standard of 0.6. This current research used accepted procedures in evaluating the scale's convergent validity. Each construct exhibited an average extracted variance (AVE) between 0.53 and 0.73. This result is higher than the standard 0.5 (Fornell and Larcker, 1981), supporting the convergent validity of the measures. Furthermore, the researchers measured discriminant validity by calculating the AVE for all pairs of constructs and comparing this value to the squared correlation between the two constructs of interest. Table 2 shows that the AVE values for each construct were all larger than the square of the respective construct's correlations with the other constructs (Fornell and Larcker, 1981), supporting discriminant validity.

Dimension	Factor loadings	Composite reliability	AVE
Job Crafting			
Individual Crafting		0.88	0.55
Introduce new approaches on your own to improve your work in the job.	0.75		
Change minor work procedures that you think are not productive on your own.	0.70		
On your own, change the way you do your job to make it easier to yourself.	0.77		
Rearrange equipment or furniture in the play areas of your classroom on your own.	0.77		
Organize special events in your job on your own.	0.77		
On your own, bring in other materials from home for the job.	0.67	0.92	0.72
Collaborative Crafting Work together with your coworkers to introduce new approaches to improve your work in the job.	0.81	0.92	0.73
Decide together with your coworkers to change the way you do your job to make it easier to yourself.	0.81		
Decide together with your coworkers to rearrange equipment or furniture in the play areas of your job.	0.80		
Decide together with your coworkers to rearrange equipment of furniture in the play areas of your job.	0.86		
becae togenici will your coworkers to organize special events in your job	0.00		
Job Burnout			
Emotional Exhaustion		0.89	0.62
I feel emotionally drained from my work.	0.73		
I feel fatigued when I get up in the morning and have to face another day on the job.	0.81		
Working with people all day is really a strain for me.	0.74		
I feel burned out from my work.	0.87		
I feel frustrated by my job.	0.79		
Depersonalization		0.88	0.64
I feel I treat some recipients as if they were impersonal objects.	0.65		
I've become more callous toward people since I took this job.	0.93		
I worry that this job is hardening me emotionally.	0.88		
I don't really care what happens to some recipients.	0.71	0.07	0.52
Reduced Personal Accomplishment I deal very effectively with the problems of my recipients.	0.62	0.87	0.53
I feel I'm positively influencing other people's lives through my work.	0.62		
I feel very energetic.	0.74		
I can easily create a relaxed atmosphere with my recipients.	0.81		
I feel exhilarated after working closely with my recipients.	0.80		
I have accomplished many worthwhile things in this job.	0.74		
Job Satisfaction	0.7 1	0.87	0.63
In my job, I feel that I am doing something worthwhile.	0.75	0.07	0.00
I feel that my job is interesting.	0.73		
I feel that my job is satisfying.	0.86		
If I had to do it all over again, I would choose another job. (Reverse scored)	0.84		
Perceived Organizational Support		0.88	0.64
My organization cares about my opinions.	0.80		
My organization really cares about my well-being.	0.90		
My organization strongly considers my goals and values.	0.87		
My organization would forgive an honest mistake on my part.	0.60		

#### 4.3. Common method bias evaluation

To address common method variance (CMV), we used Harman's single-factor test, a principal component factor analysis using varimax rotation (Podsakoff and Organ, 1986), in examining the items of job crafting, job burnout, and job satisfaction. Results support multiple factors with eigenvalues over the cutoff value of one. The first factor represents 29.25% of the variance. A one-factor model, with all items loading on one factor, showed poor fit ( $\chi^2 = 6252.43$ , df = 740,  $\chi^2/$ df = 8.45, GFI = 0.34, AGFI = 0.27, RMSEA = 0.15, SRMR = 0.16, NNFI = 0.37, CFI = 0.40, and IFI = 0.4). These results suggested CMV did not cause any problems within the data analysis (Podsakoff et al., 2003).

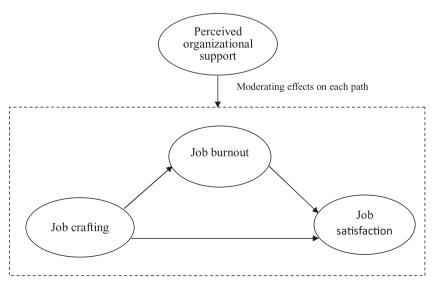
#### 4.4. Correlation analysis

Variable details, such as means, standard deviation cab be seen in Table 2. Correlation analysis shows job crafting was positively related to job satisfaction and POS (r = 0.47 and 0.24, p < 0.01), and negatively related to job burnout (r = -0.29, p < 0.01). Job burnout was negatively related to job satisfaction and POS (r = -0.55 and -0.48, p < 0.01), and job satisfaction was positively related to POS (r = 0.38, p < 0.01). The results reflect an initial examination of the proposed relationships.

#### 4.5. Tests of hypotheses

According to the fit indices, the hypothesized model provides an acceptable fit to the data ( $\chi^2 = 852.45$ , df = 369,  $\chi^2/df = 2.31$ , GFI = 0.86, AGFI = 0.83, RMSEA = 0.06, SRMR = 0.08, NNFI = 0.91, CFI = 0.92, and IFI = 0.92). Fig. 1 displays the results concerning H1. Job crafting was negatively related to job burnout (path coefficient = -0.34, z = -4.33, p < 0.01), job burnout was negatively related to job satisfaction (path coefficient = -0.47, z = -6.44, p < 0.01), and job crafting was positively related to job satisfaction (path coefficient = 0.42, z = 5.80, p < 0.01). Therefore, H1 is supported: job crafting is positively related to job satisfaction (Fig. 2).

To further understand the factors affecting job satisfaction, the study proceeded with direct- and indirect-effect analyses of job satisfaction. Job crafting exerted a direct effect on job satisfaction with a value of 0.42 (p < 0.01), with one path indicating an indirect effect on job burnout of 0.16; the total effect was 0.58. Furthermore, job burnout exerted a direct effect on job satisfaction (-0.47, p < 0.01). Hence, job burnout partially mediates the relationship between job crafting and job satisfaction.



To verify the mediating role of job burnout, we conducted a mediation analysis. A bootstrapping approach was adopted to test the significance of indirect effects (Preacher and Hayes, 2004) through AMOS, which produces bootstrapped percentile and bias-corrected confidence intervals (CIs) for indirect effects. The bootstrapping method is particularly useful when examining the indirect effects in mediation models (Shrout and Bolger, 2002). According to MacKinnon et al. (2002), bootstrapping is more appropriate and more powerful than the Sobel (1982) test because bootstrapping does not assume the data set is normally distributed. This approach is also regarded as a more formal test for examining the hypothesized mediating or indirect effects (Preacher and Haves, 2004). The significance of the indirect path (ab) was evaluated from 5000 bootstrap samples: a bias-corrected, percentile, and accelerated CI was created for significance tests. For the 95% CI, the limits must both be positive or negative to prove that the bootstrapped CI for ab did not include zero (i.e., both the upper and lower limits must be in the positive or negative region). The bias-corrected 95% CI is shown in Table 3. Note that this CI (0.07, 0.53), assumed to be more accurate, excludes zero, and the percentile confidence interval also does not include zero (0.08, 0.08). Thus, we can conclude that the indirect effect is statistically significant at the 0.05 level, and H2 is supported: Job burnout negatively mediates the relationship between job crafting and job satisfaction.

H3 was tested using moderation effect analyses. We used Hayes (2012) PROCESS macro for SPSS to estimate the equations presented earlier and obtain bias-corrected bootstrapped CIs. The PROCESS macro runs each independent variable separately, with additional independent variables run as covariates. The model set job crafting as the independent variable (X), job burnout as the mediator (M), POS as the moderator (W), and job satisfaction as the outcome (Y). For the analyses, the products were mean centered, a 95% CI was used, and 5000 bootstrap samples were generated for indirect effect analysis. This process was repeated to obtain all the required coefficients. Results are presented in Table 4 partially supporting Hypothesis 3, as there was evidence of moderated mediation for the relationship between job crafting and job burnout (B = -0.16, t = -2.67, p < 0.01, CI [-0.29, -0.04]). Therefore, POS moderates the relationships among job crafting, job burnout, and job satisfaction.

#### 5. Conclusions and discussion

This study examined the relationship between job crafting and job satisfaction in the hospitality industry, specifically considering the mediating role of job burnout and the moderating role of POS. Findings support job crafting is positively associated with job satisfaction; job

#### Fig. 1. Propose Model.

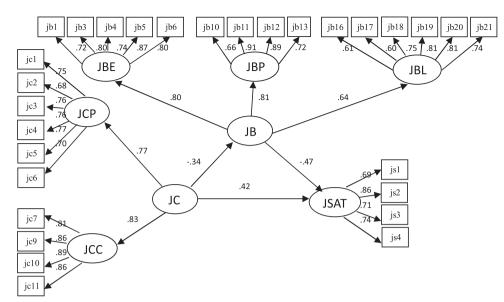


Table 3Bootstrap Methods to Test Significance of Mediation Effects.

	Point estimate	Bootstrap 5000 times					
		Bias-corrected		Percentile			
		Lower	Upper	Р	Lower	Upper	Р
Indirect Effect	0.21	0.07	0.53	0.00	0.08	0.08	0.00
Direct Effect	0.55	0.26	0.89	0.00	0.21	0.84	0.00
Total Effect	0.76	0.42	1.07	0.00	0.44	1.09	0.00

Table 4

The Results of Moderating Effect.

DV	IV	В	se	t	р	LLCI	ULCI
Job Burnout	Constant Job Crafting POS Job Crafting x POS	0.02 -0.21 -0.35 -0.16	0.03 0.05 0.04 0.06	0.65 - 4.09 - 9.88 - 2.67	0.52 0 0 0.00	-0.03 -0.31 -0.42 -0.29	0.07 - 0.11 - 0.28 - 0.04
Job Satisfaction	Constant Job Burnout Job Crafting Job Burnout x POS POS Job Crafting x POS	4.07 - 0.40 0.39 0.02 0.08 0.03	0.03 0.05 0.05 0.05 0.04 0.06	154.33 -7.80 7.37 0.50 2.11 0.53	0 0 0.62 0.04 0.60	4.01 - 0.50 0.28 - 0.07 0.01 - 0.09	4.12 -0.30 0.49 0.12 0.16 0.16

burnout negatively mediates the relationship between job crafting and job satisfaction; and POS moderates the relationships among job crafting, job burnout, and job satisfaction. Cheng et al. (2016) suggested that future studies should explore the potential mediators or moderators in the relationship between job crafting and job outcomes in other segments of the tourism industry. The present study responds to this call by showing that job crafting is positively associated with job satisfaction in a hospitality context, while also elaborating on the relationship between job crafting and job satisfaction.

Job crafting enhances job resources. When service employees have sufficient resources in their hotels, they are more likely to experience satisfaction and overcome challenging situations. Thus, employees with greater job crafting opportunities can increase job satisfaction. This result aligns with the findings from Tims et al. (2013). The current study shows that job crafting is a critical antecedent of job satisfaction Fig. 2. Structural Path Estimates Model.

Note: JSAT, Job Satisfaction; JC, Job Crafting; JCP, Individual Crafting; JCC, Collaborative Crafting; JB, Job Burnout; JBE, Emotional Exhaustion; JBP, Depersonalization; JBL, Reduced Personal Accomplishment.

within the hospitality context. These findings are consistent with those of the JD-R model (Bakker and Demerouti, 2016). Although past studies (Cheng et al., 2016; Chen et al., 2014) have examined potential mediating variables between job crafting and job outcomes, to our knowledge, no scholars before us have explored the role of job burnout. Supporting the proposition COR theory (Hobfoll, 1989), that individuals are directed towards the accumulation of resources in order to protect other valued resources, employees who engaged in job crafting for more resources experienced lower levels of job burnout, and consequently enhanced their job satisfaction. When hotel employees have a higher degree of job crafting, they feel lower burnout and are therefore more satisfied with the job. Job burnout is a psychological mechanism through which job crafting influences job satisfaction.

Regarding POS, our empirical results support significant moderator effects for the relationship between job crafting and job burnout. A sound foundation for understanding the influence of job crafting on job burnout is provided by COR theory. Additional resources that enable individuals to accomplish work objectives is understood through POS. High levels of organizational support assist employees to meet challenges and reduce hindrances by providing additional resources and facilitating cooperation among group members. Thus, our findings indicate the relationship between job crafting and job burnout is stronger for higher levels of POS due to the increased availability of resources. One surprising finding in this study is that POS did not moderate the job crafting-job satisfaction and job burnout-job satisfaction relationship. A possible explanation for the finding is that this may be affected by the East-West cultural differences, such as Eastern cultural emphases on collectivism (Hofstede, 1980). Although an emphasis on centralization leads to less work flexibility, collectivism compensates for this through policies and organizational norms. Employees within Eastern societies may still view overall performance objectives as the main priority (Francesco and Chen, 2004; Jackson et al., 2006). Hotel employees may also take the assistance and support of their employers for granted.

#### 5.1. Theoretical contributions

The current study extends job crafting research in several ways. First, this study contributes to the development of job crafting literature by quantifying the relationship between job crafting and job satisfaction within the context of the hospitality industry. Second, the present study includes job burnout as a mediating variable. Although burnout has been proposed as an important outcome of job crafting (Nielsen and Abildgaard, 2012; Tims et al., 2013), to our knowledge, the mediating role of job burnout has not yet been empirically tested. Based on

propositions within JD-R theory (Bakker and Demerouti, 2016) and COR theory (Hobfoll, 1989), this study contends that job burnout is one of the mediators in the relationship between job crafting and job satisfaction. The current research findings contribute to the extant knowledge base by uncovering the role of job burnout in the link between job crafting and employee job satisfaction. Thus, this research proposes that job burnout may be seen as an important checkpoint in detecting how job crafting influences job satisfaction. Finally, this study further extends job crafting theory by incorporating the role of POS. We have contributed to the job crafting literature by examining situational influences relevant to the job crafting-job burnout relationship. This study supplements previous research that has explored a direct relationship between job crafting and employee job burnout (e.g., Tims et al., 2013) by emphasizing a crucial contingent factor of POS in regard to such a relationship. Based on COR theory, this research proposed additional resources provided by organizational support help employees better engage in job crafting, which in turn result in reduced levels of job burnout.

#### 5.2. Management implications

Given our findings, hotel management should consider implementing function-level human resource management strategies that offer service employees greater job autonomy and discretion. They should ensure that work conditions engender a supportive work environment that is sensitive to employee preferences for planning and task scheduling. Second, on-the-job training should enable hotel employees to gain job resources and become more competent in completing new or changing tasks. Training programs could be offered that encourage job crafting behaviors, and thus enhance job satisfaction. Third, facing the reality of high levels of role stress for many service workers, hotel managers should recognize job crafting as a coping strategy and tool that can decrease employees' job burnout. Finally, hotel managers should consider providing organizational support to employees. This could take the role of giving more feedback and care at work, for example, and/or providing employees with supervisor coaching and encouragement. With the goal of assisting employees in crafting their jobs and facilitating sufficient opportunities for professional development at work, such activities will enable employees to gain additional resources and reduce job burnout.

#### 5.3. Limitations and future research

The present study has some limitations. First, we measured frontline employees' job crafting, job burnout, and job satisfaction with a selfreport approach that may have incurred response bias. Second, the research design was cross-sectional, limiting claims of cause-effect relationships. Longitudinal research would be required to test the causal relationships in this study. Third, this research focuses only on the frontline service employees in hotels; the results may have limited applicability to other industries. We recommend that future research explore these topics in other parts of the tourism industry, such as airlines or tour operations, and investigate whether mediators or moderators besides job burnout and POS may influence the relationship between job crafting and job satisfaction. Finally, numerous studies have previously explored the relationship between job crafting and other important variables within the JD-R model. Job demands and job resources are two important variables within the model that are not examined in the current research. Future scholars can further explore such relationships by expanding this work and considering related variables that may influence outcomes or even be specific to some service sectors.

#### References

analysis. J. Burnout Res. 1 (3), 112-119.

- Bakker, A.B., Demerouti, E., 2007. The job demands-resources model: state of the art. J. Managerial Psychol. 22 (3), 309–328.
- Bakker, A.B., Demerouti, E., 2016. Job demands-resources theory: taking stock and looking forward. J. Occup. Health Psychol. 22 (3), 273–285.
- Bakker, A.B., Rodriguez-Munoz, A., Sanz-Vergel, A.I., 2016. Modelling of job crafting behaviours: implications for work engagement. Hum. Relat. 69 (1), 169–189.
- Berg, J.M., Dutton, J.E., 2011. Crafting a Fulfilling Job: Bringing Passion into Work. pp. 2008 Retrieved form the website of Positive Organizational Scholarship on April, 15, 2011.
- Berg, J.M., Dutton, J.E., Wrzesniewski, A., 2013. Job Crafting and Meaningful Work Purpose and Meaning in the Workplace. pp. 81–104.
- Bitner, M.J., Faranda, W.T., Hubbert, A.R., Zeithaml, V.A., 1997. Customer contributions and roles in service delivery. Int. J. Serv. Ind. Manage. 8 (3), 193–205.
- Bufquin, D., DiPietro, R., Orlowski, M., Partlow, C., 2017. The influence of restaurant coworkers' perceived warmth and competence on employees' turnover intentions: the mediating role of job attitudes. Int. J. Hosp. Manage. 60, 13–22.
- Chalkiti, K., Sigala, M., 2010. Staff turnover in the Greek tourism industry: a comparison between insular and peninsular regions. Int. J. Contemp. Hosp. Manage. 22 (3), 335–359.
- Chen, C.Y., Yen, C.H., Tsai, F.C., 2014. Job crafting and job engagement: the mediating role of person-job fit. Int. J. Hospitality Manage. 37 (2), 21–28.
- Cheng, J.C., Yen, C.H., Chen, C.Y., Teng, H.Y., 2016. Tour leaders' job crafting and job outcomes: the moderating role of perceived organizational support. Tourism Manage. Perspect. 20 (5), 19–29.
- 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. J. Appl. Psychol. 95 (5), 834–848.
- Demerouti, E., Bakker, A.B., Nachreiner, F., Schaufeli, W.B., 2001. The job demandsresources model of burnout. J. Appl. Psychol. 86 (3), 499–512.
- Despoina, X., Arnold, B.B., Maureen, F.D., Evangelia, D., Wilmar, B.S., Toon, W.T., Paul, J.G.S., 2007. When do job demands particularly predict burnout? the moderating role of job resources. J. Managerial Psychol. 22 (8), 766–786.
- Eisenberger, R., Huntington, R., Hutchison, S., Sowa, D., 1986. Perceived organizational support. J. Appl. Psychol. 71 (3), 500–507.
- Eisenberger, R., Cummings, J., Armeli, S., Lynch, P., 1997. Perceived organizational support, discretionary treatment, and job satisfaction. J. Appl. Psychol. 82 (5), 812–820.
- Erdogan, B., Kraimer, M.L., Liden, R.C., 2004. Work value congruence and intrinsic career success: the compensatory roles of leader-member exchange and perceived organizational support. Personnel Psychol. 57 (2), 305–332.
- Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. J. Marketing Res. 18 (1), 39–50.
- Francesco, A.M., Chen, Z.X., 2004. Collectivism in action: its moderating effects on the relationship between organizational commitment and employee performance in China. Group Organ. Manage. 29 (4), 425–441.
- Gerbing, D.W., Anderson, J.C., 1988. An updated paradigm for scale development incorporating unidimensionality and its assessment. J. Marketing Res. 25 (2), 186–192.
- Hair Jr., J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., 2006. Multivariate Data Analysis. 6th ed. Pearson-Prentice Hall. Upper Saddle River. NJ.
- Han, S.J., Bonn, M.A., Cho, M., 2016. The relationship between customer incivility, restaurant frontline service employee burnout and turnover intention. Int. J. Hosp. Manage. 52 (1), 97–106.
- Hayes, A.F., 2012. PROCESS: a Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling [White Paper]. Retrieved from. http://www.afhayes.com/public/process2012. pdf.
- Hemdi, M.A., 2009. Investigating hotel employees' organizational commitment: the influence of human resource management practices and perceived organizational support. J. Tourism Hosp. Culinary Arts 1, 1–18.
- Hobfoll, S.E., 1989. Conservation of resources: a new attempt at conceptualizing stress. Am. Psychol. 44 (3), 513–524.
- Hochwarter, W.A., Witt, L.A., Treadway, D.C., Ferris, G.R., 2006. The interaction of social skill and organizational support on job performance. J. Appl. Psychol. 91 (2), 482–489.
- Hofstede, G., 1980. Motivation, leadership, and organization: do American theories apply abroad? Organ. Dyn. 9 (1), 42–63.
- Hur, W.M., Moon, T.W., Jun, J.K., 2013. The role of perceived organizational support on emotional labor in the airline industry. Int. J. Contemp. Hosp. Manage. 25 (1), 105–123.
- Jackson, C.L., Colquitt, J.A., Wesson, M.J., Zapata-Phelan, C.P., 2006. Psychological collectivism: a measurement validation and linkage to group member performance. J. Appl. Psychol. 91 (4), 884–899.
- Janssen, P.M., Peeters, M.C.A., De Jonge, J., Houkes, I., Tummers, G.E.R., 2004. Specific relationships between job demands, job resources and psychological outcomes and the mediating role of negative work-home interference. J. Vocat. Behav. 65 (3), 411–429.
- Johlke, M., Duhan, D., 2000. Supervisor communication practices and service employee job outcomes. J. Serv. Res. 3 (2), 154–165.
- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., Amick, B., 1998. The job content questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. J. Occup. Health Psychol. 3 (4), 322–355.
- Karatepe, O.M., Babakus, E., Yavas, U., 2012. Affectivity and organizational politics as antecedents of burnout among frontline hotel employees. Int. J. Hosp. Manage. 31 (1), 66–75.
- Karatepe, O.M., 2015. Do personal resources mediate the effect of perceived organizational support on emotional exhaustion and job outcomes? Int. J. Contemp. Hosp.

Bakker, A.B., Costa, P.L., 2014. Chronic job burnout and daily functioning: a theoretical

Manage. 27 (1), 4–26.

- Kim, S.S., Im, J., Hwang, J., 2015. The effects of mentoring on role stress job attitude, and turnover intention in the hotel industry. Int. J. Hosp. Manage. 48, 68–82.
- Kim, H.J., 2008. Hotel service providers' emotional labor: the antecedents and effects on burnout. Int. J. Hosp. Manage. 27 (2), 151–161.
- Lazarus, R.S., 1991. Progress on a cognitive-motivational-relational theory of emotions. Am. Psychol. 46 (8), 819–834.
- Leana, C., Appelbaum, E., Shevchuk, I., 2009. Work process and quality of care in early childhood education: the role of job crafting. Acad. Manage. J. 52 (6), 1169–1192.
- Lee, J.J., Ok, C., 2012. Reducing burnout and enhancing job satisfaction: critical role of hotel employees' emotional intelligence and emotional labor. Int. J. Hosp. Manage. 31 (4), 1101–1112.
- Lee, J., Peccei, R., 2007. Perceived organizational support and affective commitment: the mediating role of organization-based self-esteem in the context of job insecurity. J. Organ. Behav. 28 (6), 661–685.
- Lee, A.P., Teng, H., Chen, C.Y., 2015. Workplace relationship quality and employee job outcomes in hotel firms. J. Hum. Resour. Hosp. Tourism 14 (4), 398–422.
- Leiter, M.P., Maslach, C., 2005. Banishing Burnout: Six Strategies for Improving Your Relationship with Work. John Wiley & Sons San Francisco, CA.
- Lewin, J.E., Sager, J.K., 2007. A process model of burnout among salespeople: some new thoughts. J. Bus. Res. 60 (12), 1216–1224.
- Locke, E.A., 1976. The Nature and Causes of Job Satisfaction Handbook of Industrial and Organizational Psychology Vol. 1. pp. 1297–1343.

Lu, A.C.C., Gursoy, D., 2016. Impact of job burnout on satisfaction and turnover intention: do generational differences matter? J. Hosp. Tourism Res. 40 (2), 210–235.

Lynch, P.D., Eisenberger, R., Armeli, S., 1999. Perceived organizational support: inferior versus superior performance by wary employees. J. Appl. Psychol. 84 (4), 467–483.

- Spector, P.E., 1997. Job Satisfaction: Application, Assessment, Causes, and Consequences. Sage, Thousand Oaks, CA.MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G., Sheets, V., 2002. A com-
- parison of methods to test mediation and other intervening variable effects. Psychol. Methods 7 (1), 83–104.
- Maslach, C., Jackson, S.E., 1981. The measurement of experienced burnout. J. Occup. Behav. 2 (2), 99–113.
- Maslach, C., Jackson, S.E., Leiter, M.P., 1996. MBI: The Maslach Burnout Inventory: Manual. Consulting Psychologists Press, Palo Alto, CA.
- Min, H., Kim, H.J., Lee, S.B., 2015. Extending the challenge-hindrance stressor framework: the role of psychological capital. Int. J. Hosp. Manage. 50, 105–114.
- Moghimi, S.M., 2006. Organization and Management Research Approach. termeh publication, Terhan.
- Nielsen, K., Abildgaard, J.S., 2012. The development and validation of a job crafting measure for use with blue-collar workers. Work Stress 26 (4), 365–384.
- Oreyzi, H.R., Ahmadi, F., 2014. Job design impact on plasma lipid level, depression, job burnout, employee fatigue and workload in workers from Isfahan province gas distribution company. Jentashapir J. Health Res. 5 (1), 495–507.
- Organ, D.W., 1990. The motivational basis of organizational citizenship Behavior. In: In: Staw, B.M., Cummings, L.L. (Eds.), Research in Organizational Behavior 12. JAI Press Inc, pp. 43–72.
- Parker, S.K., Collins, C.G., 2010. Taking stock: integrating and differentiating multiple proactive behaviors. J. Manage. 36 (3), 633–662.
- Parker, S.K., Wall, T.D., Cordery, J.L., 2001. Future work design research and practice: towards an elaborated model of work design. J. Occup. Organ. Psychol. 74 (4), 413–440
- Petrou, P., Demerouti, E., Schaufeli, W.B., 2015. Job crafting in changing organizations: antecedents and implications for exhaustion and performance. J. Occup. Health

Psychol. 20 (4), 470-480.

- Podsakoff, P.M., Organ, D.W., 1986. Self-reports in organizational research: problems and prospects. J. Manage. 12 (4), 531–544.
- 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. J. Appl. Psychol. 88 (5), 879–903.
- Preacher, K.J., Hayes, A.F., 2004. SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behav. Res. Methods Instrum. Comp. 36 (4), 717–731.
- Prentice, C., Chen, P.J., King, B., 2013. Employee performance outcomes and burnout following the presentation-of-self in customer-service contexts. Int. J. Hosp. Manage. 35 (4), 225–236.
- Rhoades, L., Eisenberger, R., 2002. Perceived organizational support: a review of the literature. J. Appl. Psychol. 87 (4), 698–714.
- Riggle, R.J., Edmondson, D.R., Hansen, J.D., 2009. A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. J. Bus. Res. 62 (10), 1027–1030.
- Schaufeli, W.B., Bakker, A.B., Van Rhenen, W., 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. J. Organ. Behav. 30 (7), 893–917.
- Shrout, P.E., Bolger, N., 2002. Mediation in experimental and nonexperimental studies: new procedures and recommendations. Psychol. Methods 7 (4), 422–445.
- Slemp, G.R., Vella-Brodrick, D.A., 2014. Optimising employee mental health: the relationship between intrinsic need satisfaction, job crafting, and employee well-being. J. Happiness Stud. 15 (4), 957–977.
- Slemp, G.R., Kern, M.L., Vella-Brodrick, D.A., 2015. Workplace well-being: the role of job crafting and autonomy support. Psychol. Well-Being 5, 1–17.
- Sobel, M.E., 1982. Asymptotic confidence intervals for indirect effects in structural equation models. Soc. Methodol. 13, 290–312.
- Stamper, C.L., Johlke, M.C., 2003. The impact of perceived organizational support on the relationship between boundary spanner role stress and work outcomes. J. Manage. 29 (4), 569–588.
- Talachi, R.K., Gorji, M.B., 2013. Job burnout and job satisfaction among industry, mine and trade organization employees: a questionnaire survey. Int. J. Acad. Res. Bus. Soc. Sci. 3 (7), 21–41.
- Tims, M., Bakker, A.B., Derks, D., 2012. Development and validation of the job crafting scale. J. Vocat. Behav. 80 (1), 173–186.
- Tims, M., Bakker, A.B., Derks, D., 2013. The impact of job crafting on job demands, job resources, and well-being. J. Occup. Health Psychol. 18 (2), 230–240.
- Tims, M., Derks, D., Bakker, A.B., 2016. Job crafting and its relationships with person-job fit and meaningfulness: a three-wave study. J. Vocat. Behav. 92, 44–53.

Tongchaiprasit, P., Ariyabuddhiphongs, V., 2016. Creativity and turnover intention among hotel chefs: the mediating effects of job satisfaction and job stress. Int. J. Hosp. Manage. 55, 33–40.

- Ustrov, Y., Valverde, M., Ryan, G., 2016. Insights into emotional contagion and its effects at the hotel front desk. Int. J. Contemp. Hosp. Manage. 28 (10), 2285–2309.
- Wrzesniewski, A., Dutton, J.E., 2001. Crafting a job: revisioning employees as active crafters of their work. Acad. Manage. Rev. 26 (2), 179–201.
- Yang, J.T., 2010. Antecedents and consequences of job satisfaction in the hotel industry. Int. J. Hosp. Manage. 29 (4), 609–619.
- Yen, C.H., Chen, C.Y., Teng, H.Y., 2013. Perceptions of environmental management and employee job attitudes in hotel firms. J. Hum. Resour. Hosp. Tourism 12 (2), 155–174.
- Zacher, H., Winter, G., 2011. Eldercare demands, strain and work engagement: the moderating role of perceived organizational support. J. Vocat. Behav. 79 (3), 667–680.