

Does perceived manager support reduce hotel supervisors' emotional exhaustion? The mediating role of control over time and negative emotions

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Abstract

Purpose – Supervisory employees in the hotel industry experience high levels of emotional exhaustion. The current study aims to examine the impact of perceived manager support, perceived control over time and negative emotions at others on hotel supervisors' emotional exhaustion. It further investigates the mediating role of perceived control over time and negative emotions at others on the relationship between perceived manager support and hotel supervisors' emotional exhaustion.

Design/methodology/approach – Paper questionnaires were distributed at a hotel supervisor training seminar. A total of 155 usable responses were collected from hotel supervisors. Confirmatory factor analysis and structural equation modeling were used for hypotheses testing.

Findings – Results showed that perceived manager support and perceived control over time both were negatively associated with hotel supervisors' emotional exhaustion. Negative emotions at others were positively related to hotel supervisors' emotional exhaustion. Both perceived control over time and negative emotions at others were found to mediate the relationship between perceived manager support and hotel supervisors' emotional exhaustion.

Originality/value – The study applied the job demand–resources model and the affective event theory to examine hotel supervisors' emotional exhaustion. The mediating role of perceived control over time and negative emotions at others added to the current knowledge of factors that are associated with hotel supervisory employees' emotional exhaustion.

Keywords Perceived manager support, Emotional exhaustion, Control over time, Negative emotions, Hotel supervisors

Paper type Research paper

1. Introduction

Supervisory employees within the hotel industry often face stressful demands, resulting in adverse effects on their emotional health as well as both physical and mental health issues (Khamisa *et al.*, 2015), such as emotional exhaustion. Employee emotional exhaustion has been shown to negatively impact job satisfaction (Lewig and Dollard, 2003), performance (Halbesleben and Bowler, 2007), and employee turnover (Karatepe and Aleshinloye, 2009).

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The factors that potentially impact hotel supervisory employees' emotional exhaustion present a crucial area of study as the training and development of hotel supervisory employees is known to be costly and time-consuming (O'Neill and Xiao, 2010).

Existing literature applied the job demand–resources (JD-R) model and suggested that job resources such as perceived organizational support and perceived manager support help reduce hotel frontline employees' emotional exhaustion (Karatepe, 2015; Karatepe and Kilic, 2015). Perceived manager support refers to the extent employees perceive their immediate manager giving them support needed at work (Tymon *et al.*, 2011), which was found to be an antecedent of employees' perceived organizational support (Shanock and Eisenberger, 2006) that exists when employees perceive their organization cares about them and appreciates their contribution (Eisenberger *et al.*, 1986). Previous studies also showed that time pressure as a job demand can turn into a work stressor when employees do not have the job resources to meet the demand (Bakker and Demerouti, 2007), which may cause emotional exhaustion (Syrek *et al.*, 2013). Kemp *et al.* (2013) further suggested that employees' perceived control over time in the workplace can help reduce their emotional exhaustion. Similarly, a study on hotel frontline employees also demonstrated that time pressure at work could lead to mental strain and exhaustion (Chela-Alvarez *et al.*, 2021). In addition to job resources and job demands, individuals' emotions tend to have an impact on the formation of emotional exhaustion. As suggested by Karatepe and Aleshinloye (2009), hotel employees' negative emotions are positively associated with their emotional exhaustion.

However, most of the studies on emotional exhaustion in the hotel industry focused on entry-level employees only. Studies conducted using a sample of supervisory employees, who are more costly to recruit and train and experience high level of emotional exhaustion (O'Neill and Xiao, 2010), are far scarcer. Moreover, though supervisory positions in the hotel industry in general face high time pressure due to the nature of the industry, limited studies have explored perceived control over time and whether it can relieve hotel supervisors' emotional exhaustion. In addition, most research studied hotel employees' negative emotions in general without distinguishing whether it is directed toward oneself or others. Studies outside of the service industry indicated that employees' negative emotions toward others could reduce emotional engagement and increase the perception of lack of control and the intention to quit (Erdil and Muceldili, 2014; Vecchio, 2000). However, little is known whether manager support can alleviate hotel supervisory employees' negative emotions toward others, which may have an impact on their work outcomes as hotel jobs in nature requires high levels of collaboration (Pizam and Shani, 2009) and customer interaction.

Hence, the objective of the current study is to examine the impact of perceived manager support, perceived control over time and negative emotions toward others on hotel supervisors' emotional exhaustion. In the current study, hotel supervisor is defined as the direct supervisor of line-level employees. Hotel manager is defined as the direct supervisor or department-level manager of the hotel supervisor. These definitions will provide distinction through the study. The research will help expand the current knowledge of factors influencing supervisory employees' emotional exhaustion in the hotel industry. Insights on how to relieve hotel supervisors' emotional exhaustion should be useful for hotel human resources managers to reduce hotel employee turnover costs and improve service quality toward hotel employees and guests.

2. Literature review

2.1 Emotional exhaustion

Emotional exhaustion refers to a state of emotional and mental frustration due to excessive stress that leads to high depersonalization and burnout (Maslach and Leiter, 2008). It is considered as the core of the burnout syndrome, which is commonly experienced by

individuals who interact with clients and customers (Maslach and Jackson, 1981; Saxton *et al.*, 1991). Symptoms of emotional exhaustion include dread at the prospect of returning to work, increased absenteeism, diminished self-esteem, depression, insomnia and withdrawal from the organization or profession (Kahill, 1988), which adds hundreds of billions of dollars of cost to businesses on an annual basis (Lewin and Sager, 2009).

Research in the hospitality industry also showed a negative relationship between frontline employees' emotional exhaustion and various work outcomes. Researchers indicated that emotional exhaustion is negatively associated with hospitality employees' job satisfaction (e.g. Karatepe, 2010; Rathi and Lee, 2016; Xu and Wang, 2019), life satisfaction (e.g. Karatepe, 2011) and organizational commitment (e.g. Karatepe and Uludage, 2007; Rathi and Lee, 2016) and is positively related to their turnover intentions (e.g. Karatepe, 2011; Lv *et al.*, 2012) and psychological withdrawal (Xu and Wang, 2019). In addition, research indicated a negative relationship between emotional exhaustion and hospitality employees' job performance (e.g. Choi *et al.*, 2014; Karatepe and Aleshinloye, 2009; Karatepe, 2011), resulting in lower levels of customer orientation and service recovery performance.

The JD-R model can be used to explain employees' emotional exhaustion. The JD-R model classifies work characteristics into job demands and job resources (Bakker and Demerouti, 2007; Demerouti *et al.*, 2001). It contends that the lack of job resources to meet job demands may eventually lead to employees' emotional exhaustion and that different job demands may interact with job resources to predict stress and motivation (Bakker and Demerouti, 2007). Resources at work may include social support, participation in decision-making and job control (Demerouti *et al.*, 2001; Lee and Ashforth, 1996). Previous studies indicated that organizational support, supervisor support and employees' personal resources such as positive affectivity, self-efficacy, deep acting and mindfulness were effective in reducing hospitality frontline employees' emotional exhaustion (Karatepe, 2010, 2011, 2015; Li *et al.*, 2017). Common work demands include role ambiguity, role conflict, time pressure and work overload (Demerouti *et al.*, 2001; Rathi and Lee, 2016). Research shows role ambiguity, role conflict, work overload, work-family conflict, family-work conflict and surface acting were positively related to hospitality employees' emotional exhaustion (Karatepe, 2010; Karatepe *et al.*, 2012; Li *et al.*, 2017; Lv *et al.*, 2012). Customer related social stressors such as customer aggressions were also found to aggregate hospitality line employees' emotional exhaustion (Choi *et al.*, 2014; Karatepe, 2011).

However, frontline employees are not the only ones that may experience emotional exhaustion. As Gaines and Jermier (1983) indicated, managerial positions who may not directly interact with customers can also suffer from emotional exhaustion. Hotel supervisory employees face challenges from the unpredictable environment such as availability of labor and seasonality, which may increase the level of stress experienced at work (Krone *et al.*, 1989) and further contribute to their emotional exhaustion (O'Neill and Xiao, 2010). Most research to date focused on antecedents and consequences of hotel frontline employees' emotional exhaustion. Very few studies investigated factors that may influence hotel supervisor personnel's emotional exhaustion. O'Neill and Xiao (2010) employed a sample of US hotel managers and found job and organizational characteristics such as organizational climate, job demands and personality traits are significantly related to hotel managers' emotional exhaustion. More research is needed to further investigate factors that can reduce emotional exhaustion experienced by hotel supervisors who interact with customers on a daily basis and facilitate the communication between frontline employees and managers at the same time.

2.2 Perceived manager support

Social support is known as interpersonal transactions of emotional concern, information, instrumental aid or appraisal (Carlson and Perrewé, 1999). Supervisory support is considered one type of social support and was shown to have a significant impact on employees' job

satisfaction and resulted in high levels of service performance (Han *et al.*, 2017; Seiger and Wiese, 2009). The JD-R model discussed two psychological methods to clarify job strain and motivational outcomes (Fernet *et al.*, 2012). The mental and physical power of the employee is depleted by the job demands in the energetic process that leads to stress and health problem (Bakker and Demerouti, 2007; Demerouti *et al.*, 2001). On the contrary, in the motivational process, work motivation and adaptive work behaviors is enhanced by job resources (Hakanen *et al.*, 2006; Schaufeli and Bakker, 2004), which in turn leads to positive work outcomes (Bakker and Demerouti, 2007).

According to the motivational process of the JD-R model, job resources such as perceived manager support can motivate and stimulate employees to accomplish their goals and lead to positive job outcomes (Bakker and Demerouti, 2007). It is also posited that the access to job resources can help employees better handle stress at work and prevent them from experiencing negative work outcomes such as emotional exhaustion (Xanthopoulou *et al.*, 2007). Researchers found supervisory support moderated the effect of customer aggression and role conflict on hotel employees' emotional exhaustion (Karatepe, 2010, 2011). Research shows that hotel managers provide supervisory support to hotel supervisors. Karatepe and Kilic (2015) applied the JD-R model and demonstrated that hotel manager's support mitigates the positive effects of time- and behavior-based work-family conflict on emotional exhaustion of employees. Similarly, manager support as a job resource for hotel supervisors may also result in lower levels of emotional exhaustion. Therefore, the following hypothesis is proposed:

- H1.* Perceived manager support is negatively associated with hotel supervisors' emotional exhaustion.

2.3 Perceived control over time

Time pressure is defined as the stress caused by insufficient time to complete tasks at work (Kinicki and Vecchio, 1994). The JD-R model classifies time pressure as a job demand, which can turn into a work stressor when employees do not have the job resources to meet the demand (Bakker and Demerouti, 2007). Individuals who perceive little control over their time may be more likely to become frustrated or overwhelmed (Jaramillo *et al.*, 2005). For example, studies demonstrated that high time pressure is negatively related to employee well-being (Teuchmann *et al.*, 1999) and is positively associated with employees' emotional exhaustion (Syrek *et al.*, 2013). Moreover, Teuchmann *et al.* (1999) suggested that time pressure is related to emotional exhaustion and perceived control might relieve the negative impact on emotional exhaustion.

Research showed that students who perceived control over time experienced lower job-induced tensions (Macan *et al.*, 1990). Effective time management led to a decrease in the level of job-related stress, physical stress and an increase of job satisfaction (Macan, 1996). Contrarily, Peeters and Rutte (2005) used a sample of elementary teachers and found teachers who were low in time management tend to experience a higher level of burnout. Similarly, Kemp *et al.* (2013) indicated that salespersons' perceived control over time is negatively associated with their emotional exhaustion. Scarce research has been found that focuses on hotel supervisors' perceived control over time and its effect on their emotional exhaustion, where time pressure can be high and control over time may be challenging. Based on the JD-R model, perceived control over time may act as a job resource and help reduce hotel supervisors' emotional exhaustion.

Previous studies indicated that supervisor support is related to employees' perceived control at work (Thomas and Ganster, 1995). According to the JD-R model, perceived manager support as a job resource might help hotel supervisors combat time pressure in the workplace, resulting in an enhanced level of perceived control over time. The perceived

control over time will further alleviate hotel supervisors' emotional exhaustion. Hence, the following hypotheses are posited:

- H2. Perceived manager support is positively associated with hotel supervisors' perceived control over time.
- H3. Hotel supervisors' perceived control over time is negatively associated with emotional exhaustion.
- H4. Perceived control over time mediates the relationship between perceived manager support and hotel supervisors' emotional exhaustion.

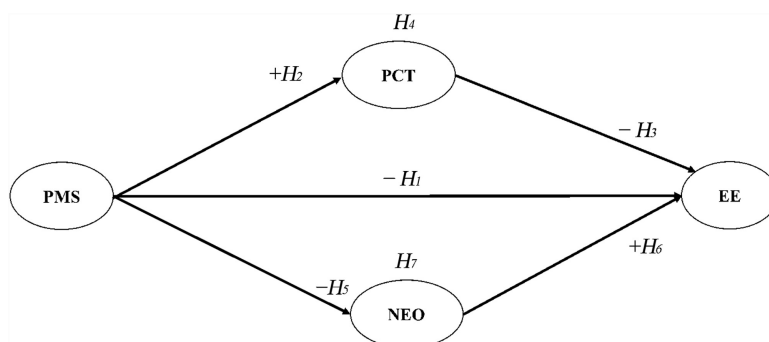
2.4 Negative emotions toward others

Negative emotions can be defined as “an unpleasant or unhappy emotion which is evoked in individuals to express a negative effect towards an event or person” (Pam, 2013). It is associated with increased levels of dread to return, absenteeism and withdrawal from work (Kahill, 1988). Badovick *et al.* (1992) indicated that an individual's negative emotions can be directed at either self or others. Most studies to date emphasized negative emotions in general without specifying whether it is directed at others or oneself (Karatepe and Uludag, 2008; Karatepe *et al.*, 2012; Lee *et al.*, 2020). Chu *et al.* (2012) focused on negative emotions directed at oneself and indicated that service employees' negative affect could increase their emotional exhaustion. Mainstream management literature suggested that employees' negative emotions toward others such as jealousy and envy could negatively impact their emotional engagement and intensify their sense of lack of control and intention to quit (Erdil and Müceldili, 2014; Vecchio, 2000). It is necessary to examine whether negative emotions toward others play a role in hotel supervisors' work outcomes as hotel jobs in nature involves high levels of collaboration and teamwork (Pizam and Shani, 2009; Li *et al.*, 2020).

The affective event theory (AET) can be used to explain the relationship between perceived manager support and hotel supervisors' negative emotions. AET contends that emotions are responses to relevant events or experiences (Weiss and Cropanzano, 1996). Employees react emotionally to events that happen at work, which may influence their job-related attitudes and behaviors (Weiss and Cropanzano, 1996). Bitner *et al.* (1990) categorized job events into positive and negative experiences, which can trigger positive or negative emotional reactions. Social support from coworkers or supervisors is considered as positive job events (Basch and Fisher, 2000), which can trigger an individual's positive emotions and reduce the negative emotions at work (Reeck *et al.*, 2016; Wegge *et al.*, 2006). Therefore, perceived manager support as a positive event at work should result in a lower level of supervisor's negative emotions. Based on the AET and previous findings, perceived managers' support should be able to relieve hotel supervisors' negative emotion toward others.

Moreover, previous researchers suggested a positive relationship between employees' negative emotional reactions and their emotional exhaustion (Rose *et al.*, 2004). Karatepe and Aleshinloye (2009) also indicated that negative affectivity was positively related to hotel employees' emotional exhaustion. According to AET, employees' emotional response to events at work could further impact their work outcomes. Following the same logic, hotel supervisors' negative emotions toward others will be positively related to their emotional exhaustion.

Based on the AET, work-related events trigger employees' emotional responses, which could influence their job-related attitudes and behaviors (Weiss and Cropanzano, 1996). Hence, hotel supervisors' perceived manager support as a positive event at work could lead to less negative emotions toward others, which would further exert a less negative effect on their emotional exhaustion. Therefore, the following hypotheses are proposed (see Figure 1 for the proposed research model).



Note(s): PMS: Perceived Manager Support; PCT: Perceived Control over Time; NEO: Negative Emotion towards Others; EE: Emotional Exhaustion

Figure 1.
Proposed research model

- H5. Perceived manager support is negatively associated with negative emotion toward others.
- H6. Negative emotion toward others is positively associated with emotional exhaustion.
- H7. Negative emotion toward others mediates the relationship between perceived manager support and emotional exhaustion.

3. Methodology

The sample of the current study comprises US hotel supervisors. Hotel supervisor was defined as the immediate supervisor of frontline employees (Karatepe, 2014). Anonymous paper questionnaires were distributed during a hotel supervisor training seminar in the southern part of the USA in 2018. The participating hotels selected the supervisors who attended the training and no department-level, director-level or executive-level managers were included in the training. Respondents were told that participation in the research study is completely voluntary, and information will be kept confidential. Participants were asked to complete the survey based on their current working experience.

The survey instrument included questions of perceived manager support (PMS), perceived control over time (PCT), negative emotion toward others (NEO), emotional exhaustion (EE) and demographic information such as gender, age and organization tenure. All constructs were measured using a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). All measurement scales were adopted from existing literature and have been extensively validated by previous research. PMS was measured by the six-item scale adopted from Jaworski and Kohli (1991). Cronbach's α for the PMS scale in Kemp *et al.* (2013) was 0.95. Sample items include "My manager does a good job of helping me develop my potential". PCT was measured with a five-item scale adopted from Macan (1996). The scale was reported to have a Cronbach's α of 0.70 by previous study (Caci *et al.*, 2020). An example item of PCT includes "I feel in control of my time". NEO was adopted from Badovick *et al.* (1992) with three items such as "Upset with others". NEO was reported to have a Cronbach's α of 0.94 (Kim, 1995). EE was measured with eight items adopted from Singh *et al.* (1994). Prior study showed that Cronbach's α of this scale to be 0.86 (Kemp *et al.*, 2013). The items include "Working with my manager directly puts heavy duty stress on me".

4. Results

A total of 180 responses were collected, of which 155 were complete and usable. Data were checked for normality, skewness, kurtosis and outliers. All acceptable thresholds were met. The respondents' demographics are presented in [Table 1](#).

4.1 Measurement model

Confirmatory factor analysis (CFA) was conducted using the maximum likelihood (ML) estimation to examine the model fit (χ^2 (196) = 351.85, $p < 0.01$; comparative fit index (CFI) = 0.92; root mean square error of approximation (RMSEA) = 0.07; standardized root mean squared residual (SRMR) = 0.07). Based on the CFA, two items of the emotional exhaustion "Working with guests is really a strain for me" (0.42) and "I feel I am working hard for my guests because they're too demanding" (0.46) and two items of the perceived control over time "I underestimate the time that it would take to accomplish tasks" (0.33) and "I find myself procrastinating on tasks that I do not like but that must be done" (0.44) were removed from the final analysis due to low standardized item loading value. CFA was then performed again. [Tables 2 and 3](#) display the standardized factor loadings and fit statistics, indicating a good fit between the theoretical model and the data (χ^2 (122) = 219.90, $p < 0.01$; CFI = 0.95; RMSEA = 0.07; SRMR = 0.06).

Both Cronbach's α and composite reliability (CR) of the construct were computed to measure the internal consistency ([Table 2](#)). Cronbach's α values ranged from 0.69 to 0.92, and CR ranged from 0.66 to 0.92, showing good internal consistency ([Table 3](#)). Convergent validity was investigated using factor loadings and each construct's t -value to check whether it is statistically significant ([Bagozzi and Yi, 1988](#)). [Table 2](#) indicates that all indicator

	<i>n</i>	<i>%</i>		<i>n</i>	<i>%</i>
<i>Gender</i>			<i>Type of hotel</i>		
Male	59	38.2	Limited service	17	11.0
Female	93	60.0	Midscale	58	37.4
Refused to reveal	3	1.9	Luxury	41	26.5
<i>Ethnicity</i>			Refused to reveal	13	8.3
White	62	40.0	<i>Number of hotel rooms</i>		
Black or African American	71	45.8	Less than 250	52	46.8
Hispanic	11	7.1	250 to 499	21	19.0
Other	5	3.2	500 to 999	4	3.6
Refused to reveal	6	3.8	1,000 to 1,499	15	13.5
<i>Education</i>			1,500 and above	19	17.1
Some high school	8	5.2	<i>Age</i>		
Completed high school	22	14.2	18–24	25	16.1
Some college	53	34.2	25–34	57	36.8
College degree	53	34.2	35–54	58	37.4
Graduate degree	13	8.4	55 and over	11	7.1
Refused to reveal	6	3.8	Refused to reveal	4	2.6
<i>Functional area</i>			<i>Tenure with current position</i>		
Front office	32	19.5	Less than 1 year	69	44.5
Housekeeping	29	21.5	1 to less than 2 years	24	15.5
Food and beverage	33	22.1	2 to less than 5 years	34	21.9
HR	10	6.7	5 to less than 10 years	15	9.7
Other (finance, accounting, marketing and sales, engineering, etc.)	45	30.2	Over 10 years	10	6.5
			Refused to reveal	3	1.9

Table 1.
Demographic
profile ($N = 155$)

	Factor loadings	Composite reliability
<i>Perceived manager support</i>		
My manager does a good job of helping me develop my potential	0.87	0.92
My manager shows approval for me when I put forth my best efforts	0.83	
My manager sees that I have the things I need to do my job	0.81	
My manager gives me recognition for improvement in my performance	0.85	
My manager demonstrates confidence in my ability to meet most objectives	0.69	
My manager shows approval for me when I put forth my best efforts	0.75	
<i>Negative Emotion toward others</i>		
Upset with others	0.89	0.91
Irritated at others	0.91	
Angry at others	0.85	
<i>Perceived control over time</i>		
I feel in control of my time	0.55	0.66
I find it difficult to keep to a schedule because others take me away from my work (R)	0.69	
I underestimate the time that it would take to accomplish tasks (R)	–	
I must spend a lot of time on unimportant tasks (R)	0.64	
I find myself procrastinating on tasks that I do not like but that must be done (R)	–	
<i>Emotional exhaustion</i>		
Working with guests is really a strain for me	–	0.85
I feel I am working hard for my guests because they're too demanding	–	
Working with my manager directly puts heavy duty stress on me	0.68	
I feel emotionally drained by the pressure my manager puts on me	0.79	
I feel I work too hard trying to satisfy employees not in my own department	0.61	
I feel burned out from trying to meet top management's expectations	0.83	
I feel frustrated because I cannot work directly with employees in other departments	0.55	
I feel discouraged by the actions of top management	0.73	
Note(s): χ^2 (122) = 219.90, $p < 0.001$; CFI: 0.95; RMSEA: 0.07; SRMR: 0.06		

Table 2. Confirmatory factor analysis results ($N = 155$)

Measure	PMS	NEO	PCT	EE	AVE	The square root of AVE
PMS	1				0.64	0.80
NEO	–0.22**	1			0.78	0.88
PCT	0.27**	–0.35**	1		0.40	0.63
EE	–0.50**	0.35**	–0.45**	1	0.50	0.71
Mean	5.45	3.75	4.95	2.88		
SD	1.48	1.79	1.34	1.48		
Cronbach's alpha	0.92	0.91	0.67	0.86		

Note(s): PMS, perceived manager support; NEO, negative emotion toward others; PCT, perceived control over time; EE, emotional exhaustion
 ** $p < 0.01$; * $p < 0.05$

Table 3. Mean, standard deviations, reliability and correlations coefficients ($N = 155$)

loadings were significant at 0.05 (Bagozzi and Yi, 1988). In addition, convergent validity was examined using average variance extracted (AVE) value of each construct (between 0.40 and 0.78). Though 0.50 is the cutoff for AVE, a value of 0.40 is considered acceptable if the CR is

higher than 0.60 (Fornell and Larcker, 1981). Hence, convergent validity is confirmed. Fornell and Larcker (1981) suggested that discriminant validity could be tested by comparing squared pair-wise correlations between constructs and the AVE value of each construct. Results demonstrate that the square root of each construct's AVE value (between 0.63 and 0.88) is higher than its correlations with other constructs (Table 3). Therefore, discriminant validity is confirmed, indicating that each construct is statistically different.

Harman's single-factor test was performed using CFA to examine common method bias. If common method bias is an issue, all factor items should produce a single factor. The results showed that the four-factor model ($\chi^2(122) = 219.90, p < 0.01$; CFI = 0.95; RMSEA = 0.07; $\Delta\chi^2 = 486.57, p < 0.01$) was significantly better than the single-factor model ($\chi^2(128) = 706.47, p < 0.01$; CFI = 0.68; RMSEA = 0.17), indicating common method bias is not a concern.

4.2 Hypotheses testing

A structural model was estimated using ML through SPSS Amos 23. Table 4 displays the theoretical paths linking perceived manager support, negative emotions toward others, perceived control over time and emotional exhaustion. The results demonstrated that the overall fit of the structural model was adequate ($\chi^2(123) = 235.38, p < 0.001$; CFI = 0.94; RMSEA = 0.08; SRMR = 0.08; $\chi^2/df = 1.91$).

The results showed that perceived manager support was negatively associated with hotel supervisors' emotional exhaustion ($-0.41, p < 0.01$) and negative emotions toward others ($-0.27, p < 0.05$) and was positively related to their perceived control over time ($0.39, p < 0.05$). Hence, H1, H2 and H5 were supported. Perceived control over time again was negatively related to emotional exhaustion ($-0.38, p < 0.01$), supporting H3. Negative emotion toward others was found to be positively associated with hotel supervisors' emotional exhaustion ($0.15, p < 0.05$). H5 was also supported.

Bootstrapping was carried out with a sample size of 5,000 and a 95% confidence interval to test the indirect effect of perceived manager support on emotional exhaustion via perceived control over time and negative emotion toward others (Hayes, 2009). Bootstrapping allows for random sampling with replacement and an estimation of sampling distribution (Preacher et al., 2007). The significance of the indirect effect is assessed by whether the confidence intervals include zero (Preacher and Hayes, 2008). Results indicate the indirect effect of perceived manager support on emotional exhaustion via both perceived control over time (-0.06 ; CI = $[-0.13, -0.02]$) and negative emotion toward others (-0.06 ; CI = $[-0.12, -0.01]$) were significant (Table 5). Perceived control over time and negative emotion toward others both mediate the relationship between perceived manager support and hotel supervisors' emotional exhaustion. Hence, H4 and H7 were both supported.

Path	Standardized coefficients	<i>p</i>	Results
H1 Perceived manger support → emotional exhaustion	-0.41	**	Supported
H2 Perceived manger support → perceived control over time	0.39	*	Supported
H3 Perceived control over time → emotional exhaustion	-0.38	**	Supported
H5 Perceived manger support → negative emotion toward others	-0.27	*	Supported
H6 Negative emotion toward others → emotional exhaustion	0.15	*	Supported

Note(s): $\chi^2(123) = 235.38, p < 0.05$; CFI = 0.94; RMSEA = 0.08; $\chi^2/df = 1.91$
 ** $p < 0.01$; * $p < 0.05$

Table 4.
Structural model
results ($N = 155$)

5. Discussion and implications

Consistent with previous studies on hotel frontline employees that supervisory support could alleviate employee' emotional exhaustion (Karatepe, 2010, 2011; Karatepe and Kilic, 2015), the current study found that perceived manager support to be negatively associated with hotel supervisors' emotional exhaustion. According to the JD-R model, perceived manager support as a type of job resource can help hotel supervisors better handle stress at work, which would lead to a reduced level of emotional exhaustion. Results further indicated that perceived manager support has an indirect effect on hotel supervisors' emotional exhaustion via perceived control over time. Supervisory support was shown to be positively associated with employees' perceived control at work (Thomas and Ganster, 1995). Perceived control over time can help reduce hotel supervisors' perceived time pressure at work, which is classified by the JD-R model as a job demand that can result in job stress and intensify employees' emotional exhaustion (Bakker and Demerouti, 2007; Syrek *et al.*, 2013). Therefore, perceived manager support could enhance hotel supervisors' perceived control over time, which would further alleviate their emotional exhaustion. Hence, perceived manager support helps reduce hotel supervisors' emotional exhaustion both directly and indirectly via enhancing hotel supervisors' perceived control over time at work.

Moreover, perceived manager support was found to have an indirect effect on hotel supervisors' emotional exhaustion via negative emotion toward others. More specifically, perceived manager support was demonstrated to alleviate supervisors' negative emotions toward others, which further influences their emotional exhaustion. According to the AET, supervisory support is categorized as a positive job event that can trigger employees' positive emotional reactions and reduce their negative emotions toward work (Basch and Fisher, 2000; Reeck *et al.*, 2016), and the emotional responses could further impact their job-related attitudes and behaviors (Weiss and Cropanzano, 1996). Therefore, perceived manager support as a positive job event can reduce hotel supervisors' negative emotions toward others, which would lead to a lower level of emotional exhaustion.

5.1 Implications

Applying the JD-R model, the current study added to the limited knowledge of factors that are associated with hotel supervisory employees' emotional exhaustion. The results confirmed that both manager support and perceived control over time are effective job resources for hotel supervisors in coping with emotional exhaustion. In addition, different from previous studies on hotel employees' negative emotions without distinguishing whether the emotion was directed at oneself or others, the current study was one of the first to emphasize solely on hotel supervisory employees' negative emotion toward others and confirmed its positive effect on supervisors' emotional exhaustion. Furthermore, the study supported that perceived control over time and negative emotions toward others both mediate the relationship between perceived manager support and hotel supervisors' emotional exhaustion, expanding the current knowledge of the mechanism of how perceived manager support impacts hotel supervisors' emotional exhaustion.

Path	Standardized indirect effects	95% bootstrapping confidence intervals		Results
		Lower	Upper	
H4 PMS → PCT → EE	-0.06	-0.13	-0.02	Supported
H7 PMS → NEO → EE	-0.06	-0.12	-0.01	Supported

Note(s): PMS, perceived manager support; PCT, perceived control over time; NEO, negative emotion toward others; EE, emotional exhaustion; based on 5,000 bootstrap samples

Table 5. Indirect effects and bootstrapping results (*N* = 155)

Hotel managers should provide more support to their supervisors to alleviate their emotional exhaustion and negative emotional reaction toward others as well as to make them perceive more control over time at work. Hotels should initiate programs or seminars to train their managers to be more supportive of their supervisors. In addition, hotels can develop strategies that concentrate on the hiring, training, development and retention of managers who demonstrate a high level of support to their supervisors.

Moreover, perceived control over time and negative emotional reactions toward others were found to negatively influence hotel supervisors' emotional exhaustion. Both perceived control over time and negative emotional reactions toward others mediate the negative relationship between perceived manager support and emotional exhaustion. Therefore, offering training programs may help hotel supervisors to improve their time management skills and effectively control their negative emotions at work (Boukis *et al.*, 2020). Human resources departments should offer programs to develop hotel supervisors and increase their supervisory skill set. Topics such as conflict management, communication skills (both verbal and nonverbal) and stress management will empower supervisors to take control of their time and manage negative influences. Participation in training increases skills, job performance and feelings of self-worth, and employees will feel more connected to the organization if they receive support for training from their supervisors or managers (Bulut and Culha, 2010). Mindfulness training, a form of meditation, is another program that human resource departments can offer to help reduce emotional exhaustion (Khan *et al.*, 2020). Further, team building activities such as formal department retreats and informal team building components during shift meetings may also be offered by hotels to help reduce supervisors' emotional exhaustion.

5.2 Limitations and future research

The sample size of the current study is relatively small due to the challenges of data collection from supervisory-level hotel employees. Future researchers may recruit a bigger sample of hotel supervisors to validate the findings from this study. Moreover, the study employed a self-report survey and social desirability bias may prevent participants from answering truthfully. In addition, the data for the current study was collected within the Southern part of the USA prior to the COVID-19 pandemic, which may limit the generalizability of the findings. Future studies may employ a less biased sample and replicate the study to validate the findings in the current setting. In the current study, the hotels selected the supervisors to attend the training and no department-level, director-level or executive-level managers were included in the training. Future research may include these upper-level managers and explore whether perceived manager support, control over time and negative emotions toward others have the same effect on their emotional exhaustion. The current study emphasized the effects of hotel supervisors' negative emotions toward others on emotional exhaustion. Future studies may compare the impact of negative emotions at self and toward others on emotional exhaustion. Moreover, the causal relationship direction cannot be decided since the study is a cross-sectional study in nature. Longitudinal studies may be conducted in the future to establish the causal relationships. It will be interesting for future research to examine whether the same relationships exist among other hospitality settings outside of hotels. Future studies can also incorporate other factors into the research model, such as emotional regulation and psychological capital, to better understand hotel supervisors' emotional exhaustion.

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