

## The Effects of Work Characteristics and Self-esteem on Work Burnout for Supervisory-levels Employees in Hotels

Dr. Hany Hosny Sayed Abdelhamied<sup>1</sup>

### Abstract

---

The hotel industry is a labor-intensive industry, depending on large number of employees with different job positions to perform the services. These employees especially supervisory-level and front line employees face much pressure from the management to meet the hotel standards. Work characteristics and employees' self-esteem assumed to contribute to employees' burnout. High level of employees' burnout may affect hotels' performance. The purpose of this study is to examine the effects of work characteristics' dimensions and self-esteem on levels of burnout among supervisory-level employees in Egyptian hotels.

**Methodology/ Approach** - A quantitative approach was employed to the measure the associations between the study variables, data were collected on modified versions of Maslach Burnout Inventory scale, work characteristics and self-esteem scales. Statistical tests include descriptive statistics, internal consistency, reliability, validity, simple and multiple regressions tests were conducted to determine the associations among the study variables and to validate the study.

**Findings**- the emerged results indicated that work characteristics are crucial predictors of burnout dimensions. Certain work characteristics such as work variety, work identity, work significance and work feedback increase the emotional exhaustion of supervisory-level employees while, work autonomy did not contribute to supervisor staff emotional exhaustion. Similarly, work characteristics influence personal accomplishment; on the other hand, depersonalization did not affected by the changes in work characteristics of supervisory employees in hotels. The results also show that, self-esteem negatively and strongly affects all burnout dimensions.

**Originality**- this study comes up with new insight for hotels' operators, hence it illustrates the importance of work characteristics for burnout phenomena in hotels, and it sheds the light on the self-esteem as a predictor, strongly affect burnout in hotels.

---

**Keywords:** Work characteristics, Self-esteem, Work burnout, emotional exhaustion, depersonalization, personal accomplishment, Conservation of resources theory.

### 1. Introduction

Hospitality services require customer contact around the clock and much care from the service attendants. Supervisory-level staff in hotels faces much pressure from their managers and top management to improve the hotels' services, beside the pressure from their subordinates and customers therefore they can be burnt quickly. The hospitality work circumstances have been reported to be stressful for example, Bitner et al. (1994) discovered that handling clients' problems is one of the most unpleasant challenges for restaurants and hotels employees. Hotels personnel are exposed to the risk of developing burnout for many reasons: they have direct contact with guests, they endure different work conditions, weak salaries, workload and stress from management. Moreover, ambiguous roles which represented in wearing certain uniforms, that may be unacceptable in Islamic and Arab cultures.

---

<sup>1</sup> Associate Professor, Faculty of Tourism and Hotels, University of Sadat City, Egypt & College of Business, Umm Al-Qura University, KSA. E-mail: hanyhosny96@hotmail.com

Also long and unsociable working hours during the holidays have the potential to cause dissatisfaction, stress, and burnout (Law et al. 1995; Brymer et al. 1991; Buick and Thomas 2001; Prabhu 1996; Pavesic and Brymer (1990). Moreover, dealing with problems caused by residents and guests who may be drunk, snobby or moody along with the nature of hospitality jobs, which require high degree of fitness, mental and psychological tolerance, these job conditions might lead to work burnout. Job burnout defined as “the syndrome of emotional exhaustion, depersonalization of others, and a feeling of reduced personal accomplishment” (Lee and Ashforth, 1996). Another crucial factor that may lead to worker burnout in hospitality industry is work characteristics. Work characteristics entail the work design that result in three psychological states: the meaningfulness of the work performed, responsibility for work outcomes, and knowledge of the results of the work performed; these states will bring about positive work outcomes (Morgeson and Campion 2003). Work characteristics comprise five dimensions; namely, task identity, skill variety, task significance, autonomy and feedback. These dimensions may develop burnout as indicated by Kuruuzum et al. (2008). Self-esteem described as a comprehensive assessment of one’s personal worth or value. Self-esteem was found to be linked to job satisfaction, performance intention to leave in hospitality and service sector and burnout in health sector (Donnellan et al. 2005; Karatepe and Demir, 2014; Abdelhamied, 2015). Drawing on the conservation of resources theory as a theoretical framework (Lee and Ashforth, 1996), the current study was designed to extend previous studies and present empirical evidence of the relationship between burnout dimensions, work characteristics and self-esteem for supervisory-level employees in hotels. The paper then presents an empirical study of a sample of supervisory-level staff in five-star hotels in two major tourists' cities in Egypt; consequently, the significance of the findings is discussed. The paper concludes with a summary of the major findings and recommendations for management practices.

## **2. Review of related literature and hypothesis development.**

Alarcon, et al. (2009) stated that burnout is a work-related syndrome that most often affects human-service professionals. Mansour and Tremblay (2016) claimed that burnout is a constant condition coming from frequent exposure to work stress at overwhelming levels beyond the individual's capacity. This condition is highly prevalent in the service sector professions. Maslach and Leiter (2005) reported that, there is a discrepancy between what a worker wants to do and the task that the worker has to perform; it arises when there is less consistency between the nature of a person’s job and the nature of the person doing the job. Thus, burnout is not only a personal problem but rather, it is a social/environmental problem related to a person’s work or environment. Burnout concept encompasses three dimensions: emotional exhaustion, depersonalization and reduced personal accomplishment. Emotional exhaustion; focuses on the feeling that one’s emotional resources are used up (Cordes and Dougherty 1993). Emotional exhaustion causes employees to feel tension and frustration, and they are not able to perform properly their usual duties. This leads them to lose their sense of responsibility toward customers. Depersonalization, points to a cynical, callous and detached attitude toward customers, co-workers and the organization; that is negative and inappropriate behaviors toward customers, feeling frustration, loss of work standards, and withdrawal. While reduced personal accomplishment, is marked by a sense of ineffectiveness, inadequacy and low morale in relation to job performance. It also accompanied by negative self-evaluation and decreased feelings of competence and the tendency of an individual to evaluate himself negatively with respect to his work and other people (Schutte et al. 2000).

### **Antecedents of work burnout**

Cordes and Dougherty (1993) reported that the antecedents of burnout could be classified into three categories; organizational characteristics work and role characteristics and personal characteristics. Organizational characteristics might cause employees burnout in the workplace because of contingency in the rewards and punishment system along with the specific work itself and the management context in which the work occurs (Cordes and Dougherty 1993; Maslach et al. 2001). Personal characteristics refer to a number of factors, such as gender, age, years of experience, personality traits, personnel perception about their job and their personal performance, as well as career advancement; these characteristics can explain why some individuals face burnout while others do not (Cordes and Dougherty 1993). Empirical evidences showed substantial issues concerned with burnout in terms of more costs for both organizations and individuals. In addition, high turnover rates, employee absenteeism, low levels of organizational commitment and decreased productivity (Jackson et al. 1986 ; Lee and Ashforth, 1996; Leiter and Maslach, 1988 ; Wright and Bonett, 1997 ; Wright and Cropanzano, 1998). Alike, Kahill, (1988) found that burnout negatively affects job involvement.

In service sector, the burnout consequences include marital and familial disharmony; diminished self-esteem; difficulties in concentration; social isolation; and psychological disorders (Burke and Greenglass 2001; Demir et al. 2003).

### **2.1 Work characteristics and burnout**

Work characteristics refer to job attributes that can have motivational influences on personnel. Based on job demand-resource model, job characteristics can be combined into two categories: job demands and job resources. Hockey (1993) described work characteristics as physical, social or organizational facets of the work that demand sustained physical or mental effort and is therefore linked with definite physiological and psychological consequences.

Hackman and Oldham (1976, 1980) developed the work characteristics model that encompasses five dimensions of work characteristics; namely, task identity, skill variety, task significance, autonomy and feedback. The first three dimensions determine the extent to which a certain job is meaningful to the employee; autonomy and feedback are useful to match the level of autonomy and feedback that the jobholder has acquired from the job. Skill variety relates to the activities that are relevant to a certain type of work, such as the skills and talents that a jobholder requires for performing his or her job. Task identity evaluates the progress of a given job from its commencement to its termination with a visible outcome (Grant 2008).

Work demands can include work characteristics as diverse as task interruptions, task variety, workload, work home conflict, organizational changes, and emotional dissonance (e.g., Bakker, Demerouti, Taris, Schaufeli & Schreurs, 2003). A plenty of studies have illustrated that job demands are associated with burnout (Bakker, Demerati, de Boer & Schaufeli 2003; Bakker, Demerouti, & Schaufeli, 2005) and predict burnout over time (Hakanen, Schaufeli, & Ahola, 2008). In line with this Broeck, Vansteenkiste, Witte and Lens (2008) reported that work demands and work resources are theorized to be linked to individuals' burnout.

Most studies indicated that greater skill variety, task identity, and task significance, as well as greater experience, responsibility (autonomy) and a greater knowledge of results (feedback), led to increased employee motivation, performance, commitment, satisfaction, decreased absenteeism and decrease turn-over (Turner and Lawrence 1965; Brief and Aldag 1975; Hackman and Oldham, 1980; Loher et al. 1985; Fried and Ferris 1987; Spector and Jex 1991). Similarly, Pizam and Neumann, (1999) found task characteristics also develop employee burnout. Brockner (1988) stated that employees with low self-esteem might be more likely to develop burnout. Jansen et al. (1996) found that both work characteristics and individual characteristics are related to work burnout. While, Lingard (2010) assured that a complex interaction between individual characteristics and issues in the work environment greatly affect burnout. Furthermore, Schaufeli and Bakker (2004) confirmed that burnout is predicted by elements of job demand.

### **2.2 Conservation of resources theory (CRT) and burnout**

Hobfoll, (2001a) described CRT as an extended model for work stress. CRT identifies four types of resources each linked to four kinds of personal investments (Lilly & Jackson, 1992), valued objects (e.g., housing, clothing, tangible benefits), stress-mediating conditions (job security, seniority, social support), stress aiding personal characteristics (traits, skills), and resource generating energy (time, money, knowledge, and competence). In hospitality context, conflict and stress are common occurrence, and personnel become burnt or exhausted due to lack of resources. CRT claims that some aspects of work characteristics causes stress situations because of loss of resources. Personnel cannot achieve the work requirement, at this stage, the resource depletion may occur leading to work frustration, anxiety and burnout (Halbesleben, 2006). Up to date, the conservation of resource theory (Halbesleben & Buckley, 2004) remains the most dominant approaches to interpret the process of burnout for personnel.

Based on CRT, individuals exert much effort to attain what they prize or value resource, in case they lose their resources or even perceived threat of resources loss, burnout is most likely to occur (Lee and Ashforth, 1996). Examples of resources include social support, work anatomy, role ambiguity, workload, being an optimistic towards the work, work demand, and stressful situations in general (Hobfoll, 1998). CRT is linked to burnout dimension, for instance it places emphasis on personal motivation in the burnout process to avoid resources depletion. Emotional exhaustions occurs when individuals lose their emotion, social support, personality and controlling the work stressors.

Similarly, COR theory fits with depersonalization that concerned with reducing individual emotional loss, which occurs due to facing customers' problems (Sutton and Kahn, 1986). CRT has been widely implemented by scholars in over-coming stress and burnout. Neveu (2007) applied conservation of resources theory to handle prisons burnout, similarly Xing, Zhou, Jianfeng Ma and Xia Dong (2018) depend on the CRT in empowering supervisors to deal with the service issues. The current study draws on the conservation of resources theory to explain the hypothesized relationships. It provides important interpretation for how hotels' supervisory level should act work, it suggests that instinctive regulation of emotions and attitudes to match with organizational service standard rules may require employees to use psychological resources to avoid losing their resources.

### **2.3 Burnout and the hospitality industry.**

Due to the nature of service, which should be consistent every time it is being delivered, it is not surprising that burnout is important for hospitality sector, especially for managers (Pienaar and Willemse 2008). Many burnout related studies have examined burnout in the hospitality industry, Krone et al. (1989) found foodservice employees faced high professional burnout levels, emphasizing on emotional exhaustion and depersonalization, which were particularly high in comparison with other dimensions. Demeroutim, Bakker, Nachreiner and Schaufeli, (2001) proved that job demands are primarily related to emotional exhaustions in service based human industry. While, Kim et al. (2009) focused on the effect of individual characteristics in hotels on level of stress and professional burnout experienced. Previously, Ledgerwood et al. (1999) proved a strong correlation between organizational climate and employees' burnout levels. Similarly, Bitner et al. 1994 ; Pelit and Turkmen (2008) discovered that employees who work in hotels, catering units and restaurants experience disagreeable occurrences more frequently than do those who work in other sectors. Kozak (2001) argued different causes for burnout in his study; hence, he found 45 % of the women participated in the study experienced burnout because of the uncertainty over the fate of the sector, career uncertainty, busy schedules, managers' attitudes and nature of the social roles of women in the Turkish hotels. In addition, Bogaert et al. (2013) found perceived workload; decision latitude and social capital affect the three dimensions of burnout. Janssen et al. (1999) confirmed a significant and negative association between self-esteem and all three burnout dimensions alike. Similarly, Kuruuzum et al. (2008) found certain job characteristics such as excessive workload, lack of support from senior management, task complexity, and role ambiguity develop the emotional exhaustion of middle managers and decrease their performance levels. Although a wide body of studies on burnout exists, few have examined the impacts of work characteristics and self-esteem on burnout in the hotels. The current study, therefore, investigates the association among work characteristics, self-esteem, and burnout dimensions for supervisory-level employees in Egyptian hotels. Based on the aforementioned discussion, several hypotheses are formulated:

- H1. Work characteristics dimensions and self-esteem positively affect emotional exhaustion of supervisory-level staff.
- H2. Work characteristics dimensions and self-esteem positively affect depersonalization of supervisory-level staff.
- H3. Work characteristics dimensions and self-esteem negatively affect personal accomplishment of supervisory-level staff.

To clarify the effects of work characteristics only on work burnout dimensions, the following hypotheses are posited:

- H4. Work characteristics dimensions positively influence emotional exhaustion perceived by supervisory-level staff.
- H5. Work characteristics dimensions positively influence depersonalization perceived by supervisory-level staff.
- H6. Work characteristics dimensions negatively influence personal accomplishments perceived by supervisory-level staff.

### **2.4 Self-esteem and burnout**

Rosenberg (1965) defines self-esteem "as an overall evaluation of one's personal worth or value. Normally, self-esteem reflects a person's overall appraisal of his or her own worth" (Cotton 1985). In addition, self-esteem includes beliefs and emotions, such as triumph, despair, pride and shame. Plenty of studies have argued the effects of self-esteem for example Karatepe and Demir (2014) found self-esteem can greatly affect performance. Further, he added negative self-esteem cause failure to meet companies' goals, loss of standards, wishes and performance. For example, educators often assume that students with high self-esteem are more likely to strive academically as a way of maintaining feelings of self-worth. (Ross and Broh 2000). In contrast, students with low self-esteem may feel less in control and are more likely to perform poorly (Peixoto and Almeida 2010).

Other research has confirmed the negative effects of low self-esteem on a variety of outcomes, including performance, achievement, motivation, aggression and substance abuse (Donnellan et al. 2005). A lack of self-esteem may lead to employee turnover intention and burnout (Kahill 1988).

Social cognitive theory (SCT) is one of the most widely utilized models and theories for improving human self-management behaviors. It encompasses many constructs including knowledge, self- efficacy, social support, outcome expectations and outcome expectancy (Dong-Hee, Young- Ae, In-Soon, 2007). Bandura (2002) expanded in SCT and explained that individuals learn from their colleagues in the work place. When personnel see someone else awarded for certain behavior, they tend to behave the same way to attain an award. Self-efficacy is a belief about how can an individual can act under certain conditions regardless the skills he/she possesses Edwards, Jepson and Mcinnes 2017; Ryan et al. 2017). The second important factor in (SCT) is social support that received from the social network surrounding the individuals especially their managers, co-workers and family members, might directly affect their behavior (Williams, Bond, Williams, Bond, 2002). Emotional exhaustions has a positive statistical correlation with self-esteem (Chen, Yangu, Tianqiang, Guangzeng, Shilan, 2017). While outcome expectation is individual's thoughts concerning the probability of certain occurrence of particular behavior consequences and expectancy is the importance and value that the person gives to this outcome. SCT posits that social support and interpersonal agency have crucial implications for individuals' motivation, engagement, behavior and achievement. This study, engaged SCT to examine the extent to which interpersonal (or, contextual) agency (social support) are associated with employees burnout. Few studies have demonstrated the link between STC and self-esteem for example Shu, Tu &Wang (2011) claimed that when employees mistreated by their managers or customers they start the process leading to counterproductive behavior like service failure and the resultant loss of emotional resources like self-esteem and self-worth, they are likely to endanger to burnout.

Limited studies have investigated the effects of self-esteem on supervisory-level employees in hotels; however, Akgunduz (2015) found that self-esteem in hotels was positively associated with job performance. Abdelhamied (2015) also confirmed that higher level of self-esteem leads to reduced intention to leave hotels. Kwek et al. (2013) suggested that self-esteem and resilience are significant predictors of academic performance. Moreover, Ahmed (2012) found that self-esteem and optimism are significantly and positively correlated with teacher job satisfaction. Previously, Rosse et al. (1991) declared that poor self-esteem might foster burnout. According to the aforementioned discussion, the following hypotheses are posited:

- H7. Self-esteem has a negative effect on emotional exhaustion perceived by supervisory-level staff.
- H8. Self-esteem has a negative effect on depersonalization perceived by supervisory- level staff.
- H9. Self-esteem has a negative effect on personal accomplishment perceived by supervisory-level staff.

### 3. Methodology

#### 3.1 Sample and data collection

Based on a purposive sampling strategy, data were collected from a sample including five-star hotels in the Greater Cairo and Alexandria governorates because hotels in these cities have the highest occupancy rates during summer season. To verify the sampling strategy adequacy Kaiser Meyer Olkin (KMO) test and Bartlett's test were conducted. The sample is adequate if KMO value is more than 0.7, and is inadequate if less than 0.50. The KMO test identifies whether or not enough items are predicted by each factor, whereas Bartlett's test indicate significance value.

This means that the variables are correlated sufficiently to provide a convenient basis for factor analysis (Barrett and Morgan 2005). Table 1 shows that the KMO test was greater than .70 except perceived value. It was more than .50, which is considered reasonable. In addition, all Bertlett's tests were greater than .05, which is significant.

Table1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.793
Bartlett's Test of Sphericity	Approx. Chi-Square	8023.778
	Df	81
	Sig.	.000

Supervisors' staff from 59 international five-star hotels participated in this study. Contacts were made with general managers in the sampled hotels, and they consented to the participation of their hotels. Each hotel was visited in person by the researcher and the purpose of the study was explained to the participants. Questionnaires were handed to departments' heads in all sampled hotels' for subsequent distribution to supervisory-level staff. In reply to 428 questionnaires that were distributed, 317 usable responses were collected, yielding a 74.2% response rate. Prior to administering the questionnaires, a pilot study was conducted to assess reliability using the test re-test method, and a panel of three experts assessed validity. The collected data were analyzed using the Statistical Package for Social Sciences (SPSSv.22.1).

### **3.2 Measures and factor analysis Burnout scale.**

Burnout scale was applied for the first time by Maslach and Jackson (1981). This 22-statement scale is used to measure the frequency and intensity of job burnout employees in service sector (Schutte et al., 2000 ; Maslach and Leiter 2005) and has good psychometric properties. This study partially employs the Turkish MBI, which was adapted by Ergin (1996) and Kuruuzum et al. (2008). The Turkish version of MBI is distinctive from the original Maslach Burnout Inventory. The main alteration in the Turkish version is the reduction in the number of points used in the scale from seven in the original scale to five in the Turkish version. Each item of the scale employs the following gradations: 1 = "never"; 2 = "very rare"; 3 = "sometimes"; 4 = "usually"; and 5 = "always" (Ergin, 1996 ; Kuruuzum, et al. 2008). The questionnaire encompasses 22 items, and the study used both confirmatory and exploratory factor analysis to investigate the factor structure of the MBI. Factor analysis helps in estimating the joint distribution of the full set of variables in an inventory and in combining variables into factors that correlate with one another but are independent of other variables in the set (Tabachnick and Fidell 1996). In addition, factor analysis permits to determine whether the items of the scale comprise the same factors or subscales of the original MBI suggested by Maslach and Jackson (1981).

Exploratory factor analysis was used after confirmatory factor analysis, the results indicated the existence of distinctions between the structure of the Turkish version of the MBI and the original MBI scale. Principal component methods utilized to extract factors, and after extracting three factors, the factors were rotated using both Varimax and Promax rotations to achieve interpretable results (Merenda 1997). Three subscales of the MBI were extracted and were investigated for internal consistency. The coefficient of reliability (Cronbach's alpha) for each subscale was calculated to determine how well the items in each subscale measured the latent construct, Cronbach's alpha for the three burnout dimensions were 0.66, 0.63 and 0.74 respectively.

Correlation coefficients were calculated to assess how strongly the subscales were associated with one another and to describe the levels of burnout; therefore, means and standard deviations on each MBI subscale were calculated. Differences were found between the three factors that were extracted from the exploratory analysis and the original three subscales proposed by Maslach; thus, the item stating that "Working with guests all day is really a strain for me" loads on the depersonalization scale rather than on the emotional exhaustion scale, as did the item stating that "Working directly with guests puts too much stress on me." In addition, "I feel fatigued when I get up in the morning" from Maslach's emotional exhaustion subscale loaded on the depersonalization scale, while another item "I feel I'm working too hard on the job" loaded on the personal accomplishment subscale, and the item "I feel delight after working with guests" loaded on the emotional exhaustion subscale. One other item, "I become more callous toward people", failed to load on any of the subscales.

The results of the exploratory factor analysis (loadings of MBI Items) produced three subscales: a 6-item emotional exhaustion (EE) subscale, a 8-item personal accomplishment (PA) subscale, and a 7-item depersonalization (DP) subscale, and the results are almost fully supported by the exploratory factor analysis.

### **3.3 Work characteristics scale**

Work characteristics were measured using five subscales developed by Hachman and Oldham (1976), this study adopted Morgeson and Humphery (2006) work characteristics five subscales. The work characteristics construct has the following five subscales: work variety, work identity, work significance, work autonomy, and feedback, which are traditional job design variables. The work variety scale assesses whether a job entails various activities that require the staff to demonstrate a number of different skills (5 items); for example, "This work requires me to do many different things at work using a variety of skills and talents."

The work identity scale measures whether a job demands the completion of a whole and identifiable piece of work with a clear beginning and end (4 items); for example, “The job allows me to complete the work that I start”. The work significance scale assesses the level to which a job has significant effects on the works of others (5 items); for example, “The work is very significant and important in the broader scheme of things.”

The work autonomy scale examines whether a job provides substantial freedom and independence for the individuals in planning the work (5 items); for example, “The job provides me with opportunities to use my personal initiative”. Feedback measures the extent to which the work activities required by the job results in the individual being given direct and clear information about their effectiveness (3 items); for example, “After I complete a task, I know whether I have performed it well.” Cronbach’s alpha for the five work characteristic dimensions were 0.76, 0.73, 0.69, 0.68 and 0.71, respectively.

### 3.4 Self-esteem scale

This study adopted Rosenberg’s (1965) 10-item Self-Esteem Scale (SES) to assess self-esteem. The scale, which provides a convenient measure of global attitudes about self-esteem, has five negatively worded items and five positively worded items. Employees were asked to express their agreement on a five-point Likert scale (1= strongly disagree; 5= strongly agree) with statements such as “ I feel that I have a number of good qualities” and “At times, I think I am no good at all”. This scale is one of the most widely used measures of self-esteem and exhibits good reliability and validity (Akgunduz 2015 ; Crandell, 1973 ; Rosenberg, 1965). The scale had an internal reliability of 0.86. An acceptable level of internal consistency (from 0.69 to 0.87) was found for each construct used.

### Statistical design and study variables.

This study identified the three-burnout dimensions as dependent variables. Work characteristic dimensions and self-esteem are used as independent variables. A series of multiple and simple regression equations were conducted to investigate the influence of work characteristics' dimensions and self-esteem on burnout for supervisory-level employees. The models used are as follows:

$$EE = \alpha + \beta_1 WV + \beta_2 WI + \beta_3 WS + \beta_4 WA + \beta_5 WF + \beta_6 SE + e.$$

$$DP = \alpha + \beta_1 WV + \beta_2 WI + \beta_3 WS + \beta_4 WA + \beta_5 WF + \beta_6 SE + e.$$

$$PA = \alpha + \beta_1 WV + \beta_2 WI + \beta_3 WS + \beta_4 WA + \beta_5 WF + \beta_6 SE + e.$$

$$EE = \alpha + \beta_1 WV + \beta_2 WI + \beta_3 WS + \beta_4 WA + \beta_5 WF + e.$$

$$DP = \alpha + \beta_1 WV + \beta_2 WI + \beta_3 WS + \beta_4 WA + \beta_5 WF + e.$$

$$PA = \alpha + \beta_1 WV + \beta_2 WI + \beta_3 WS + \beta_4 WA + \beta_5 WF + e.$$

$$EE = \alpha + \beta_1 SE + e.$$

$$DP = \alpha + \beta_1 SE + e.$$

$$PA = \alpha + \beta_1 SE + e.$$

## 4. Results

### 4.1 Descriptive statistics

#### 4.1.1 Demographic characteristics

The demographic factors of gender, age and job tenure were measured. The respondents comprised of 59 % males and 41 % females. Average respondent age was 32 years. Approximately half of the employees (48.5%) had work experience comprising more than three years in the hotels in which they currently worked. Approximately 54 % of the sample held a bachelor degree, and the remaining respondents held secondary and high school. Table 2 shows the mean values, standard deviations, and minimum and maximum values for burnout dimensions, work characteristics dimensions and self-esteem; means ranged from 3.01 to 4.57, and SDs ranged from 0.440 - 0.856. Correlations between the study variables were determined based on the Pearson correlation co-efficient. As illustrated in the table, work characteristics were significantly and positively correlated with some burnout dimensions and were negatively correlated with other burnout dimensions.

Table 2. Descriptive statistics and a correlation matrix among the burnout sub-scales, work characteristic sub-scales and self-esteem scale

Variables	Means	SD	EE	PA	DP	W V	WI	WS	W A	W F	Self-esteem
Emotional Exhaustion (EE)	3.88	.703	1								
Depersonalization (DP)	3.65	.771	.634**	1							
Personal Accomplishment (PA)	3.01	.856	.511**	.476**	1						
Work Variety (WV)	4.57	.814	.490**	.337**	.447**	1					
Work Identity (WI)	3.50	.705	-.502	-.898	.356**	.471**	1				
Work Significance (WS)	3.50	.705	-.302	-.100	.256**	.471**	1.000**	1			
Work Autonomy (WA)	3.56	.665	.621**	.407**	.459*	.304**	.382**	.382**	1		
Work Feedback (WF)	3.40	.679	.452**	.330**	.276**	.206	.344**	.344**	.284**	1	
Self-Esteem (SE)	3.07	.440	.496**	.286**	.311**	-.341	.556	.456	.662	.137	1

Note: \*  $p < .05$

\*\*  $p < .01$

To test the existence of multi-collinearity, VIF and tolerance were measured; tolerance was  $> 0.200$  (from .655 to .982), and VIF was  $< 10$  (from 1.018 to 1.582). Both fall within the normal limits; therefore, multi-collinearity does not exist. To test the study hypothesis, multiple regressions were conducted between dependent and independent variables. Table (3) shows the model summary for the first multiple regression; where the values of  $R^2$  describe the amount of variation in emotional exhaustion as a dependent variable and indicate that emotional exhaustion was associated with variation in work characteristic dimensions and self-esteem as independent variables.  $R^2$  adj. values also indicated the percentage of total variation in the dependent variable (emotional exhaustion) that can be explained using the independent variables (work characteristics and self-esteem). The high levels of  $\beta$  reflect that each increase in the dependent variable was based on an increase in the independent variable. The findings of table 3 clearly indicate that work characteristics and self-esteem were statistically significant for predicting emotional exhaustion.

Notably, the four factors of the work characteristics were significant and positive predictors for emotional exhaustion; however, work autonomy did not affect emotional exhaustion and was not significant. Although work autonomy concerned with level of freedom and discretion allowed to an employee over his or her job, it is apparent that, supervisory level have enough empowerment, therefore emotional exhaustion did not affected by work autonomy. A negative and significant association detected between self-esteem and emotional exhaustion, this finding is congruent with the social cognitive theory, which proposed a concrete relationship between the factors related to emotional support and self-behavior. In other words, the more the supervisory-level employees' feel that their management esteems them, the less they will be emotionally exhausted.

This result is consistent with the findings of Tsai and Chan (2010) Broeck, Vansteenkiste, De Witte and Lens, (2008). Based on these results H1, which proposes that work characteristics and self-esteem positively affect emotional exhaustion, is partially accepted because self-esteem negatively influences emotional exhaustion and this result accords with the social cognitive theory which suggests a link between self esteem and emotional variables. Further analysis was conducted by splitting data to identify employees with higher levels of emotional exhaustion; it was found that females were more likely to be emotionally exhausted than their male counterparts are. In addition, employees holding bachelor degrees had higher level of emotional exhaustion than those holding secondary or high school degrees.

Table 3. Multiple regression analysis for predicting emotional exhaustion

Variables	$\beta$	Sig
Work Variety	.214	.001
Work Identity	.417	.002
Work Significance	.368	.000
Work Autonomy	.003	.101
Work Feedback	.217	.003
Self-Esteem	-.489	.000
R square = .603		
Adjusted R <sup>2</sup> = .593		
F. 125.37 (0.000)		

Regarding H2, the results showed weak relationships among work characteristic dimensions and depersonalization. The model summary presented in table (4) illustrates that no substantial significance found in the regression equation; hence, the regression coefficient was small and the correlations were not significant; thus, depersonalization did not affected by the changes in work characteristics. On the contrary, self-esteem appeared to have a negative and moderately association with depersonalization (-0.216). The relationship was not significant but it was existed. Patently, supervisory-level employees who are less esteemed by their management are expected to become depersonalized. This finding contradicts with Bogaert et al. (2013) who found that work characteristics affect burnout dimensions. Thus, H2 is rejected.

Table 4. Multiple regression analysis for predicting depersonalization

Variables	$\beta$	Sig
Work Variety	.008	.101
Work Identity	.013	.163
Work Significance	.014	.240
Work Autonomy	.023	.111
Work Feedback	.019	.103
Self-Esteem	-.216	.070
R square = .203		
Adjusted R <sup>2</sup> = .193		
F. 9.841 (0.073)		

When work characteristics and self-esteem were regressed on reduced personal accomplishment, a strong negative and significant association was found among work characteristic dimensions, self-esteem and personal accomplishment see table (5). This finding clarifies the importance of work significance, work variety, work identity and work feedback in predicting personal accomplishment. Again, work autonomy had no influence on personal accomplishment of supervisory level staff. In addition, self-esteem was found to be a crucial factor influencing the accomplished work. A negative coefficient of ( $\beta$ ) means that as the size of the independent variable (work characteristics or self-esteem) increases, the size of the dependent variable (personal accomplishment) will decrease.

The results are consistent with conservation of resources theory that recognized reduced personal accomplishment occurs due to employees' feelings of drops in competences and accomplishing required work properly (Maslach, 1993). This result accords with (Anafarta and Cizel, 2003; Kuruzum, et al., 2008). Accordingly, the third hypothesis is confirmed.

Table 5. Multiple regression analysis for predicting personal accomplishment

Variables	$\beta$	Sig
Work Variety	-.201	.001
Work Identity	-.115	.006
Work Significance	-.541*	.000
Work Autonomy	.102	.069
Work Feedback	-.129	.003
Self-Esteem	-.516*	.000
R square = .728		
$\Delta R^2 = .689$		
F.	143.	487
(0.000)		

Note: \*  $p < .05$

In order to explore the effects of work characteristics dimensions alone on burnout, the following regressions were conducted. See table (6), shows positive and marginally high significant coefficients ( $\beta$ ) ranging from .216 to .617 were found for all work characteristic items with emotional exhaustion. Obviously, the emotional exhaustion of supervisory-level employees was greatly affected by work feedback and work variety, due the nature of supervisory job whom face pressure from the top management and customers. Similar results were obtained by Broecka , Vansteenkisteb , De Wittea and Lens, (2008) who found job characteristics greatly contribute to burnout. These results are also congruent with the findings of Jansen et al. (1996). Therefore, H4 is accepted.

Table 6 Multiple regression analysis of work characteristics for predicting job burnout dimensions

Variables	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	$\beta$	Sig	$\beta$	Sig	$\beta$	Sig
Work Variety	.398	.000	.142	.001	-.340	.001
Work Identity	.216	.000	.201	.003	-.252	.006
Work Significance	.286	.000	.111	.040	-.331	.000
Work Autonomy	.231	.011	.178	.061	.022	.041
Work Feedback	.617	.000	.115	.073	-.254	.003
R square =	.533		.381		.404	
AdjustedR <sup>2</sup> =	.508		.357		.371	
F.	113.	841	89.	052	76.	325
(0.000)			(0.047)		(0.000)	

A relatively strong association appeared when regressing work characteristic dimensions alone on depersonalization. Despite the low marginal effect ( $\beta$ ), which was not significant in two cases (work autonomy and work feedback) an association remained for work characteristics on depersonalization. Moreover, the results match with COR theory that argued depersonalization concerned with reducing individual emotional loss, which occurs due to facing customers' problems (Sutton and Kahn, 1986).

Notably, regressing work characteristic dimensions alone produced more powerful and accurate associations between the variables. In addition, work autonomy did not contribute to burnout in most cases. Based on that finding, H5 is supported.

The last regression indicated that work variety was the most important predictor for reduced personal accomplishment table (6);  $\beta = -0.340, p < 0.001$ ), followed by work significance ( $\beta = -0.331, p < 0.000$ ) and work feedback ( $\beta = -0.254, p < 0.003$ ).

Work identity was also a strong predictor of reduced personal accomplishment ( $\beta = -0.252, p < 0.006$ ). Work autonomy did not play any role in predicting personal accomplishment. Based on these results, H6 is confirmed.

Table (7) Simple Regression analysis of self-esteem for predicting job burnout dimensions.

Variables	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	$\beta$	Sig	$\beta$	Sig	$\beta$	Sig
Self-esteem	-.515*	.000	-.221	.001	-.241	.007
R square =	-.654		-.457		-.518	
$\Delta R^2 =$	-.611		-.412		-.469	
F.	142. (0.000)	482	117.621 (0.021)		124. (0.000)	529

Note: \*  $p < .05$

Regarding to the relationship between self-esteem and emotional exhaustion, the results showed that self-esteem plays an important role in predicting emotional exhaustion for supervisory-level employees; see table (7), the explained variation ( $R^2$ ) was negative and adjusted  $R^2 = -.611$ , indicating that self-esteem greatly influences emotional exhaustion. Moreover, the  $\beta$  coefficients of the characteristics were negative and significant, indicating that the less the supervisory-level employees were esteemed, the more emotionally exhausted they become. Notably, regressing self-esteem alone on emotional exhaustion produced a stronger coefficient than regressing self-esteem with work characteristics.

Table (7) also showed that self-esteem affects depersonalization, and the coefficient was strong and negative. Therefore, self-esteem considers as a significant predictor of depersonalization. In addition, self-esteem played a stronger role in determining personal accomplishment (Adjusted  $R^2 = -.469$ ;  $P .000$ ). It can be concluded that self-esteem had a strong effect on all burnout dimensions, especially on emotional exhaustion. These findings are congruent with Kang, Twigg and Hertzman (2010) who examined the effects organizational self-esteem on hospitality employees specifically chefs, and found organizational self-esteem and support lead to more production and less prone to illness (burnout symptoms). Moreover (Ferris et al., 2009; Lee and Pecce, 2007) detected a significant association between self-esteem and burnout. Accordingly, H7, H8 and H9 are accepted.

### 5. Conclusions and Managerial implications

When hotel top management did not understand the human side of work and employees, the risk of burnout increases, carrying with it a high price and harming all parties involved (Maslach, 1982). Supervisory-level staff in hotels faces much pressure to attain the hotels goals in terms of profit and gaining more market share. An intensive body of literature sheds light on the influence of work characteristics and self-esteem on work burnout in the service sector and hospitality. This study examined the roles of work characteristics as predictors of work burnout for supervisory-levels employees in Egyptian hotels. The literature has focused on the impact of work characteristics on burnout level, and studies have revealed a positive link between work dimensions and burnout (Lu and Gursoy 2016; Kim et al. 2009; Pienaar and Willemse 2008 Kuruzum et al. 2008). However, certain dimensions of work characteristics did not influence emotional exhaustions. Moreover, the work characteristics' dimensions did not contribute to depersonalization and the results contradicts with the literature.

#### Several conclusions can be derived from this study.

First, work characteristic dimensions were found to be relatively strong predictors of emotional exhaustion for supervisory-level employees; hence, the coefficient of explained variation was quite strong. The main determinants of supervisory-level emotional exhaustion were feedback received from customer, top management and managers, hence hotels operators emphasize the highest level of service standards that requires too much efforts and place stress on supervisors. In this regard, top management should avoid placing much stress on supervisors, as they are the coach or leader who will guide subordinates to keep the highest service level.

Work variety followed by work identity and work significance contributes to supervisors emotional exhaustions. Accordingly, top management should improve work characteristics to avoid supervisors' emotional exhaustions.

The merged results also showed that work characteristics has a slightly moderate role in predicting depersonalization; hence, work variety and work identity were found to be significantly associated with depersonalization. Finally, a strong negative and significant association was detected among work characteristic dimensions and reduced personal accomplishment, interpreting that work characteristics strongly improve the work performance. It can be concluded that work characteristics largely influence personal performance of supervisors. A concrete suggestion should be mentioned here for top managers and hotels operators "the best way to increase the accomplished work is by improving the different aspects of work characteristics.

Meaningful associations between self-esteem and all dimensions of burnout were observed. Supervisors' self-esteem negatively affect emotional exhaustion, depersonalization and reduced personal accomplishment. Coefficients were strong, and adjusted R<sup>2</sup> values were strong. Consequently, hotel operators should realize that appreciating employees and praising them is important to encourage them to perform well. Thus, hotel managers should attempt to establish direct communication with their supervisors, encouraging their initiatives and considering their opinions. The adoption of similar administrative practices to improve employee appreciation may contribute to an increase in their self-esteem, which will be reflected on their emotional work life, personality and personal accomplishment. Overall, this study provided important insights into the association between self-esteem and work burnout in hotels and explored the important role played by self-esteem in predicting work burnout; in addition, it gives operators indicators to avoid burnout. Although the current study was exploratory, it contributes to the literature on hotel-related human resources by extending current knowledge of the role of these two (work-characteristics and self-esteem) important factors for determining work burnout for supervisory-level employees in hotels.

### Limitations

In fact, there are some aspects deserve to be highlighted with regard to the limitations faced in this study. The study conducted only in two areas of Egypt, which means the study findings may not be generalized to whole areas in Egypt. Collecting the study data were through questionnaires, which is a common method variance may lead to mangle the results. Such method effects might be avoided in future research by using objective rather than subjective assessments of job characteristics and self-esteem variables. In addition to, the cross-sectional character of the study, although multiple regression analysis insights into the nature of the relationships, cross-sectional study do not clarify firm conclusions, regarding the causal association among studied variables. Thus, longitudinal research and cross-lagged model testing are encouraged to examine the causal relationships between work characteristics, self-esteem, and job burnout. Future research regarding burnout should include other traits that may affect burnout (e.g. role conflict). Another notion for future research is the study of the specific job conditions (work environment) that might contribute to burnout.

### References

- Abdelhamied, H. (2015). The moderating role of positional level and experience between employees' job satisfaction and turnover: evidence from hotels in Saudi Arabia. International conference on tourism (ICOT 2015) from tourism policy into practice: issues and challenges in engaging policy makers and end users. London, 24-27 June 2015.
- Ahmed, M. A. (2012). The role of self-esteem and optimism in job satisfaction among teachers of private universities in Bangladesh. *Asian Business Review*, 1 (1), 114-120.
- Akgunduz, Y. (2015). The influence of self-esteem and role stress on job performance in hotel businesses. *International Journal of Contemporary Hospitality Management*, 27(6), 1082 - 1099.
- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationship between personality variables and burnout: A meta-analysis. *Work and Stress*, 23, 244–263.
- Anafarta, N. & C, Izel, B., (2003). Career analysis in tourism industry: experiences from Turkey. *Tourism Review*, 58 (3), 15-19.
- Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of vocational behavior*, 62, 341-356.
- Bakker, A. B., Demerouti, E., Taris, T., Schaufeli, W., & Schreurs, P. (2003). A multigroup analysis of the Job Demands-Resources model in four home care organizations. *International Journal of Stress Management*, 10, 16-38.

- Bakker, A.B., Demerouti, E. & Schaufeli, W. (2005). The crossover of burnout and work engagement among working couples. *Human Relations*, 58, 661-689.
- Bitner, M. J., Booms, B. H. & Mohr, L. A. (1994). Critical Service Encounter: The Employee's Viewpoint. *Journal of Marketing*, 58 (4), 47-50.
- Bogaert, V. Clarke, P., Wouters, S., Franck, K., Willems, E., & Mondelaers, M. (2013). Impacts of unit-level nurse practice environment, workload and burnout on nurse-reported outcomes in psychiatric hospitals: a multilevel modeling approach. *International Journal of Nursing Studies*, 50 (3), 357-365.
- Brief, A. P. & Aldag, R. J. (1975). Employee reactions to job characteristics: A constructive replication. *Journal of Applied Psychology*, 60, 182-186.
- Brockner, J. (1988). *Self-esteem at work*, Lexington, MA: Lexington Books.
- Broeckea , Vansteenkisteb , De Wittea & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22(3), 277-294.
- Brymer, R. A., Perrewe, P. L. & Johns, T. R. (1991). Managerial job stress in the hotel industry. *International Journal of Hospitality Management*. 10 (1), 47-58.
- Buick, M. and Thomas, I., (2001). Why do middle managers in hotels burn out?. *International Journal of Contemporary Hospitality Management*, 13(6), 304 - 309.
- Burke, R. J., & Greenglass, E. R. (2001). Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychological Health*, 22, 123-132.
- Chen, W., Zhang, D., Pan, Y., Hu, T., Liu, G., & Luo, S. (2017). Perceived social support and self-esteem as mediators of the relationship between parental attachment and life satisfaction among Chinese adolescents. *Personality and Individual Differences*, 108, 98-102.
- Cotton, N. S. (1985). *A Developmental Model of Self-esteem regulation: Part 1*, Hather Leigh company, Long Island City, New York, NJ.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, 18 (4), 621-656.
- Crandall, R. (1973). The measurement of self-esteem and related constructs. In J. Robinson and P. Shaver (eds), *Measures of social psychological attitudes*. Ann Arbor: University of Michigan, Institute for Social Research.
- Demir, A. Ulusoy, M. & Ulusoy, M. F. (2003). Investigation of factors influencing burnout levels in the professional and private lives of nurses, *International Journal of Nursing Studies*, 40, 807-827.
- Dong-Hee, K., Young- Ae K, & In-Soon K. (2007), Social support mediated by cognitive and behavioral determinants as predictors of body mass index among Korean adolescents: a structural equation model. *Journal of Korean Acad. Child Health Nurs*, 13,13-20.
- Donnellan, M., Trzesniewski, K., Robins, W., & Moffitt, T. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency., *Psychological science*, 16 (4) 328-335.
- Ergin, C. (1996). Maslach Tukenmislik Olceginin Turkiye saglik personeli normları (Turkish health personnel norms of Maslach Burnout Inventory. *Dergisi*, 4 (1), 28-33.
- Ferris, D. L., Brown, D. J., Heller, D., (2009). Organizational supports and organizational deviance: the mediating role of organization-based self-esteem. *Organizational Behavior and Human Decision Process*, 108 (2), 279-286.
- Fried, Y. & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, 40, 287-322.
- Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93 (1), 108-124.
- Hackman, J. R. & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279.
- Hackman, J. R. & Oldham, G. R. (1980). *Work Redesign*. Philippines: Addison-Wesley.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22, 224-241.
- Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, 91,1134-1145.
- Halbesleben, J. R. B., and Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management*, 30, 859-879.

- Hockey, G. J. (1997). Compensatory control in the regulation of human performance under stress and high workload: a cognitive–energetical framework. *Biological Psychology*, 45, 73–93.
- Jackson, S. E. & Maslach, C. (1982). After-effects of job-related stress: Families as victims. *Journal of Occupational Behavior*, 3, 63-67.
- Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout Phenomenon. *Journal of Applied Psychology*, 71(4), 630–640.
- Jansen, P. G., Kerkstra, A., Abu-Saad, H. H. & Jouke, V. Z. (1996). The Effects of Job Characteristics and Individual Characteristics on Job Satisfaction and Burnout in Community Nursing. *International Journal of Nursing Studies*, 33 (4), 407- 421.
- Janssen, P. M., De Jonge, J., & Bakker, A. B. (1999). Specific determinants of intrinsic work motivation, burnout and turnover intentions: A study among nurses. *Journal of Advanced Nursing*, 29, 1360–1369.
- Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology*, 29, 284-297.
- Kang, B., Twigg, N. & Hertzman, J. (2010). An examination of social support and social identity factors and their relationship to certified chefs' burnout. *International Journal of Hospitality Management*, 29, 168–176.
- Karatepe, O. M. & Demir, E. (2014). Linking core self-evaluations and work engagement to work-family facilitation. *International Journal of Contemporary Hospitality Management*, 26, 307-323.
- Kim, H. J., Shin, K. H., & Swanger, H. (2009). Burnout and engagement: A comparative analysis using the big five personality dimensions. *International Journal of Hospitality Management*, 28, 96–104.
- Kozak, M., (2001). Türkiye’de Konaklama Sektörü ve Çalışan Kadınların Tükenmişlik Durumları Üzerine Bir Araştırma. *Gazi Üniversitesi Turizm Akademik Dergisi*, 2, 11-19.
- Kroner, D. G. Reddon, J. R. & Beckett, N. (1991). Basic personality inventory clinical and validity scales: Stability and internal consistency. *Journal of Psychopathology and Behavioral Assessment*, 13, 147-154
- Kuruüzüm, A., Anafarta, N. & Irmak, S. (2008). Predictors of burnout among middle managers in the Turkish hospitality industry. *International Journal of Contemporary Hospitality Management*, 20(2), 186 - 198.
- Kwek, A., Swee Lym, B., T., Rynne, G. J. & So, K. (2013). The Impacts of self-Esteem and Resilience on Academic Performance: An Investigation of Domestic and International Hospitality and Tourism Undergraduate Students. *Journal of Hospitality & Tourism Education*, 25 (3), 110-122.
- Law, J., Pearce, P. & Woods, B. (1995). Stress and coping in tourist attraction employees. *Tourism Management*, 16 (4), 277-284
- Ledgerwood, C. E., Crotts, J. C. & Everett, A. M. (1999). Antecedents of Employee Burnout in the Hotel Industry. *International Journal of Tourism Research*. 4(1), 31-44.
- Lee, R. & Ashforth, B. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123-33.
- Lee, J., & Pecce, R., (2007). Perceived organizational support and affective commitment: the mediating role of organization-based self-esteem in the context of job insecurity. *Journal of Organizational Behavior*, 28(6), 661–685.
- Leiter, M. P., and Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior*, 9(4), 297–308.
- Lingard, H. (2010). The impact of individual and job characteristics on 'burnout' among civil engineers in Australia and the implications for employee turnover. *Construction management and economics*, 21(1), 69-80.
- Loher, B. T., Noe, R.A., Moeller, N.L. & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology*, 70, 280-289.
- Mansour, S. & Tremblay, D. (2016). How the need for leisure benefit systems as a resource passageways moderates the effect of work-leisure conflict on job burnout and intention to leave: A study in the hotel industry in Quebec", *Journal of Hospitality and Tourism Management*, 27, 4-11.
- Lu, A. & Gursoy, D. (2016). Impact of Job Burnout on Satisfaction and Turnover Intention: Do Generational Differences Matter., *Journal of Hospitality & Tourism Research*, 40 (2), 210–235.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout, *Journal of Occupational Behavior*, 2, 99-113.
- Maslach, C. (1982). *Burnout: The cost of caring*. New York: Prentice-Hall.
- Maslach, C., Schaufeli, W. & Leiter, M. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.

- Maslach, C. & Leiter, M. (2005). Stress and burnout: The critical research. In C. L. Cooper (Ed.), *Handbook of stress medicine and health* (2nd ed., pp. 153–170). London: CRC Press.
- Merenda P. F. (1997). Methods, plainly speaking: A guide to the proper use of factor analysis in the conduct and reporting of research: Pitfalls to avoid. *Measurement and Evaluation in Counseling and Development*, 30,156–164.
- Morgeson, F. & Campion, M. (2003), *Work design*. Hoboken, N J: Wiley.
- Morgeson, F. P. & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321-1339.
- Neveu, J. P. (2007). Jailed resources: Conservation of resources theory as applied to burnout among prison guards. *Journal of Organizational Behavior*, 28, 21-42.
- Pavesic, D. V. & Brymer, R. A. (1990). Job satisfaction: what's happening to the young manager. *Cornell Hotel and Restaurant Administration Quarterly*, 30(4), 90-96.
- Peixoto, F. & Almeida, L. (2010). Self-concept, self-esteem and academic achievement: Strategies for maintaining self-esteem in students experiencing academic failure. *European Journal of Psychology of Education*. 25, 157-175.
- Pelit, E. & Turkmen, F. (2008). Otel İşletmeleri İşgörenlerinin Tükenmişlik Düzeyleri: Yerlive Yabancı Zincir Otel İşletmeleri İşgörenleri Üzerinde bir Araştırma", *Gazi Üniversitesi İİBF Dergisi*, 10(1), 117-139.
- Pienaar, J. & Willems, S. A. (2008). Burnout, engagement, coping and general health of service employees in the hospitality industry. *Tourism Management*, 29, 1053-1063.
- Pizam, A. & Neumann, Y. (1999). The effect of task characteristics on hospitality employees job satisfaction and burnout. *Journal of Hospitality & Tourism Research*, 12(2), 99-105.
- Prabhu, S. (1996). Challenges for hospitality and tourism operators: a North American perspective. *International Journal of Contemporary Hospitality Management*, 8(7), 52-62.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ross, C. E. & Broh, A. B. (2000). The roles of self-esteem and the sense of personal control in the academic achievement process. *Sociology of Education*, 73, 270-284.
- Rosse, G. J., Boss, W. R., Johnson, E. A. & Crown, F. D. (1991). Conceptualizing the Role of Self-Esteem in the Burnout Process. *Group Organization Management*, 16(4), 428-451.
- Schaufeli, W. B. & Bakker, A. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schutte, N., Toppinnen, S., Kalimo, R. & Schaufeli, W. (2000). The factorial validity of the Maslach Burnout Inventory-General Survey across occupational groups and nations. *Journal of Occupational and Organizational Psychology*, 73, 53–66.
- Shu, Q., Tu, Q., & Wang, K. (2011). The impact of computer self-efficacy and technology dependence on computer-related technostress: A social cognitive theory perspective. *International Journal of Human-Computer Interaction*, 27(10), 923-939.
- Spector, P. E. and Jex, S. M. (1991). Relations of job characteristics from multiple data sources with employee affect, absence, turnover intentions and health. *Journal of Applied Psychology*, 76, 46-53.
- Sutton, R. I., & Kahn, R. L. (1986). Prediction, understanding, and control as antidotes to organizational stress. In J. Lorsch (Ed.), *Handbook of organizational behavior* (272-285). Englewood Cliffs, NJ: Prentice-Hall.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. 3<sup>rd</sup> edition. New York: Harper Collins.
- Tetrick, L. E. & LaRocco, J. M. (1987). Understanding, prediction, and control as moderators of the relationships between perceived stress, satisfaction, and psychological wellbeing. *Journal of applied psychology*, 72, 538-542.
- Turner, A. N. & Lawrence, P. R. (1965). *Industrial jobs and the worker*. Boston: Harvard Graduate School of Business Administration.
- Tsai, F. J. & Chan, C. C. (2010). Occupational stress and burnout of judges and procurators. *International Archives of Occupational and Environmental Health*, 83, . 133–42.
- Williams, K E, Bond, M. J. (2002). The roles of self-efficacy, outcome expectancies and social support in the self-care behaviours of diabetics. *Psychol. Health Med.* 7,127–41.

- Wright, T. A. & Bonett, D. G. (1997). The contribution of burnout to work performance", *Journal of Organizational Behavior*, 18, pp. 491–499.
- Wright, T. A. & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover, *Journal of Applied Psychology*, 83(3), 486–493.
- Zhou, X., Ma, J., & Dong, X. (2018). Empowering supervision and service sabotage: A moderated mediation model based on conservation of resources theory. *Tourism Management*, Vol. 64, 170-187.