Journal of Tourism and Hospitality Management
June 2020, Vol. 8, No. 1, pp. 120-132
ISSN: 2372-5125 (Print), 2372-5133 (Online)
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Published by American Research Institute for Policy Development
DOI: 10.15640/jthm.v8n1a13
URL: https://doi.org/10.15640/jthm.v8n1a13

Emotional Labor and Service Sabotage in the Hospitality Industry: The Mediating Role of Emotional Exhaustion

Mei-Ying Lai¹, Lou-Hon Sun² & Hei-Lin Chu³

Abstract

This study explored the relationships among two emotional labor types (surface acting and deep acting), emotional exhaustion, and service sabotage, and examined the mediating effect of emotional exhaustion on the emotional labor–service sabotage relationship. The proposed study model was tested using data collected from 323 frontline employees in 10 international tourist hotel restaurants in Taiwan. Structural equation modeling was used to examine our hypotheses. The empirical results indicate that (i) surface and deep acting has significant positive and negative influences on emotional exhaustion, respectively; (ii) emotional exhaustion has a positive and significant relationship with service sabotage; and (iii) emotional exhaustion has a complete mediating effect on the surface acting–service sabotage relationship but a partial mediating effect on the deep acting–service sabotage relationship.

Keywords: emotional labor, surface acting, deep acting, emotional exhaustion, service sabotage

1. Introduction

The hospitality industry demonstrates high service density and "customer-first" service principles, both of which pose various problems to people working in the industry. The service quality of frontline personnel not only influences the first impression of guests directly but also plays a key role in deciding service quality and influencing customer satisfaction (Solomon *et al.*, 1985; Bitner *et al.*, 1990). However, the frontline personnel responsible for running the front-of-the-house must regularly cope with unreasonable requests and properly handle hard-to-please customers. They also must present an appropriate mood even under unpleasant circumstances. In brief, service personnel must always take care to display appropriate emotions to make a positive impression on customers. Hochschild (1983) was the first to call this special kind of work task "emotional labor."

Emotional labor at work may have negative effects on physical and mental health. Most studies have found that an excessive load of emotional labor may lead to burnout (Morris and Feldman, 1997; Kim, 2008; Lee and Ok, 2014). In addition, long-term continuous emotional labor can damage physical and mental health (Rafaeli and Sutton, 1987). Work that requires a high degree of emotional labor can consume the emotional resources of employees, so that they experience emotional exhaustion (Grandey, 2000; Hochschild, 1983; Morris and Feldman, 1996). The service industry includes customer-oriented businesses, in which most of the frontline employees are required by their organizations to display positive emotions and appropriate service behavior. However, the service provided by front line employees when dealing with customers may be either genuine (i.e., deep acting) or superficial (i.e., surface acting). Therefore, the first objective of this study is to identify the emotional labor type that more likely results in emotional exhaustion in frontline employees.

Emotions have often been ignored in organizational behavior studies (Arvey *et al.*, 1998; Putnam and Mumby, 1993). Because work places are regarded as rational environments, the presence of irrational emotions at workplace has yet not been considered in workplace research (Grandey, 2000).

¹ Associate Professor(Corresponding author). Department of Leisure Regimen Management, Tainan University of Technology

No. 529, Zhongzheng Rd., Yongkang District, Tainan City, 71002, Taiwan. Email: t20107@mail.tut.edu.tw

² Professor. Graduate Institute of Hospitality Management, National Kaohsiung University of Hospitality and Tourism

No.1, Songhe Rd., Xiaogang Dist., Kaohsiung City 81271, Taiwan. E-mail: honsun@mail.nkuht.edu.tw

³ Associate Professor. Department of Hospitality Management, Tunghai University

No.1727, Sec.4, Taiwan Boulevard, Xitun District, Taichung 40704, Taiwan. Email: kchu@thu.edu.tw

Nevertheless, this view has been invalidated gradually. Several researchers have believed that emotions in the workplace can help explain individual outcomes (Arvey et al., 1998) that lead to individual burnout (Maslach and Leiter, 1997). Their influence on organizational outcomes include increased resignation rate, resignation intention, negative work attitude, and low work performance (Lee and Ashforth, 1996; Wright and Cropanzano, 1998). Although many studies have reported on emotional labor, most have focused on its relationship with emotional exhaustion, work satisfaction, or service quality. Relatively few have explored whether emotions are a cause of service sabotage by employees.

Service sabotage is particularly consequential in the hospitality industry, because it has a negative influence on service quality, customer satisfaction, company performance, and even profitability (Harris and Ogbonna, 2006, 2009; Wallace and de Chernatony, 2008); however, it was not recognized until Harris and Ogbonna (2002) borrowed the term "industrial sabotage" for use in the study of the hospitality industry.

In the past, employees were usually assumed to follow and obey an organization's rules; however, it has actually been found that the behavior of employees usually runs counter to this idealistic assumption. Studies have revealed that more than 90% of hospitality employees admit that service sabotage is a daily occurrence in their workplaces (Harris and Ogbonna, 2002) and even that employees participate or engage in service sabotage behavior twice every three shifts (Harris and Ogbonna, 2012). Moreover, there may be a positive correlation between emotional labor and service sabotage (Lee and Ok, 2014; Luo and Bao, 2013). Emotional exhaustion caused by the long-term consumption of emotional resources in frontline service personnel under continuous pressure may be a cause of service sabotage. Investigating whether emotional exhaustion causes service sabotage behavior is the second objective of our study.

Most studies have indicated that deep acting provides results beneficial to the organization, whereas surface acting has adverse effects (Grandey, 2003; Hochschild, 1983; Rafaeliand Sutton, 1987). Different forms of emotional labor (i.e., surface and deep acting) may have different relationships with service sabotage behavior; describing this relationship is the third objective of our study.

Finally, emotional labor is related to emotional exhaustion, and emotional exhaustion is related to service sabotage. Moreover, emotional labor and service sabotage are related. Therefore, emotional exhaustion possibly plays a mediating role in the emotional labor—service sabotage relationship. No study has explored the mediating role, and filling this research gap is the fourth objective of our study. The results may provide a reference to businesses useful when recruiting and hiring employees and managing operations.

2. Conceptual Background and Hypotheses

2.1 Emotional Labor

The concept of "emotional labor," first stated by Hochschild (1983), states that at work places, employees must put on emotional camouflage according to the feeling rules required by the organization; emotional expression can therefore be seen as a form of commoditization insomuch as it is sold for wages. Emotional labor is also defined as "employees striving to control emotions to create facial expressions and body movements visible to everyone in public." Other scholars have provided their own definitions of emotional labor: Ashforth and Humphrey (1993) and Morris and Feldman (1996) emphasized the adjustment of the external expression of emotions. Grandey (2000), Zapf (2002), and Glomb and Tews (2004) believed that emotional labor is the adjustment of not only external emotional expression but also internal feelings. Regarding the forms of expression of emotional labor, "surface acting" and "deep acting" have been identified as the two most commonly used strategies for coping with display rule requirements (Hochschild, 1983; Zapf, 2002).

Surface acting refers to adjusting the expression of external emotions (such as facial expression or gaze) to change their display. This style of acting does not change employees' true internal feelings but only adjusts body language. In general, employees that tend to engage in surface acting may only follow the organization's rules for emotional expression to keep their jobs and do not genuinely do it to meet customer needs or to act in the organization's interest (Grandey, 2003). By contrast, deep acting refers to attempting to adjust one's true internal emotions to change one's external emotional display and attempting to make internal feelings consistent with expression. Employees engaged in deep acting, which is an "inside out" change, may not demonstrate emotional dissonance easily. In addition, employees engaged in deep acting appear to be highly concerned about the feelings of customers and thus interact with customers while expressing sincere emotions (Ashforth and Humphrey, 1993). Accordingly, in this study, we considered surface acting and deep acting as forms of emotional labor that frontline service employees demonstrate when interacting with customers.

2.2 Emotional Exhaustion

Many studies have reported that emotional exhaustion is a precursor symptom of burnout (Maslach, 1978, 1982; Maslach and Jackson, 1984; Maslach *et al.*, 2001; Saxton, Phillips, and Blakeney, 1991). The reason that emotional exhaustion occurs at work has also been investigated: To achieve the organization's goals, employees are needed to not only manage their own emotions but also manufacture the emotions required by the organization. This is a process that can cause stress. When employees engage in long-term and excessive emotional labor, they frequently experience self-alienation, in which a loss of connection between their real self and their self at the workplace occurs, leading to emotional exhaustion (Grandey, 2000; Hochschild, 1983; Morris and Feldman, 1996; Rafaeli and Sutton, 1987). It can even produce serious symptoms, such depersonalization and reduced personal accomplishment. In general, when people discuss work burnout, the most commonly mentioned experience is that of emotional exhaustion (Maslach, Schaufeli, and Leiter, 2001). This situation is particularly common in work that requires a considerable amount of interpersonal contact (Maslach, 1978; Wright and Cropanzano, 1998).

2.3 Emotional Labor-Emotional Exhaustion Relationship

The concept of emotional exhaustion and its consequences have been explored in emotional labor studies (Brotheridge and Grandey, 2002; Morris and Feldman, 1996). Studies have revealed that surface acting leads to stress, burnout, and even resignation; it also has a positive correlation with emotional exhaustion. Surface acting is the display of emotional expression that fakes or suppresses external emotions, even though true internal feelings remain unchanged. The fakery required for surface acting can easily produce negative emotions (such as emotional exhaustion) and lead to burnout (Brotheridge and Grandey, 2002; Grandey, 2003; Grandey et al., 2004; Chau et al., 2009). By contrast, the emotional labor of deep acting involves awareness and expression of positive emotions to influence the external expression of emotion from a deep internal level; it can also strengthen the feelings of personal accomplishment and reduce burnout (Brotheridge and Grandey, 2002). It also has a negative correlation with emotional exhaustion (Chu et al., 2012).

A study on hotel employees revealed that surface and deep acting had positive and negative influence on work burnout, respectively (Kim, 2008). Accordingly, surface acting often brings with it a higher degree of internal resource consumption, whereas deep acting influences a person's expression of service mood from the inside out, which makes the consumption of resources smaller and also reduces work stress and emotional exhaustion. Therefore, we propose the following hypotheses:

H₁: Surface acting has a significant positive influence on emotional exhaustion.

H₂: Deep acting has a significant negative influence on emotional exhaustion.

2.4 Emotional Exhaustion-Service Sabotage Relationship

Service sabotage is service employee misbehavior, intentionally designed to negatively affect service (Harris and Ogbonna, 2006). Regardless of whether this behavior is perceived by customers, coworkers, or managers, it fits this definition given that the employee sabotages the service encounter with a "deliberate" intention and acts in a way that they clearly know will have a negative influence on the quality of service (Harris and Ogbonna, 2009).

The reasons that emotionally exhausted employees engage in service sabotage have been explored. Lee and Ok (2014) identified work burnout as the main reason that employees engage in service sabotage. However, Crino (1994), Ferris et al. (2012), and Wang et al. (2011) found that improper treatment of service personnel by customers is the main factor in service sabotage. These results can be explained using conservation of resources theory, proposed by Hobfoll (1989): people have the basic motives of conserving, protecting, and establishing the resources that they value. An individual will not only strive to conserve their personal resources to prevent the psychological distress caused by the loss of these resources but also invest in them to accumulate the resources needed to cope with future challenges. Improper treatment by customers consumes the emotional resources of self-esteem and self-worth; therefore, service personnel will input other resources (such as time and energy) to engage in service sabotage to compensate for and restore the consumed emotional resources.

According to the findings of Raman, Sambasivan, and Kumar (2016), a significant relationship exists between the emotional exhaustion of frontline employees and their counterproductive behavior; this supports the hypothesis that excess emotional consumption can lead to counterproductive behavior. In addition, individual employees perform service sabotage behavior when they are in a bad mood (Guo and Sun, 2010; Lin, 2011). A positive correlation was also noted between emotional exhaustion and service sabotage behavior (Luo and Bao, 2013). Therefore, we state the following hypothesis:

H₃: Emotional exhaustion has a positive influence on service sabotage.

2.5 Emotional Labor-Service Sabotage Relationship

Most studies have focused on the influence of emotional labor on work attitude (Abraham, 1999; Grandey, 2003), stress (Brotheridge, 1999; Pugliesi, 1999), and satisfaction (Lam and Chen, 2012; Gursoy et al., 2011); however, little is known regarding the relationship between emotional labor and service sabotage. Emotional labor has a certain level of importance in employee deviance. Lee and Ok (2014) revealed that the emotional labor of employees (particularly emotional dissonance) is the main cause of service sabotage. Luo and Bao (2013) noted a positive correlation between emotional labor and service sabotage. In addition, Bu et al. (2015) proved that surface acting predicts service sabotage behavior more reliably than deep acting. Therefore, we state the following hypotheses:

H₄: Surface acting has a positive influence on service sabotage.

H₅: Deep acting has a negative influence on service sabotage.

2.6 Mediating Effect of Emotional Exhaustion

Emotions are the internal resources of an individual, but the feelings that are required by the organization may not necessarily be consistent with an employee's actual feelings. The long-term display of feeling that is required by the organization but is not actually felt by employees consumes emotional resources. Wang and Weng (2009) stated that burnout plays a mediating role in the emotional labor—work satisfaction relationship. Wang *et al.* (2012) also revealed that emotional labor can lower the work satisfaction of frontline employees in the hospitality industry through the mediating effect of burnout. In addition, Lee and Ok (2014) found that burnout has a mediating role in the emotional imbalance—service sabotage relationship. Therefore, we state the following hypotheses:

 H_{6a} : Emotional exhaustion plays a mediating role between surface acting and service sabotage. H_{6b} : Emotional exhaustion plays a mediating role between deep acting and service sabotage.

The proposed conceptual model is depicted in Figure 1: surface and deep acting have a significant influence on emotional exhaustion (H_1 and H_2), emotional exhaustion has a positive influence on service sabotage (H_3), emotional labor (surface acting and deep acting) influences service sabotage (H_4 and H_5), and emotional exhaustion mediates the emotional labor (surface acting and deep acting)—service sabotage relationship (H_{6a} and H_{6b}).

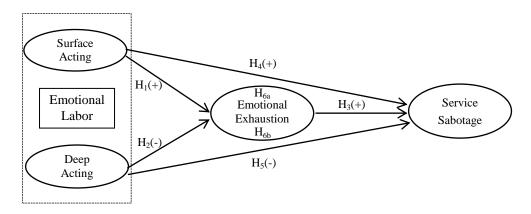


FIGURE1 | Proposed conceptual model.

3. Methods

3.1 Sample and Data Collection

This study used convenience sampling to collect data, with our research subjects being frontline employees in the food service departments of ten international tourist hotels in Taiwan. To ensure employees could answer questions without pressure, surveying was anonymous and a sealable envelope was provided with each questionnaire. Of 400 questionnaires sent, 355 were returned. Questionnaires that were incomplete or did not pass the negative question test were removed; finally, 323 questionnaire responses were valid (valid return rate, 80.8%).

Regarding the demographic characteristics of the respondents (Table 1), 63.8% of the participants were women. Of all respondents, 58.8%were aged 21–30 years and 25.4% were aged 20 years or younger; moreover, 80.5% had an education level of junior college or university, and 49.8% and 35.6% had completed 2–5 and 0.5–1 years of service at the hotel. Finally, most of the respondents were full-time employees (52.0%), followed by student assistants (29.4%), and most of the restaurants were Western restaurants (31.9%), followed by self-service restaurants (26.6%) and Chinese restaurants (22.6%).

TABLE 1 | Demographic information

Demographic	Item	N	
Gender	Male	117	36.2
	Female	206	63.8
	≤ 20	82	25.4
Λ	21-30	189	58.5
Age	31-40	42	13.0
	41-50+	10	3.1
	High school and lower	60	18.6
Education Level	Junior college, university	260	80.5
	Graduate school or higher	3	0.9
	6 months to 1 year	115	35.6
Years of service	2 to 5 years	161	49.8
rears of service	6 to 10 years	26	8.0
	More than 10 years	21	6.5
	Full-time	168	52.0
Nature of work	Part-time	60	18.6
	Part-time work for student	95	29.4
	Western restaurant	103	31.9
	Buffet	86	26.6
	Chinese restaurant	73	22.6
Type of restaurant	Banquet hall	24	7.4
	Japanese restaurant	18	5.6
	Teppanyaki	11	3.4
	Bar	8	2.5

3.2 Variable Measurement

To measure emotional labor, the Grandey (2003) scale was primarily used. The scale is largely divided into "surface acting" and "deep acting" scales. The surface acting scale used here comprised four items and was modified from the Grandey scale, with reference to the surface acting scale by Brotheridge and Lee (1998) and some other modifications. The deep acting scale used here comprised five items and modified from the Grandey scale, the scale created by Brotheridge and Lee (1998), and the revised scale proposed by Wu *et al.* (2005) with reference to the scales of Ashforth and Humphrey (1993) and Hochschild (1983). For measuring emotional exhaustion, five items from the occupational burnout scale (Maslach and Jackson, 1986) were used. For measuring service sabotage, questions developed by Harris and Ogbonna (2006) were used, with some modifications:

The third person style of their questionnaire was revised to the first person style and a total of five questions were included, with one of the questions being a negative question (used to evaluate whether the returned questionnaire was answered with the respondent's full attention). However, the negative question was not included in the empirical analysis. For measurement, a 6-point response scale, ranging from 1 (*Strongly disagree*) to 6 (*Strongly agree*), was applied because 6-point response scales are more stable than 4-or5-point scales (McKelvie, 1978). In addition, a scale with an even number can prevent the occurrence of a central tendency response and giving the measurement results more discriminative power.

3.3 Data Analysis

The study used AMOS for structural equation modeling (SEM). Hoyle and Panter (1995) proposed that SEM can be used to test hypotheses on the relationships between measured and latent variables and can simultaneously test hypotheses concerning the direct and indirect effects of measured or latent variables in a group (MacCallumand Austin, 2000). SEM can also be used to simultaneously process multiple dependent variables.

According to Anderson and Gerbing's (1988) suggestion, confirmatory factor analysis was conducted for all study variables to confirm that the items measured by the overall scale could effectively represent the independent dimensions that needed differentiation. Structural model analysis was then used to understand the amount of influence and the interpretative power of the cause-and-effect relationships between the variables.

4. Results

4.1 Confirmatory Factor Analysis

Confirmatory factor analysis is used to verify the construct validity of a model. Construct validity includes two key concepts, namely convergent and discriminant validities. For convergent validity (Table 2), the factor loading of all items was between 0.692 and 0.874, and the results of the t test reached a level of statistical significance in all cases. This indicates that all measured variables sufficiently reflected the constructed latent variables. The composite reliability scores for all variables were between 0.837 and 0.907, higher than the minimum of 0.70 defined by Hair *et al.* (2006). These results suggest good reliability of all the dimensions in our study, indicating that the measurement has good internal consistency. In addition, the average variance extracted (AVE) remained above 0.50 (Fornell and Larcker, 1981; Bagozziand Yi, 1988). The square multiple correlation (SMCs) coefficients of all items were also between 0.5 and 0.8 (Bagozziand Yi, 1988). These results indicate that the individual measured variables are reliable. The Cronbach's α for all dimensions was between 0.836 and 0.906, indicating that good reliability. Therefore, all dimensions of the study's model demonstrated convergent validity.

TABLE 2 | Confirmatory factor analysis

	Convergent validity				
Construct / Indicators	factor loading	SMC	C.R.	AVE	а
Surface Acting (Mean=3.63; Std dev.=0.99)					
I put on an act in order to deal with customers in an					
appropriate way.	0.771**	0.594			
I have to cover up my true feelings when dealing with					
customers.	0.692**	0.479	0.837	0.564	0.836
I pretend to have the emotions I need to display for my job.	0.804**	0.646			
I put on a "mask" in order to express the right emotions for					
my job.	0.731**	0.534			
Deep Acting (Mean=4.28; Std dev.=0.89)					
I am pleasant outside and inside when dealing with customers.	0.744**	0.554			
I try to change my actual feelings to match those that I must					
express to customers.	0.779**	0.607			
I make an effort to actually feel the emotions (e.g. friendliness,					
mildness) that I need to display to others.	0.848**	0.719	0.907	0.661	0.906
I attempt to create certain emotions (e.g. friendliness, mildness)					
in myself when dealing with customers.	0.830**	0.689			
I try to have good moods when I am unpleasant in workplace					
in facing with customers.	0.859**	0.738			
Emotional Exhaustion (Mean= 3.32; Std dev.=1.01)					

	Convergent validity				
Construct / Indicators	factor loading	SMC	C.R.	AVE	а
Surface Acting (Mean=3.63; Std dev.=0.99)					
I feel fatigued when I get up in the morning and have to face					
another day on the job.	0.752^{**}	0.566			
I feel burned out from my work.	0.831**	0.691	0.006	0.609	0.884
I feel frustrated by my job.	0.815**	0.664	0.886		
I feel I'm working too hard on my job.	0.722**	0.521			
I feel like I'm at the end of my rope.	0.776**	0.602			
Service sabotage (Mean= 2.61; Std dev.=1.01)					
I took revenge on rude customers.	0.730**	0.533			
I hurried customers when I want to.	0.874**	0.764			
I ignored company service rules to make things easier for myself.	0.777**	0.604	0.860	0.606	0.858
Sometimes, when customers aren't looking, I deliberately mess					
things up.	0.724**	0.524			

^{**}p < 0.01

Regarding discriminant validity (Table 3), this study mainly relied on Fornell and Larcker's (1981) method and used AVE. The results demonstrated that the square roots of the AVEs of the latent variables were all greater than the coefficient of the correlation between these variables and the dimensions (see the triangle at the bottom of Table 3) and that all dimensions had good discriminant validity.

TABLE 3 | Discriminant validity

	TIDLE	Discinimatic van	arcy	
	Surface Acting	Deep Acting	Emotional Exhaustion	Service Sabotage
Surface Acting	0.751			
Deep Acting	.151**	0.813		
Emotional Exhaustion	.165**	361**	0.780	
Service Sabotage	.128*	273**	.439**	0.778

^{1.} Values on the diagonal (in bold) represent the square root of AVE; lower diagonal values indicate factor correlations

4.2 SEM Analysis and Hypothesis Testing

Our study used "surface acting" and "deep acting" as exogenous latent variables and "emotional exhaustion" and "service sabotage" as endogenous latent variables for an overall model analysis. The empirical testing results of the study's hypothesis paths are listed in Table 4.

First, "surface acting" has a significant and positive influence on "emotional exhaustion" ($\beta = 0.273$; t = 4.41), thus proving H₁. If employees use "surface acting," emotional exhaustion increases. By contrast, "deep acting" has a significant and negative influence on emotional exhaustion ($\beta = -0.443$; t = -6.88), indicating that if employees use deep acting, the production of emotional exhaustion is reduced. Emotional exhaustion has a significant and positive influence on "service sabotage" ($\beta = 0.402$; t = 5.55), thus proving H₃.

^{2.} All correlations among study variables are significant

p < 0.05, **p < 0.01

Table4 | SEM analysis and hypothesis testing results

Path	direct effect	indirect effect	total effect	Result
	(t value)	(Sobel Test)		
Surface Acting → Emotional Exhaustion	0.273*** (4.41)			H ₁ supported
Deep Acting → Emotional Exhaustion	-0.443*** (-6.88)			H ₂ supported
Emotional Exhaustion → Service Sabotage	0.402*** (5.55)			H ₃ supported
Surface Acting → Service Sabotage	0.096 (1.53)			H ₄ not supported
Deep Acting → Service Sabotage	-0.156** (-2.36)			H ₅ supported
Surface Acting → Emotional Exhaustion → Service Sabotage		0.110^{***} (Sobel z = 3.45)	0.205^{**} (t = 2.36)	H _{6a} supported
Deep Acting → Emotional Exhaustion → Service Sabotage		-0.178*** (Sobel z = - 4.33)	-0.334^{***} (t = -5.15)	H _{6b} supported

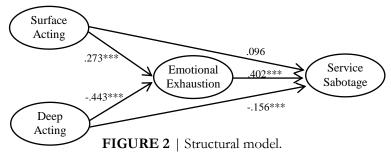
Goodness-of-fit statistics: $x^2/df = 1.968$, p = 0.00; GFI = 0.919; IFI = 0.960; RMR = 0.071; RMSEA = 0.055. **p < 0.05, ***p < 0.01

Finally, the path relationships between the two types of emotional labor (surface acting and deep acting) and service sabotage were tested. The standardized regression coefficients of the paths "surface acting \Rightarrow service sabotage" and "deep acting \Rightarrow service sabotage" were 0.096 (t=1.53) and -0.156 (t=-2.36), respectively, revealing that the emotional labor of surface acting is positively related to service sabotage, but it is nonsignificant. Surface acting does not directly influence service sabotage. By contrast, deep acting is negatively and significantly related with service sabotage; service sabotage is less likely to occur the more an employee uses deep acting. Therefore, H_4 is not supported, but H_5 is.

4.3 Testing for Mediating Effects

To understand whether emotional exhaustion has a mediating effect, we followed the principles of Baron and Kenny (1986) and Williams *et al.* (2009): (1) Independent variables must influence dependent variables; the standardized coefficients of surface acting and deep acting for service sabotage were significant (0.205 and -0.334, respectively; both p < 0.01). (2) Independent variables must influence mediating variables; the standardized coefficients of surface acting and deep acting for emotional exhaustion were significant (0.272 and -0.442, respectively; both p < 0.01). (3) Mediating variables must influence dependent variables; the standardized coefficient of emotional exhaustion for service sabotage was significant (0.447; p < 0.01). (4) The relationship between independent and dependent variables becomes nonsignificant or weakens after adding the mediating variable; the standardized coefficients of surface acting, deep acting, and emotional exhaustion for service sabotage are 0.096 (p> 0.05), -0.156 (p < 0.05), and 0.402 (p < 0.01), respectively. After the addition of the mediating variable, the coefficient of surface acting for service sabotage becomes insignificant, and the coefficient of deep acting for service sabotage was significant but with a weakened relationship. This proved the existence of the mediating effect.

To explore in greater depth the strength of the mediating effect of emotional exhaustion between surface/deep acting and service sabotage, we used the results obtained through SEM. First, we explored the mediating effect of emotional exhaustion between surface acting and service sabotage (Fig. 2 and Table 4). The two paths of "surface acting \rightarrow emotional exhaustion" and "emotional exhaustion \rightarrow service sabotage" both had statistically significance, and the indirect effect of the relationship was 0.11 (0.273 * 0.402). In the Sobel (1982) test, the z value was 3.45 (p< 0.01), indicating statistical significance. These results confirm that surface acting influences service sabotage behavior through "emotional exhaustion." Therefore, H_{6a} is supported; the emotional exhaustion of front line employees in the hospitality industry has a complete mediating effect between surface acting and service sabotage. This result indicates that although the surface acting of service personnel does not directly cause service sabotage, it does increase the occurrence of service sabotage through the mediating effect of emotional exhaustion.



Next, we explored the mediating effect of emotional exhaustion between deep acting and service sabotage (Fig. 2 and Table 4). The two paths "deep acting \rightarrow emotional exhaustion" and "emotional exhaustion \rightarrow service sabotage" both attained the level indicating a statistically significant effect, and the indirect effect of the relationship was -0.178 (0.443 * 0.402). In the Sobel (1982) test, the z value was -4.33 (p< 0.01), indicating statistical significance. Therefore, a mediating effect for emotional exhaustion is present. Furthermore, the direct effect of "deep acting \rightarrow service sabotage" has a significant negative relationship (-0.156^{***}). Therefore, emotional exhaustion has a partial mediating effect between deep acting and service sabotage, and H_{6b} is supported.

Notably, although the coefficient for the total effect that deep acting has on service sabotage is -0.334 (p< 0.05), it is -0.156 for the direct effect. Thus, in a situation where an employee has emotional exhaustion, the negative relationship between deep acting and service sabotage weakens. In other words, even if employees make use of deep acting, occurrence of service sabotage behavior may increase with emotional exhaustion.

5. Conclusions

With frontline employees of the food service departments of international tourist hotels as research subjects, this study explored the relationships among emotional labor (surface acting and deep acting), emotional exhaustion, and service sabotage as well as the mediating role of emotional exhaustion in the emotional labor–service sabotage relationship. Moreover, all hypotheses, except H₄, were supported.

First, our study found that surface acting and deep acting have significant positive and negative influences on emotional exhaustion, respectively. If a frontline employee follows the emotional expression rules of the organization only to keep their job and uses surface acting to fake a good mood when dealing with customers, this quickly leads to emotional exhaustion. However, if employees can change their external emotional expression by adjusting their true internal emotional feelings and change interaction with customers in a positive way "from inside out," then the occurrence of work fatigue and emotional exhaustion is reduced. This is consistent with the results obtained by Grandey (2003).

Second, emotional exhaustion has a positive and significant relationship with service sabotage. This outcome is similar to the results reported by Luo and Bao (2013) and Lee and Ok (2014). Consistent with conservation of resources theory, when an individual is faced with various stressors in the workplace, they will use all the resources they have in their response. No matter how successful they are, resource loss occurs and the individual experiences psychological distress. Accordingly, to value and conserve their remaining resources, an individual may use a "defensive" strategy and engage in service sabotage by inputting other resources (such as time and energy) to compensate for the emotional resources that were consumed. Therefore, emotional exhaustion can predict the occurrence of service sabotage. Third, surface acting has a positive but nonsignificant relationship with service sabotage. In contrast to this, deep acting has a negative and significant relationship with service sabotage. Although this finding is slightly different from that of Lee and Ok (2014) and Luo and Bao (2013), it demonstrates that instances of service sabotage decrease when use of deep acting increases.

Finally, emotional exhaustion plays an important mediating role. Surface acting does not directly affect the occurrence of service sabotage, but we discovered that if "emotional exhaustion" is used as a mediating variable, then the emotional exhaustion of employees has a "complete mediating effect." In other words, although surface acting does not directly affect service sabotage, it leads to the occurrence of service sabotage behavior through "emotional exhaustion." Therefore, using insincere emotions to deal with customers for a prolonged period can build up stress and cause emotional exhaustion, which ultimately leads to service sabotage behavior. Regarding deep acting, it has a direct influence on service sabotage behavior. The more employees deal with customers with sincerity, the less likely it is that service sabotage behavior will occur. Notably, emotional exhaustion also indirectly influences the occurrence of service sabotage; it has a partial mediating effect. If a frontline employee is experiencing emotional exhaustion, the use of deep acting does not prevent service sabotage behavior.

5.1 Theoretical Contribution

The theoretical contributions of our study are as follows. First, past studies related to emotional labor have rarely explored "service sabotage" as the outcome variable; the study addressed this gap. Second, we discovered that emotional exhaustion has a complete mediating effect with surface acting and a partial mediating effect with deep acting. This result is a revelation for the study of emotional labor and highlights the crucial role that emotion plays in the workplace. When the relationship between emotional labor and other variables are explored by future studies, the mediating role of emotional exhaustion is one factor to consider.

5.2 Practical Implication

When employees make use of deep acting, their service performance improves. In addition, it also reduces the occurrence of emotional exhaustion. In management practice, during frontline service personnel selection, the interview or written test stage can be used to obtain an understanding of whether the applicant has a high degree of identification with the organization and intention to join as well as their ability to observe emotion. This can help predict whether they can serve and interact with customers using an optimal mode of emotional expression (i.e., deep acting) when dealing with customers.

Next, employees can be trained to use deep acting when interacting with customers. Emotional management courses can train employees in the skills essential for emotional expression (Chu *et al.*, 2012; Totterdell and Parkinson, 1999). This will lower the frequency of surface acting and increase the use of deep acting. In turn, instances of emotional exhaustion and service sabotage can decrease and work performance can improve, which will be beneficial for the healthy development of employees and the organization.

Increasing the work resources available to employees can also reduce burnout. Encouraging the work initiative of employees through work design, allowing employees opportunities to participate in the decision-making of the organization within a reasonable scope, and providing employees feedback and guidance after a performance evaluation can all decrease work burnout (Zhan *et al.*, 2011).

Managers can also use the Hospitality Emotional Labor Scale (Chu and Murrmann, 2006) to regularly track and evaluate the state of employee emotional labor to understand the actual emotional labor performance of employees and to develop plans for improving interaction.

Finally, according to the research, "motivational compensation" can encourage employees to follow and internalize the organization's rules of emotional expression and promote social and personal identification (Ashforth and Humphrey, 1993). It can also reduce emotional imbalance and occupational burnout caused by the execution of emotional tasks by employees (Sutton, 1991). Additionally, Robbins (1991) argued that the influence of salaries on work performance is even higher than that of raising levels of goal-setting, participating in decision-making, and designating more challenging work tasks with more responsibility. Therefore, for frontline service personnel with low starting pay, long work hours, and high stress, salary systems should be altered to enhance the work satisfaction of employees and thereby raise the organization's operational performance.

5.3 Limitations and Future Research

In this study, we used questionnaires to collect data. The data was composed of the self-evaluations of the service personnel, and the respondents might have looked for connections between the variables in the questionnaire, which would influence responses. This means that the study could have the problem of commonmethod variance. However, the questions were mixed so that respondents could not easily perceive connections among the variables. Future studies can consider having managers or coworkers measure the surface acting and deep acting of service personnel. In addition, the study samples were limited to the hospitality industry. Although this increased internal validity, generalizing the results of this study to other industries would require careful consideration. Future studies could select different samples for testing. Furthermore, we did not include variables at the organization or environment level. Future studies can pursue more in-depth exploration to better understand the influence of work environment and managerial styles on emotional labor.

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