International Journal of Hospitality Management 90 (2020) 102632

Contents lists available at ScienceDirect

International Journal of Hospitality Management

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

Employees' perceived job performance, organizational identification, and pro-environmental behaviors in the hotel industry

Xuerong Peng[a,b,*], Seoki Lee[c], Zhenglan Lu[a]

[a] Zhejiang Gongshang University, China
[b] Fudan University, China
[c] The Pennsylvania State University, United States

ARTICLE INFO

Keywords:
Pro-environmental behaviors
Organizational identification
Perceived job performance
Chinese hotel industry

ABSTRACT

Employees' engagement in pro-environmental behaviors (PEBs) is crucial for greening hotels and improving hotel performance. This paper argues that we can explore employees' PEB motivations from a positive externality/spillover perspective because such voluntary behaviors benefit actors other than the employees, namely, the hotels that employ them and the surrounding natural environment. Accordingly, compensation and internalization could motivate employees' PEBs. This paper attempts to advance research on internalization by focusing on the oneness between employees and organizations and by proposing that organizational identification (OI) is an essential predictor of employees' PEBs and can be improved by increasing their perceived job performance (PJP). Additionally, this paper argues that PJP can affect employees' PEBs through OI. In the context of the positivism research philosophy, the current study utilized a survey method to collect data from employees working in Chinese hotels and performed ordinary least squares (OLS) regression analysis to test the proposed hypotheses, which were all supported empirically.

1. Introduction

Motivating employees to engage in pro-environmental behaviors (PEBs) has been a recent hot topic in the hospitality literature (Chan and Hsu, 2016; Peng and Lee, 2019; Rezapouraghdam et al., 2018; Zientara and Zamojska, 2018). Chan and Hsu (2016, p.905) noted that "without staff involvement, a company's environmental program will very likely fail, as frontline employees execute many environmental measures". Graves et al. (2013, p.81) defined PEBs as “a broad set of eco-friendly activities in the workplace, such as learning and thinking about the environment, developing and applying ideas to reduce the company’s negative effects on the physical environment, developing green products and processes, and recycling as well as reusing”. Employees' PEBs in the hotel industry often refer to value-added organizational citizenship behaviors (OCBs) targeting the environment (Kim et al., 2017b; Pereira-Moliner et al., 2015; Tian and Robertson, 2019) for both monetary and environmental benefits (Van der Werff and Steg, 2018). In such PEBs, the primary beneficiaries are the hotel itself and the natural environment (Peng and Lee, 2019). The externality view in the economics literature states that positive externalities or spillovers occur when the action of one party (i.e., hotel employees’ PEBs in the current study) benefits another party or other parties (i.e., the hotel and natural environment in the current study). Further, this effect, when altruistic, is not directly reflected in the market (i.e., no compensation) (Pindyck and Rubinfeld, 2018). Positive spillovers tend to reduce incentives for employees to engage in PEBs, and two approaches address this issue: compensation and internalization (Peng and Lee, 2019). First, via compensation, the beneficiaries (i.e., hotels and the natural environment) can provide incentives to the actors (i.e., employees) for their PEBs' positive spillovers. Second, via internalization, the actors internalize their PEBs’ positive spillovers from the beneficiaries, either symbolically or substantially. Symbolic internalization includes the actors’ cognitive perception of oneness with the beneficiaries. Substantive internalization consists of the actors integrating with the organizational beneficiaries by obtaining ownership of their organizations.

The analysis of PEBs in the workplace from the externality perspective can help us better understand the benefits of employees' PEBs for employees, hotels and the natural environment.It can also identify unique predictors of employees’ PEBs from two directions: compensation and internalization. The compensation literature has emphasized how compensation works in PEB situations and has examined the impacts of various incentives and related predictors, such as organizational supports for PEBs from policies, leaders, and peers (Cantor et al.,

* Corresponding author.
E-mail addresses: pxr1122@zjgsu.edu.cn, pxr1122@163.com (X. Peng), leeseoki@psu.edu (S. Lee), zlluhz@zjgsu.edu.cn (Z. Lu).

https://doi.org/10.1016/j.ijhm.2020.102632
Received 23 April 2019; Received in revised form 15 June 2020; Accepted 10 July 2020

2012; Chou, 2014; Peng and Lee, 2019; Zientara and Zamojska, 2018). However, previous studies have shown that providing incentives to motivate employees to conduct PEBs may not be a practical or cost-effective method in the hotel context. First, hotels find it difficult to measure employees' PEBs in terms of monetary value. Furthermore, because the hotel industry is a low-profit margin sector, the primary purpose of hotels' encouraging employees' engagement in PEBs is often to save costs (Kim et al., 2017b). Thus, hotels tend to expect or even encourage their employees to engage in PEBs voluntarily to minimize the cost of implementing an environmental program. Otherwise, the hotels' original economic target in implementing the environmental program becomes difficult to achieve. The internalization literature has argued that employees' perceived oneness with the natural environment positively affects employees' PEBs. Such perceptions include an individual cognition of connectedness to nature, which is rooted implicitly or explicitly in the employees' environmental concern, environmental ethics, and environmental awareness (Rezapouraghdam et al., 2018; Zientara and Zamojska, 2018). However, previous studies have paid less attention to how employees *internalize* their PEBs' positive spillovers gained by their hotel, which could consequently impact the impetus of employees' PEBs (Peng and Lee, 2019).

To fill this research gap, the current study focuses on employees' symbolic internalization of their PEB's positive spillovers gained by hotels and its impact on employees' PEBs. We argue that organizational identification (OI), defined as employees' perceived oneness with an organization, is an essential antecedent of employees' PEBs. Previous studies have shown that people with a higher level of OI tend to conduct more OCBs, which can be related to PEBs. This relationship occurs because those with high identification with their organization tend to become stewards in the principal-steward relationship more than those with low identification (Davis et al., 1997). Moreover, those stewards are more likely to seek to meet the goals of the organization (e.g., sales growth or profitability) with higher collective orientation (Davis et al., 1997). Furthermore, we propose that perceived job performance (PJP) is an essential predictor of employees' OI and that OI mediates the relationship between PJP and PEBs (Fig. 1 shows the conceptual framework). Previous studies have emphasized the organizational predictors of OI and have focused on identifying the types of organizations (e.g., prestigious organizations) that can improve employees' self-enhancement and their identification with the group. However, these studies have paid less attention to those employees who have higher OI than other employees in the same organization. The main difference in the underlying logic between the previous literature and the current study in this regard is the entity to which employees feel attached for prestige. While the previous literature tends to emphasize that members' self-enhancement is mainly derived from the prestige of their organization, the current study proposes that individual self-enhancement can result from members' personal prestige (Zhu et al., 2017). These two logics together can provide a full picture of how the two different types of prestige (i.e., organizational prestige vs. personal prestige) influence employees' OI.

Our study makes theoretical and practical contributions. First, this paper identifies OI as an important predictor of employees' PEBs in the hotel industry from the externality perspective, which opens a new research direction for studies concerning the antecedents of PEBs in the workplace for the hotel industry. This perspective considers the organizational context in which employees conduct PEBs and explicitly notes that the costs and benefits of personal PEBs in the workplace differ from those at home and while traveling. We argue that financial compensation (i.e., incentives) in the hotel industry is not a practical or effective method of encouraging employees to engage in PEBs, and employees' internalization of their PEBs' positive spillovers (environmental benefits) from the natural environment has been overemphasized in the previous literature. Moreover, this internalization effect in the form of health benefits rooted in ecological embeddedness is difficult for hotel employees to perceive because the hotel industry is not considered as a significant contributor to pollutions. Therefore, it is necessary to analyze the antecedents of PEBs in the workplace by exploring how *hotel* employees, in particular, internalize their PEBs' positive spillovers (i.e., monetary and environmental benefits) gained by hotels. OI is an appropriate construct to explore this issue in the hotel industry because OI refers to employees' perceived oneness with their organization and reflects employees' cognitive/symbolic (vs. substantial, e.g., the hotel offers ownership incentives to general employees) integration with the organization. Thus, OI is an efficient and practical method of motivating employees to engage in PEBs without adding extra cost to the organization, specifically for the hotel industry.

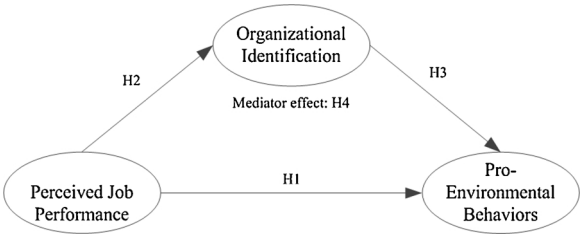

Fig. 1. Conceptual framework.

Second, we propose that hotels can enhance their employees' OI by helping them improve their PJP, especially in the short-term. Furthermore, our findings suggest that employees with high PJP would conduct PEBs only when their high PJP accelerates their OI. Employees with high PJP may change jobs if they ascribe their achievements to internal (personal) rather than to external (organizational) influencing factors. This proposition matches the status of the hotel industry. The OI literature emphasizes that prestigious organizations can improve their employees' OI (He and Brown, 2013; Zhu et al., 2017). However, because the hotel industry, characterized by a low entry salary and challenging work, is typically not considered as a top prestigious industry in the labor market, hotels find it difficult to improve their employees' OI through improving organizational prestige. The high turnover rate of employees in the hotel industry supports this notion. Therefore, in the hotel industry, identifying the type of employees who have a relatively high degree of OI among all employees in the same organization is very important. The current study argues that employees with high PJP tend to have high OI because high PJP tends to satisfy employees' fundamental needs of self-enhancement, which is the necessary foundation of OI (Haslam, 2004; He and Brown, 2013). Thus, helping employees improve their PJP, especially over the short-term, is an effective method of increasing their OI with hotels. We also argue that employees with high PJP do not always voluntarily engage in PEBs unless they believe that their achievements are strongly connected to organizational support and then increasingly identify themselves with the organization, namely, by developing a higher level of OI. This finding extends the literature concerning the antecedents of OI and PEBs. Furthermore, it uncovers the conditions under which an employee who has high in-role performance also has high extra-role performance, specifically in the hotel context. This finding contrasts with the reverse causality underlined by the previous literature (Chiang and Hsieh, 2012; Munir et al., 2019).

2. Theory and hypotheses

2.1. PJP and PEBs

We argue that employees' in-role performance impacts their extra-role performance, such as PEBs' performance. Previous studies have explored the antecedents of in-role performance and extra-role performance, but have seldom discussed the relationship between them (Lee et al., 2004; Miao et al., 2014; Newman et al., 2015; Park et al., 2016; Randall et al., 1999). However, the extant literature has widely discussed this issue at the organizational level: the relationship between

doing well (corporate financial performance, CFP) and doing good (corporate social performance, CSP) (Lin et al., 2019). A meta-analysis conducted by Orlitzky et al. (2003) suggested that CSP is overall positively related to CFP and that the underlying core logic is that CSP can improve corporate legitimacy and reputation, subsequently benefitting CFP. However, some scholars have also argued that the causal relationship between CSP and CFP might be bidirectional, with CFP also impacting CSP (McGuire et al., 1988; Waddock and Graves, 1997). Furthermore, some scholars have argued that CFP has a positive impact on CSP, while other scholars hold the view that CFP is negatively related to CSP (see the review section regarding Lin et al. (2019)'s study). For example, Waddock and Graves (1997) suggested that good CFP accelerates CSP due to great organizational slack resources. They also noted that a firm with high CFP is more visible to stakeholders, which could more likely become the target of socialists, tending to improve CSP (Chiu and Sharfman, 2011). However, Janney and Gove (2011) proposed that CSP can buffer the negative results of organizational scandal. Such a result suggests that organizations with low CFP might turn to CSP to reverse the poor corporate capital market performance.

We argue that this logic can be extended to the discussion of the relationship between in- and extra-role performance at the employee level of an organization. In this study, in-role performance is analogous to PJP, while extra-role performance corresponds to PEBs' performance. The extant literature suggests that PEBs require additional responsibilities and distract employees from in-role behaviors; thus, employees are resistant to engaging in PEBs (Kim et al., 2017b). Therefore, employees with good job performance likely have poor performance in extra-role behaviors. Moreover, Park and Levy (2014) suggested that a firm's green practices help employees identify their meaning within their organizations; thus, employees with poor job performance might engage in PEBs to enforce their sense of presence in their organizations. The underlying assumption of this argument is that in- and extra-role behaviors are not compatible, require different capabilities, and pay disproportionately.This study argues that this assumption is not always correct, especially in the hotel industry.

First, as extra-role behaviors, PEBs are perceived as value-added OCBs in the hotel industry (Kim et al., 2017b). They can be compatible with the organizational profit-making mission by saving costs and increasing differentiation (Pereira-Moliner et al., 2015). Examples of the former include reducing the use of energy, water, and material, while the latter consists of improving corporate image and reputation. Thus, PEBs in the hotel industry produce a more visible economic outcome than their environmental contributions because the hotel industry is not a heavy polluter, and the primary motivation for implementing PEB programs in hotels is often to improve profitability (Kim et al., 2017b). Consequently, such behaviors could be compatible with in-role behaviors. Hotels expect employees to conduct PEBs voluntarily to contribute to hotel performance, suggesting that employees who focus on PJP should also notice the value-added feature of PEBs in hotel operations. Thus, employees who seek to improve job performance may consider these extra-role behaviors as in-role behaviors and tend to engage in PEBs to enhance their job performance.

Second, engagement in PEBs at the individual level, such as saving water while hand-washing and saving energy by turning off lights, rarely requires additional capabilities and is highly related to employees' environmental attitudes, values, beliefs and norms (Chan et al., 2017; Li et al., 2019) as well as the perceived results of a cost-benefit analysis (Lindenberg and Steg, 2007; Steg and Vlek, 2009). Indeed, engagement in PEBs does not increase the pressure or burden of employees who target excellent job performance. Employees' unwillingness to engage in PEBs in the workplace is not heavily related to the assumption that PEBs require additional capabilities. In contrast, compared to employees with poor job performance, employees with good job performance tend to have high self-esteem because they receive positive feedback from their hotels. This experience may increase their OI, causing them to exert great efforts to contribute to hotel performance by engaging in PEBs. Furthermore, if additional capabilities are needed, everything else being equal, employees with good job performance may possess stronger capabilities than employees with poor job performance. This phenomenon would indicate that employees with good (vs. poor) job performance would have better qualifications for such extra-role behaviors. Therefore, we propose Hypothesis 1:

Hypothesis 1. PJP is positively related to PEBs.

2.2. PJP and OI

According to social identity theory, individuals identify with social units to satisfy two fundamental needs, namely, self-enhancement (striving to view oneself in the best light possible) and uncertainty reduction (Haslam, 2004). Ashforth, 2000 further noted that the self-enhancement motive seems to have the following two components—positively experiencing an identity and experiencing growth toward "becoming a truer exemplar of a valued identity", respectively referred to as prestigious organization-based self-enhancement and prestigious individual-based self-enhancement. Thus, individuals satisfy the perceptions that they are worthwhile persons by connecting to a prestigious organization (identifying themselves with a winner) or becoming the ideal of an organization (making oneself a winner and then being recognized by others). Therefore, many studies have focused on the characteristics of organizations that can improve the perceived organizational prestige of its members, thus improving individual OI. Such characteristics include perceived organizational distinctiveness, prestige and the salience of the out-group(s) (Ashforth and Mael, 1989; Mael and Ashforth, 1992). However, limited attention has been paid to which individuals in the same organization have higher OI (Zhu et al., 2017).

In this study, we attempt to advance the latter research direction. To do so, we focus on the idea that individuals who seek to become more representative of their organizations by envisioning how a good member can strive to become an ideal member (Ashforth et al., 2008). We reason that such individuals will have high OI after achieving good PJP. Specifically, job performance is the most crucial criterion for an individual overall performance appraisal in a business organization, so employees with good PJP are more likely to perceive themselves as exemplars of their organization and their subsequent OI will be increased. Furthermore, those with good job performance are more likely than those with poor job performance to consider themselves as winners and satisfy their need for self-enhancement, which is an essential motive for a person to identify with a social group (He and Brown, 2013). Hence, employees with high PJP tend to identify with the organization, namely, to have high OI. In addition, the success of a business organization is not isolated from the success of individual employees. When employees achieve higher job performance, their OI is stronger because they will have high confidence in the bright future of their organizations and themselves, and their concern about uncertainty for the future will decline. Therefore, we propose Hypothesis 2:

Hypothesis 2. PJP is positively related to OI.

2.3. OI and PEBs

OI describes employees' cognitive perceptions of their oneness with their organizations (Ashforth and Mael, 1989). OI "reflects the psychological merging of self and organization. The more people identify with an organization, the more the organization's values, norms, and interests are incorporated in the self-concept" (Van Knippenberg and Sleebos, 2006, p.572). As an individual's identity and fate become intertwined with those of the organization, s/he becomes a microcosm of the organization (Ashforth et al., 2008; Ashforth and Mael, 1989; Van Knippenberg and Sleebos, 2006). Identification with an organization

likely enhances members' support for and commitment to it (Ashforth et al., 2008; Ashforth and Mael, 1989; Zappalà et al., 2019; Zhu et al., 2013). Thus, we argue that employees with higher OI are more likely to engage in PEBs because they may psychologically internalize their PEBs' positive spillovers from their organizations when they perceive oneness with them. Specifically, Davis et al. (1997) proposed that people who highly identify with their organizations are more likely than those who have low identification with their organizations to become stewards (vs. agents) in principal-steward relationships. Stewards' behaviors are collective because stewards have work ethics that motivate them to improve their performance and that of the organization to overcome both internal and external challenges (Aßländer et al., 2016; Davis et al., 1997). Previous studies have suggested that PEBs in the hotel industry are often considered a value-added environmental strategy (Kim et al., 2017b). These practices can create a corporate competitive advantage by saving costs (e.g., saving water, energy and materials) and increasing differentiation (e.g., improving a hotel's green image or reputation by reducing negative impacts on the natural environment). These benefits are consistent with organizational interests (Kim et al., 2017b; Pereira-Moliner et al., 2015). Hence, employees with higher OI are more likely to perform a cost-benefit analysis of engagement in PEBs based on the organization's collective interests (i.e., altruism) rather than their individual interests (Ashforth and Mael, 1989; Dutton et al., 1994; Van Knippenberg and Van Schie, 2000) and to see the achievements of the organization as their own. Thus, these employees are intrinsically motivated to contribute to the collective and to engage in PEBs because they internalize, psychologically or symbolically, their PEBs' positive spillovers gained by the hotels. Therefore, we propose Hypothesis 3:

Hypothesis 3. OI is positively related to PEBs.

2.4. The mediating role of OI

Considering H1, H2, and H3, we argue that PJP is positively related to PEBs only when PJP improves employees' identification with the organization. Thus, OI is a full mediator in the relationship between PJP and PEBs. Employees with high PJP do not always have high OI due to the different interpretations of the reasons for their achievements. When employees ascribe their achievements to internal factors (e.g., personal abilities), they may consider that they could work in a more prestigious organization; thus, their turnover intention will increase after achieving high PJP, and their OI will decrease or will not change dramatically. This type of employee often has a high level of personal prestige, which is independent of changing situations. Zhu et al. (2017) have suggested that such an employee's OI fluctuation is lower than that among employees with a lower level of personal prestige. In contrast, if employees with high PJP attribute their success to external factors (e.g., organizational support), their personal prestige increases with the changing situation (i.e., high PJP). Then, their OI will increase as well. Consequently, they will engage more in PEBs to appreciate the support of the organization. In the hotel industry, many entry-level employees have a relatively low level of personal prestige (e.g., academic qualifications) when they enter the industry, which increases the likelihood of the external attribution of their achievements. Hence, most employees with high PJP in the hotel industry more likely to perceive support from supervisors and their hotels, thus increasing their OI instead of their turnover intention. Overall, PJP triggers employees' motivation to engage in more PEBs only when it increases employees' OI because positive feedback regarding in-role behaviors (high job performance) fulfills employees' desires for self-enhancement. Employees will regard themselves as part of the hotel and will be willing to perform more PEBs for benefitting hotel performance (He and Brown, 2013). Therefore, we propose Hypothesis 4:

Hypothesis 4. OI is a mediator in the relationship between PJP and PEBs.

3. Methods

3.1. Sample and data collection

We collected our data by conducting a survey of employees working in the Chinese hotel industry. China is an emerging country whose hotel development has increased over the past 40 years after the Chinese reform and opening up in 1978. Currently, China has the most hotels in operation worldwide. The average growth rate of hotels per year in China is more than 20 % according to a data analysis based on the Mintel database. Therefore, the environmental impact of the Chinese hotel industry cannot be ignored. Moreover, employee cognition and organizational behaviors in emerging countries are undergoing substantial change due to the rapid economic development, requiring closer attention to their behavioral models and new insights to manage employees better.

The questionnaire was initially prepared in English and then translated into Chinese by two scholars competent in both languages with substantial research experience in the Chinese hotel industry. The survey questionnaire was adopted after both scholars agreed on the Chinese translation. A back translation was conducted by two competent experts to avoid potential bias and ensure validity (Esposito, 2001). The questionnaire included two parts. The first part contained study-constructed scales regarding employees' PEBs, PJP, and OI and the green organizational climate (control variable). The second part included questions related to the respondents' demographic information (e.g., gender, age, educational level, and position) and the background information of the hotels where they worked (e.g., green hotel certification, hotel level, and ownership types).

We carried out this survey by using a Chinese online survey tool, i.e., ***Questionnaire Star*** (https://www.wjx.cn/); the survey could be completed on computers and smartphones and could be shared with acquaintances by the respondents. Using an online survey has four advantages. First, the recording and coding of the survey data are automatic; thus, potential errors in the manual input of paper survey results can be avoided, and the data input time can be saved. Second, an online survey can calculate the time taken by the respondents to finish the study, helping to judge the survey quality. We removed responses with a completion time of fewer than 150 s. Third, respondents find it convenient to share the survey with other people to improve the participation rate. Fourth, online surveys also record the Internet Protocol address of the respondents, which is useful for reducing the probability that one respondent submits more than one response.

To ensure the survey quality, we used two channels to conduct our survey. We shared the online questionnaire with hotel employees who participated in a green hotel training course organized by the local tourism administration and hotel association. In addition, we sent the online survey to the director of the human resources department of the hotels where we had built a collaborative relationship through consulting projects. These two channels have high authority, which contributed to the employees' willingness to participate and to provide highly reliable and valid responses. The online-based survey was conducted in March and April of 2018 and in March of 2019. Of the 829 respondents who agreed to complete the survey, 294 valid responses were generated. Table 1 shows the characteristics of the sample.

3.2. Measures

We derived the measures of several constructs in our framework from existing scales or studies in the literature and revised these measures to suit the context of our study. We operationalized the constructs using reflective measures and controlled for the number of items to ensure that the questionnaire was reasonably short to improve the

Table 1
Sample characteristics (N = 294).

Characteristic	n	%
Characteristics of the Hotels in which Respondents Worked		
Green Hotel Certification		
Hotels with the Green Hotel Certification	192	65.3
Hotels without the Green Hotel Certification	102	34.7
Hotel Level		
Economical or Budget	8	2.7
Midscale	86	29.3
Upscale and Above	200	68.0
Ownership Type		
State-Owned or Controlled Hotels	161	54.8
Non-State-Owned or Controlled Hotels	133	45.2
Characteristics of the Respondents		
Gender		
Male	97	33
Female	197	67
Age		
20 and Below	12	4.1
21 – 25	70	23.8
26 – 30	48	16.3
31 – 35	38	12.9
36 – 40	53	18.0
41 – 45	47	16.0
46 – 50	19	6.5
Over 50	7	2.4
Educational Level		
Junior Middle School and Below	23	7.8
Technical Secondary School or High School	66	22.4
Junior College	111	37.8
Undergraduate (Bachelor)	80	27.2
Postgraduate (Master or Doctor)	14	4.8
Position		
Staff without A Managerial Title	119	40.5
Foreman	34	11.6
Team Leader or Supervisor	48	16.3
Department Manager or Assistant of the Department Director	52	17.7
Department Director or Assistant of the General Manager	26	8.8
Associate General Manager	8	2.7
General Manager	7	2.4
Years Working in the Hotel Industry		
1 Year and Below	59	20.1
(1, 3]	51	17.3
(3, 5]	33	11.2
(5, 7]	17	5.8
(7, 9]	22	7.5
(9, 11]	17	5.8
Over 11	95	32.3
Marital Status		
Married	160	54.4
Single or Divorced	134	45.6
Origin		
Native	182	61.9
Nonnative	112	38.1

response rate. Multi-item scales were used to measure the study constructs. We used 5-, 7-, and 9-point scales to measure the constructs. A 7-point scale ranging from 1 “strongly disagree” to 7 “strongly agree” was used to measure PEBs and one control variable (i.e., the green organizational climate). A 5-point scale ranging from 1 “very poor” to 5 “excellent” was used to measure PJP. A 9-point scale ranging from 1 “strongly disagree” to 9 “strongly agree” was used to measure OI.

PEBs. We adopted the four most representative items from previous studies (Graves et al., 2013; Kim, Kim et al., 2016; Saifulina and Carballo-Penela, 2017) to measure employees’ PEBs, including saving water and energy, recycling and offering ideas for reducing their hotels’ impacts on the environment.

OI. We adopted the five items from Mael and Ashforth (1992) to measure the extent of employees' OI. The items included “When somebody criticizes our hotel, it feels like a personal insult” and “When I talk about this hotel, I usually say “we” rather than “they” ”.

PJP. We constructed a 3-item scale adapted from (Bal and De Lange, 2015) to measure PJP. Sample items include (1) “How would you rate your job performance as an individual employee?”, (2) “Think about your most recent assessment of your job performance or the most recent time you received feedback from your supervisor. How do you think your supervisor would rate your performance?”, and (3) “How would you rate your performance as a work team member?”.

Control variables: Based on the previous literature, we controlled for the following variables: the characteristic of the hotels where the respondents worked, such as the ownership types (1 = state-owned hotel, 0 = nonstate owned hotel); the green hotel certification (1 = hotel with the green hotel certification, 0 = hotel without the green hotel certification); the green organizational climate, which was measured by four items adopted from Chou (2014) with a response scale ranging from 1 (strongly disagree) to 7 (strongly agree); and respondent characteristics, such as gender (1 = male, 0 = female), age (eight levels: 1 = 20 and below, 2 = 21 – 25, 3 = 26 – 30; 4 = 31 – 35, 5 = 36 – 40, 6 = 41 – 45, 7 = 46 – 50, and 8 = over 50), educational level (five levels: 1 = junior middle school and below, 2 = technical secondary school or high school, 3 = junior college, 4 = undergraduate or bachelor’s degree, and 5 = postgraduate or master’s or doctoral degree), position level (seven levels: 1 = staff without a managerial title, 2 = foreman, 3 = team leader or supervisor, 4 = department manager or assistant of the department director, 5 = department director or assistant of the general manager, 6 = associate general manager, and 7 = general manager), years working in the hotel industry (seven levels: 1 = (0,1], 2 = (1, 3], 3 = (3, 5], 4 = (5, 7], 5 = (7, 9], 6 = (9, 11], and 7 = over 11), marital status (1 = married, 0 = single or divorced), and origin (1 = native, native to the city where currently employed, 0 = nonnative, with a hometown other than the city where currently employed).

3.3. Construct reliability, validity, and common method variance (CMV)

We conducted a confirmatory factor analysis (CFA) to assess the convergent and discriminant validities of the multi-item constructs using AMOS 21.0. The CFA results suggested that the measurement model had an acceptable model fit ($\chi 2 = 180.195$, $p = .000$; $\chi 2/df = 1.839$; goodness of fit index (GFI) = 0.927; confirmatory fit index (CFI) = 0.974; incremental fit index (IFI) = 0.974; root mean square error of approximation (RMSEA) = 0.054). All factor loadings were greater than 0.60 and statistically significant (Anderson and Gerbing, 1988), and no cross-loadings were identified, indicating the unidimensionality of the measures. The average variance extracted (AVE) estimates were equal to or higher than 0.50 (Bagozzi and Yi, 1988). These two findings supported the convergent validity of the constructs. All constructs were measured by reflective (vs. formative) indicators. Thus, we also calculated Cronbach’s α and the composite reliability (CR) value of each factor to assess the convergent validity and reliability of the measures. All Cronbach's α and CR values exceeded the 0.7, suggesting that all factors had good internal consistency. Altogether, the results of these tests demonstrated the acceptable convergent validity and reliability of the measures. Table 2 shows the scale of the factors, the standardized factor loadings of the items, and the Cronbach’s α and CR values of each factor.

The descriptive statistics and correlation matrix are shown in Table 3. All correlations between the constructs were below |0.7|, indicating distinctness and, thus, discriminant validity (Ping, 2004). Three additional techniques were employed to assess discriminant validity. First, the correlations between any two constructs in the study were less than the square root of the AVE estimates of the corresponding constructs of all pairs (Fornell and Larcker, 1981), indicating a more internal than external correlation, thus suggesting discriminant validity (Ping, 2004). Second, none of the confidence intervals of the different correlations between the constructs included 1.0 (Anderson and Gerbing, 1988). Because the 95 % confidence bands around the φ did not contain a value of one, we concluded that the constructs

Table 2
Construct measurements and confirmatory factor analysis results (N = 294).

Constructs	Measuring items	Standardized loading	α	CR
Employees' PEBs (Graves et al., 2013; Kim et al., 2016; Saifulina and Carballo-Penela, 2017) (AVE = 0.526)	1 At work, I try to reduce my energy use (e.g., turn off the lights when leaving, take the stairs to the lower levels).	0.800	0.811	0.815
	2 At work, I always save water (e.g., take a water-saving shower in the employee bathrooms).	0.751		
	3 At work, I try to reduce use, recycle, and reuse materials (e.g., print double-sided).	0.707		
	4 At work, I offer ideas for reducing our hotels' impact on the environment.	0.631		
Perceived Job Performance (Bal and De Lange, 2015) (AVE = 0.698)	1 How would you rate your performance as a work team member?	0.806	0.870	0.874
	2 How do you think your supervisor would rate your performance?	0.877		
	3 How would you rate your job performance as an individual employee?	0.821		
Organizational Identification (Mael and Ashforth, 1992) (AVE = 0.712)	1 When someone criticizes our hotel, it feels like a personal insult.	0.775	0.923	0.924
	2 When I talk about this hotel, I usually say 'we' rather than 'they'.	0.700		
	3 This hotel's successes are my successes.	0.892		
	4 When someone praises this hotel, it feels like a personal compliment.	0.934		
	5 If a story in the media criticized this hotel, I would feel embarrassed.	0.895		
Green Organizational Climate (Chou, 2014) (AVE = 0.762)	1 Our hotel publicly publishes an environmental policy.	0.835	0.926	0.927
	2 Our hotel continuously provides employees with environmental education and training.	0.831		
	3 Our hotel's managerial supervisors support the environmental protection task.	0.911		
	4 Our hotel promotes environmental measures in the workplace.	0.911		
CFA Model Fit Summary: $\chi 2$ = 180.195, p = .000; $\chi 2/df$ = 1.839; GFI = 0.927; CFI = 0.974; IFI = 0.974; RMSEA = 0.054				

Notes: All factor loadings of the CFA are statically significant. α = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted.

Table 3
Descriptive statistics and correlation matrix (N = 294).

	Constructs	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Employees' PEBs	5.874	0.727	***0.725***[a]												
2	Perceived Job Performance	3.669	0.630	0.150**	***0.835***											
3	Organizational Identification	6.980	1.166	0.382**	0.307**	***0.844***										
4	Green Organizational Climate	5.361	1.002	0.455**	0.080	0.360**	***0.873***									
5	Green Hotel Certification (dummy)	0.653	0.477	0.026	−0.062	0.064	0.211**									
6	Hotel Level	2.653	0.531	−0.007	0.053	0.020	0.109	−0.059								
7	State-owned Hotel (dummy)	0.548	0.499	0.085	−0.040	−0.109	0.008	−0.016	0.101							
8	Gender (dummy, Male = 1)	0.330	0.471	−0.055	0.132*	0.079	0.035	−0.036	0.118*	−0.045						
9	Age	4.027	1.810	0.061	0.267**	0.107	−0.020	0.027	−0.114*	0.093	0.061					
10	Educational Level	2.986	1.002	−0.09	0.148*	0.085	−0.047	−0.060	0.087	−0.142*	−0.128*	−0.177**				
11	Position Level	2.605	1.657	0.027	0.384**	0.251**	−0.056	−0.118*	−0.102	−0.217**	0.124*	0.526**	0.295**			
12	Years Working in Hotel Industry	4.099	2.416	0.167**	0.330**	0.141*	0.037	0.018	−0.085	0.091	0.031	0.681**	0.033	0.630**		
13	Marital Status (dummy, Married = 1)	0.544	0.499	0.032	0.155**	0.096	−0.083	−0.036	−0.045	0.115*	−0.070	0.479**	−0.101	0.203**	0.411**	
14	Origin (dummy)	0.619	0.486	0.055	0.285**	0.090	−0.046	0.017	−0.117*	0.188**	0.014	0.694**	−0.151**	0.448**	0.656**	0.407**

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
[a] The square root of the average variance extracted (AVE) for each construct is along the diagonal (in bold).

possessed discriminant validity. Third, we conducted a pairwise chi-square difference test by comparing an unconstrained model with a constrained model in which the correlation between the two constructs was set to one (Anderson and Gerbing, 1988). For each pair of constructs, the results revealed a significant chi-square difference between the constrained and unconstrained model, indicating that the unconstrained model was better than the constrained model and, hence, that each pair of constructs achieved sufficient distinction. These results suggested that the constructs were distinct with evidence of discriminant validity. In summary, our measures demonstrated adequate discriminant validity.

Like most survey studies, CMV may exist in the data because the same survey participants provided all information, including the dependent and independent variables (Podsakoff et al., 2003). Based on the suggestions of Podsakoff et al. (2003), we adopted preprocedural methods and post-statistical techniques to reduce the potential of CMV. First, to avoid item ambiguity, we adopted mature scales from previous studies, piloted these scales among experts in industry and academia, and revised the items that were ambiguous or that generated doubt. Second, we operationalized the core constructs with different scale anchors (e.g., 5-, 7-, and 9-point scales) and structured the constructs in random order with reasonable line spacing for psychological separation. Third, to avoid social desirability, in the introduction of the questionnaire, we encouraged the respondents not to hesitate to refuse to participate in our survey if they did not want to join, and we further guaranteed confidentiality to the respondents who agreed to participate. We also revised the names of the constructs that might have led the respondents to lie to provide a positive response (the potential for social desirability). For example, we changed the construct name "organizational identification" to "perception of your hotel" and maintained the measurement indicators from the original items recommended in the literature. Fourth, we used Harman's one-factor test to examine whether CMV seriously affected our data. An exploratory factor analysis of all items yielded no single factor that accounted for a threshold of 50 % of the total variance before rotation, indicating no substantial CMV. Harman's one-factor test of our data demonstrated that 38 % of the variance, i.e., less than half of the total variance, was explained by the first factor before rotation. Thus, CMV did not seem to be serious in our data. Finally, we followed the latent variable approach suggested by Podsakoff et al. (2003) by allowing the items to load on their theoretical constructs and a latent CMV factor. We found that all significant relationships held after controlling for the latent CMV factor.

4. Results

The means, standard deviations, and correlations are presented in Table 3. We used ordinary least squares (OLS) regression to test the hypothesized direct and mediating effects. We adopted the three-step mediated regression approach recommended by Baron and Kenny (1986) to test the hypothesized effects. In step 1, we examined the relationships between endogenous forces (i.e., PJP) and employees' PEBs. In step 2, we tested the relationships between endogenous forces and the mediator (i.e., OI). In step 3, we predicted employees' PEBs by adding the mediator to the step 1 regression model. Thus, the new regression model includes both the endogenous variable and OI. To support the hypotheses of mediation effects, the mediator should be significantly related to employees' PEBs, while the previously significant effects of endogenous forces should be reduced or become nonsignificant. We examined the variance inflation factors (VIFs) for the regression models. For all models, the VIFs ranged from 2.7 to 2.8, and none exceeded 10, indicating no threat of multicollinearity. Table 4 presents the results of the mediated regression analyses.

Hypotheses 1 and 3 predict that PJP and OI exert positive and significant effects on employees' PEBs. The results (Model 2: $\beta = 0.120$, $p < 0.05$, and Model 3: $\beta = 0.284$, $p < 0.001$) showed that both PJP and OI were significantly and positively related to PJP. Hence, Hypotheses 1 and 3 are supported. Hypothesis 2 proposes that PJP has a positive effect on OI. Model 6 ($\beta = 0.211$, $p < 0.001$) suggested that PJP was significantly and positively related to OI, supporting Hypothesis 2. Hypothesis 4 addresses the mediating effect of OI. As shown in Table 2, Models 2, 6, and 4 reported the mediated regression results of steps 1, 2, and 3, respectively. Models 2 and 6 showed that PJP was positively and significantly related to employees' PEBs and mediators (i.e., OI). In Model 4, which added a mediator to predict employees' PEBs, the mediator (i.e., OI) was significantly and positively related to employees' PEBs ($\beta = 0.270$, $p < 0.001$). At the same time, the regression coefficients of PJP became nonsignificant, suggesting that OI is a full mediator between PJP and employees' PEBs. Hence, Hypothesis 4 is supported.

4.1. Robustness checks

We conducted two additional analyses to ensure that our results were sufficiently robust. First, we conducted a structural equation modeling (SEM) analysis to test the mediation hypotheses (see Fig. 2). The overall model fit was satisfactory. The chi-square statistic ($\chi2 = 96.883$, df = 51; $\chi2/df = 1.900$) was significant ($p = .000$), and the fit indices were within the accepted standards (GFI = 0.946; CFI = 0.978; IFI = 0.978; RMSEA = 0.055). After the overall model fit was approved, the hypotheses were tested via SEM. The estimation results showed that every path coefficient was significant except the direct path from PJP to PEBs. Specifically, as we predicted, PJP had a positive and significant effect on OI ($\beta = .361$, $p < 0.001$), and OI had a positive and significant effect on PEBs ($\beta = .410$, $p < 0.001$), supporting H2 and H3. The direct effect of PJP on PEBs was not significant, while the indirect effect of PJP on PEBs via OI was positive and significant ($\beta = .200$, $p < 0.01$). Thus, OI is a full mediator between PJP and PEBs, supporting H4. The total effect of PJP on PEBs was also positive and significant ($\beta = .161$, $p < 0.05$), supporting H1. Thus, the SEM results were consistent with the above regression tests recommended by Baron and Kenny (1986).

Second, we conducted the Sobel test to ensure that the indirect mediation effects were statistically significant (Sobel, 1982). We calculated the z-value based on the equation $ab/\sqrt{b^2s_b^2 - a^2s_a^2}$, where a and S_a are raw (unstandardized) regression coefficients and standard errors for the effects of the independent variables on the mediator, while b and S_b are raw regression coefficients and standard errors for the effects of the mediator on the dependent variables (when the independent variable, PJP, is also a predictor of the dependent variable PEBs). The Sobel test results showed that the indirect effect of PJP on PEBs via OI was significant, with z-values of 4.36 ($p = .000$). These results further support H4, proposing the mediating effect of OI between PJP and PEBs.

5. Discussion and conclusion

Relying on insights from the positive externality perspective, the current study proposes that OI is an important predictor of employees' PEBs and can be improved by increasing PJP. This study also argues that PJP positively affects PEBs through OI. This relationship works because PJP satisfies employees' self-enhancement needs by increasing employees' personal rather than organizational prestige. This phenomenon consequently improves employees' perceived oneness with their organizations and makes employees psychologically internalize the positive spillovers caused by their PBEs to their hotels. Our empirical results show that OI is a full mediator in the relationship between PJP and PEBs. This finding may answer the question regarding the conditions under which an employee with high in-role performance could also perform well in extra-role behaviors such as PEBs. Next, we discuss the theoretical contributions and managerial implications of our findings.

Table 4
Multiple regression analyses for the mediation model (N = 294).

Predictors and controls	DV = PEB				DV = Mediator/OI	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Green Organizational Climate	0.463***	0.451***	0.354***	0.352***	0.386***	0.364***
Green Hotel Certification	−0.081	−0.075	−0.089†	−0.085†	0.028	0.038
Hotel Level	−0.045	−0.053	−0.046	−0.050	0.002	−0.012
State-owned Hotel	0.067	0.070	0.081	0.082	−0.048	−0.044
Gender	−0.083	−0.095†	−0.096†	−0.102†	0.045	0.023
Age	−0.078	−0.078	−0.060	−0.061	−0.061	−0.062
Educational Level	−0.106†	−0.120†	−0.113†	−0.120*	0.025	0.000
Position level	0.021	−0.005	−0.066	−0.075	0.305***	0.260**
Years Working in Hotel Industry	0.224**	0.217*	0.254**	0.248**	−0.103	−0.116
Marital Status	0.007	0.001	−0.031	−0.033	0.134*	0.124*
Origin	−0.061	−0.079	−0.072	−0.081	0.038	0.006
Perceived Job Performance		0.120*		0.063		0.211***
Organizational Identification			0.284***	0.270***		
F Value	8.968***	8.685***	11.101***	10.351***	7.400***	8.198***
R^2	0.259	0.271	0.322	0.325	0.224	0.259
Adjusted R^2	0.230	0.239	0.293	0.293	0.194	0.228
Δ R^2	–	0.011	0.062	0.054	–	0.035
Δ F	–	4.389*	25.869***	22.407***	–	13.400***
VIF-max	2.792	2.792	2.797	2.798	2.792	2.792

*** Correlation is significant at the 0.001 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
† Correlation is significant at the 0.1 level (2-tailed).

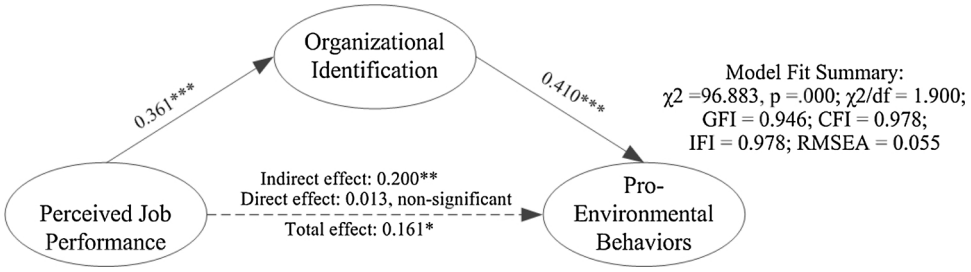

Fig. 2. Structural equation modeling results.

5.1. Theoretical contributions

This study makes the following theoretical contributions. First, our findings reveal that OI is an important predictor of PEBs from the externality perspective. They also support the argument that OI is an effective predictor of in-role and extra-role behaviors (Riketta, 2005) in the hotel context. This study emphasizes both the monetary and environmental benefits of PEBs in the hotel industry. It also argues, from the externality perspective, that employees' PEBs can be considered as positive spillover behaviors that simultaneously benefit the hotels and the natural environment in which employees are embedded. Positive spillovers reduce the motivation of employees to conduct PEBs in the workplace (Peng and Lee, 2019). Hence, according to the economics literature, to motivate employees to engage in PEBs, we should use compensation and/or internalization measures to solve the positive spillover issue (Peng and Lee, 2019). Compensation includes beneficiaries offering incentives to the subjects of positive spillovers, while internalization consists of oneness/integration between the subjects of positive spillovers and beneficiaries. Previous studies on compensation or discretion indicate an emphasis on the role of incentive or compulsory measures, or on personal altruism for the physical environment (e.g., environmental values, awareness, beliefs or attitudes) (Afsar et al., 2016; Chan et al., 2017; Chou, 2014; Kim et al., 2017a; Norton et al., 2017; Saifulina and Carballo-Penela, 2017; Wang, 2016; Zientara and Zamojska, 2018) and organizations (e.g., work ethics and workplace spirituality) (Peng and Lee, 2019; Rezapouraghdam et al., 2018). Previous studies on internalization have emphasized on the role of the employees' connection to the natural environment (Liu et al., 2019; Rezapouraghdam et al., 2018) rather than to their organization in motivating employees to engage in PEBs. This concept has received little attention in the past literature (Peng and Lee, 2019).

If appropriately developed and implemented, a policy or strategy that accelerates employees' oneness with the organization can help an organization improve employees' engagement in value-added OCBs, such as PEBs, even in the absence of a monetary rewarding system. Our findings suggest that OI works according to this logic in the hotel context because hotel employees with high OI regard themselves as stewards (vs. agents) of the organization and act accordingly to benefit organizational performance regardless of their self-interests (Wasserman, 2006). Thus, the findings of this paper enrich the internalization perspective, which holds that employees' high OI is an essential predictor of PEBs for the hotel industry. Previous studies have often assumed that employees are antagonistic to organizations. These studies have neglected the fact some employees have high OI and regard their companies' success as their own. These employees are likely to make great efforts in both their in- and extra-role performance (Lee et al., 2015).

Second, our findings show that PJP is an essential predictor of OI. Thus, it influences PEBs, suggesting that OI is a full mediator in the relationship between PJP and PEBs. This finding helps us better understand the driving factors of employees' PEBs in the hotel industry. Specifically, the current study proposes that in-role behaviors predict extra-role behaviors. This idea supports the logic that "doing well" employees tend to seek to "do good" in the workplace. This logic

challenges and supplements the previous studies' argument that employees' extra-role performance is an effective predictor of in-role performance (Chiang and Hsieh, 2012; Munir et al., 2019). Our findings suggest that the reverse causal relationship (i.e., PJP influences PEBs) also exists in the hotel context.

Furthermore, we argue that PJP can increase the likelihood of employees' engagement in PEBs only when PJP improves employees' OI. Previous studies have argued that OI is a predictor of job performance (Carmeli et al., 2007; Mael and Ashforth, 1995; Van Dick et al., 2004). However, in the current study, we find that the reverse causality also interestingly exists in the hotel context, a useful finding for the hotel industry. Specifically, for most people, joining a new company often suggests that they identify with the organization to some extent. However, employees' initial OI is often unstable and appears to be high or vague because it is not rooted in the employees' real perception and experience with the organization. Moreover, in the hotel industry, due to the low average entry salary and high intensity of work, employees tend to have lower levels of organization-based prestige/self-enhancement than employees in other sectors do. Consequently, many employees' initial OI with their hotel may not be high. After a period of working in the hotel, the employees receive feedback regarding their daily job performance from their leaders and peers. Then, they revise their perception of their fit with the hotel and have a more reasonable and stable identification with it. Thus, seeking self-enhancement by identifying with a winner (i.e., a prestigious organization) may not work well in the hotel industry. However, individual-based prestige might work better for hotels, especially when the organization and managers offer support. Such prestige consists of striving to be the ideal/exemplar of the organization through high job performance.

However, employees with high PJP may not always increase their identification with the organization if they ascribe their achievements to internal (e.g., personal abilities) instead of external (e.g., organizational support) factors. Under this condition, good performing employees may seek a more excellent organization, their identification with the current organization will decrease, and their contribution to extra-role performance will also decrease or remain unchanged. Thus, the internalization solution of positive spillovers caused by employees' PEBs when employees and organizations merge may not work when PJP does not improve employees' OI.

5.2. Managerial implications

Our findings also have managerial implications. First, hotels should consider initiating their promotion of PEBs among employees with a high level of OI and PJP. Previous studies have focused on the role of compulsory measures and incentives in motivating employees to conduct PEBs (Kim et al., 2017b), which often require extra investment and added costs. The primary motivation of hotels to promote environmental activities is to save costs (Kim et al., 2017b). Thus, measures adding extra cost to hotels will, in turn, reduce hotels' impetus of implementing programs to encourage employees' PEBs. Therefore, early in the launch of a strategy to enhance employees' PEBs in the hotel industry, managers should focus on employees with high OI and PJP. Such employees more likely to perceive their oneness with their hotels and, thus tending to engage in PEBs more voluntarily. They are also more likely to help their hotels quickly build organizational green climates, which will place pressure on other employees to also conduct PEBs. Further, for those employees with high PJP, our findings suggest that the employees who perform well at the in-role behaviors would also perform well at the extra-role behaviors, benefitting organizational performance. The underlying reason is that those employees with high PJP in the hotel industry would likely attribute their achievements to corporate support and thus generate high OI. Subsequently, OI is positively related to PEBs under the internalization mechanism of solving individual PEBs' positive spillover issues at the workplace. Moreover, hotel managers should treat the employees with a high degree of OI and PJP as stewards of their hotels. Doing so includes delegating them as advocates of the hotel's environmental strategy to promote the strategy effectively.

Second, our findings show that PJP is an important antecedent of OI. Therefore, to improve employees' OI in the hotel industry, hotel managers should exert great efforts to help employees (especially newcomers) obtain good job performance and become exemplars of the hotel over the short term. Compared to some other industries with higher entry-level salaries, the hotel industry may be less attractive and often have a high turnover rate.These factors increase the cost of human resource management and impact the stability of hotel services. In the Chinese hotel industry, the annual turnover rate of employees is more than 30 %, ranking first among all industries, according to *The Results of the China Human Capital Survey 2017* released by Aon Hewitt. Many employees often work in a hotel for less than one year. Hence, helping employees achieve good job performance over the short term effectively improves employees' OI with hotels. Furthermore, hotel managers should provide attractive incentives or create promotional opportunities for employees with good job performance. Additionally, hotel managers should pay attention to changes in employees' OI after providing feedback regarding their job performance.

5.3. Limitations and future research directions

Our study has several limitations that may be addressed in the future. First, the previous literature has shown that a bidirectional causal relationship exists between PJP and OI. Considering the current study's use of cross-sectional data, a future research can test this two-way causal relationship using longitudinal data. Second, the mechanism underlying the relationship between PJP and OI involves both the following two aspects: higher and lower PJP. Both cases may shed light on the relative intragroup self-prestige. Hence, if changes in hotel employees' relative prestige within their organizations can be measured directly and the mediating effects between PJP and OI can be tested, the logic of our argument can become more robust and have higher internal validity. Third, previous studies have shown that OI is highly related to organizational commitment, which is an essential predictor of PEBs (Stritch and Christensen, 2016; Zientara and Zamojska, 2018). Thus, future researchers can compare the two constructs' effects on PEBs and determine which factor is more significant in predicting PEBs.

Funding

Project is supported by Major project of National Social Science Fund of China "Research on perfecting the market-oriented environmental policy system to promote green innovation"(20ZDA088).

References

Afsar, B., Badir, Y., Kiani, U.S., 2016. Linking spiritual leadership and employee pro-environmental behavior: the influence of workplace spirituality, intrinsic motivation, and environmental passion. J. Environ. Psychol. 45, 79–88.
Anderson, J.C., Gerbing, D.W., 1988. Structural equation modeling in practice: a review and recommended two-step approach. Psychol. Bull. 103 (3), 411.
Ashforth, B.E., Mael, F., 1989. Social identity theory and the organization. Acad. Manag. Rev. 14 (1), 20–39.
Ashforth, B.E., 2000. Role transitions in organizational life: An identity-based perspective. Lawrence Erlbaum, Mahwah, NJ.
Ashforth, B.E., Harrison, S.H., Corley, K.G., 2008. Identification in organizations: an examination of four fundamental questions. J. Manage. 34 (3), 325–374.
Aßländer, M.S., Roloff, J., Nayır, D.Z., 2016. Suppliers as stewards? Managing social standards in first-and second-tier suppliers. J. Bus. Ethics 139 (4), 661–683.
Bagozzi, R.P., Yi, Y., 1988. On the evaluation of structural equation models. J. Acad. Mark. Sci. 16 (1), 74–94.
Bal, P.M., De Lange, A.H., 2015. From flexibility human resource management to employee engagement and perceived job performance across the lifespan: a multisample study. J. Occup. Organ. Psychol. 88 (1), 126–154.
Baron, R.M., Kenny, D.A., 1986. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. J. Pers. Soc. Psychol. 51 (6), 1173–1182.
Cantor, D.E., Morrow, P.C., Montabon, F., 2012. Engagement in environmental behaviors

among supply chain management employees: an organizational support theoretical perspective. J. Supply Chain. Manag. 48 (3), 33–51.
Carmeli, A., Gilat, G., Waldman, D.A., 2007. The role of perceived organizational performance in organizational identification, adjustment and job performance. J. Manag. Stud. 44 (6), 972–992.
Chan, E.S., Hsu, C.H., 2016. Environmental management research in hospitality. Int. J. Contemp. Hosp. Manage. 28 (5), 886–923.
Chan, E.S.W., Hon, A.H.Y., Okumus, F., Chan, W., 2017. An empirical study of environmental practices and employee ecological behavior in the hotel industry. J. Hosp. Tour. Res. 41 (5), 585–608.
Chiang, C.F., Hsieh, T.S., 2012. The impacts of perceived organizational support and psychological empowerment on job performance: the mediating effects of organizational citizenship behavior. Int. J. Hosp. Manag. 31 (1), 180–190.
Chiu, S.C., Sharfman, M., 2011. Legitimacy, visibility, and the antecedents of corporate social performance: an investigation of the instrumental perspective. J. Manage. 37 (6), 1558–1585.
Chou, C.-J., 2014. Hotels' environmental policies and employee personal environmental beliefs: interactions and outcomes. Tour. Manag. 40, 436–446.
Davis, J.H., Schoorman, F.D., Donaldson, L., 1997. Toward a stewardship theory of management. Acad. Manag. Rev. 20–47.
Dutton, J.E., Dukerich, J.M., Harquail, C.V., 1994. Organizational images and member identification. Adm. Sci. Q. 39 (2), 239–263.
Esposito, N., 2001. From meaning to meaning: the influence of translation techniques on non-english focus group research. Qual. Health Res. 11 (4), 568–579.
Fornell, C., Larcker, D.F., 1981. Structural equation models with unobservable variables and measurement error: algebra and statistics. J. Mark. Res. 382–388.
Graves, L.M., Sarkis, J., Zhu, Q., 2013. How transformational leadership and employee motivation combine to predict employee proenvironmental behaviors in China. J. Environ. Psychol. 35 (8), 81–91.
Haslam, S.A., 2004. Psychology in Organizations. Sage, London, England.
He, H., Brown, A.D., 2013. Organizational identity and organizational identification: a review of the literature and suggestions for future research. Group Organ. Manag. 38 (1), 3–35.
Janney, J.J., Gove, S., 2011. Reputation and corporate social responsibility aberrations, trends, and hypocrisy: reactions to firm choices in the stock option backdating scandal. J. Manag. Stud. 48 (7), 1562–1585.
Kim, S.H., Kim, M., Han, H.S., Holland, S., 2016. The determinants of hospitality employees' pro-environmental behaviors: the moderating role of generational differences. Int. J. Hosp. Manag. 52, 56–67.
Kim, A., Kim, Y., Han, K., Jackson, S.E., Ployhart, R.E., 2017a. Multilevel influences on voluntary workplace green behavior: individual differences, leader behavior, and coworker advocacy. J. Manage. 43 (5), 1335–1358.
Kim, S.-H., Lee, K., Fairhurst, A., 2017b. The review of "green" research in hospitality, 2000-2014: current trends and future research directions. Int. J. Contemp. Hosp. Manage. 29 (1), 226–247.
Lee, T.W., Mitchell, T.R., Sablynski, C.J., Burton, J.P., Holtom, B.C., 2004. The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. Acad. Manag. J. 47 (5), 711–722.
Lee, E.-S., Park, T.-Y., Koo, B., 2015. Identifying organizational identification as a basis for attitudes and behaviors: a meta-analytic review. Psychol. Bull. 141 (5), 1049.
Li, D., Zhao, L.M., Ma, S., Shao, S., Zhang, L.X., 2019. What influences an individual's pro-environmental behavior? A literature review. Resour. Conserv. Recycl. 146, 28–34.
Lin, W.L., Law, S.H., Ho, J.A., Sambasivan, M., 2019. The causality direction of the corporate social responsibility - Corporate financial performance Nexus: application of Panel Vector Autoregression approach. North Am. J. Econ. Financ. 48, 401–418.
Lindenberg, S., Steg, L., 2007. Normative, gain and hedonic goal frames guiding environmental behavior. J. Soc. Issues 63 (1), 117–137.
Liu, T., Geng, L.N., Ye, L.J., Zhou, K.X., 2019. Mother Nature" enhances connectedness to nature and pro-environmental behavior. J. Environ. Psychol. 61, 37–45.
Mael, F., Ashforth, B.E., 1992. Alumni and their alma mater: a partial test of the reformulated model of organizational identification. J. Organ. Behav. 13 (2), 103–123.
Mael, F.A., Ashforth, B.E., 1995. Loyal from day one: biodata, organizational identification, and turnover among newcomers. Pers. Psychol. 48 (2), 309–333.
McGuire, J.B., Sundgren, A., Schneeweis, T., 1988. Corporate social responsibility and firm financial performance. Acad. Manag. J. 31 (4), 854–872.
Miao, Q., Newman, A., Huang, X., 2014. The impact of participative leadership on job performance and organizational citizenship behavior: distinguishing between the mediating effects of affective and cognitive trust. Int. J. Hum. Resour. Manag. 25 (20), 2796–2810.
Munir, S., Yasin, M.A., Shabbir, M.S., Ali, S.R., Tariq, B., Chani, M.I., Orangzab, M., Abbas, M., 2019. Mediating role of organizational citizenship behavior on authentic leadership and employee job performance: a study of higher educational institutes in Pakistan. Dilemas Contemporaneos-Educacion Politica Y Valores 6.
Newman, A., Nielsen, I., Miao, Q., 2015. The impact of employee perceptions of organizational corporate social responsibility practices on job performance and organizational citizenship behavior: evidence from the Chinese private sector. Int. J. Hum. Resour. Manag. 26 (9), 1226–1242.
Norton, T.A., Zacher, H., Parker, S.L., Ashkanasy, N.M., 2017. Bridging the gap between green behavioral intentions and employee green behavior: the role of green psychological climate. J. Organ. Behav. 38 (7), 996–1015.
Orlitzky, M., Schmidt, F.L., Rynes, S.L., 2003. Corporate social and financial performance: a meta-analysis. Organ. Stud. 24 (3), 403–441.
Park, J., Sohn, Y.W., Ha, Y.J., 2016. South Korean salespersons' calling, job performance, and organizational citizenship behavior: the mediating role of occupational self-efficacy. J. Career Assess. 24 (3), 415–428.
Park, S.-Y., Levy, S.E., 2014. Corporate social responsibility: perspectives of hotel frontline employees. Int. J. Contemp. Hospitality Manage. 26 (3), 332–348.
Peng, X., Lee, S., 2019. Self-discipline or self-interest? The antecedents of hotel employees' pro-environmental behaviours. J. Sustain. Tour. 27 (9), 1457–1476.
Pereira-Moliner, J., Font, X., Tarí, J.J., Molina-Azorin, J.F., Lopez-Gamero, M.D., Pertusa-Ortega, E.M., 2015. The Holy Grail: environmental management, competitive advantage and business performance in the Spanish hotel industry. Int. J. Contemp. Hosp. Manage. 27 (5), 714–738.
Pindyck, R.S., Rubinfeld, D.L., 2018. Microeconomics (Global edition), 9 ed. Pearson Education Limited, England.
Ping, R.A., 2004. On assuring valid measures for theoretical models using survey data. J. Bus. Res. 57 (2), 125–141.
Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. J. Appl. Psychol. 88 (5), 879–903.
Randall, M.L., Cropanzano, R., Borman, C.A., Birjulin, A., 1999. Organizational politics and organizational support as predictors of work attitudes, job performance, and organizational citizenship behavior. J. Organ. Behav. 20 (2), 159–174.
Rezapouraghdam, H., Alipour, H., Darvishmotevali, M., 2018. Employee workplace spirituality and pro-environmental behavior in the hotel industry. J. Sustain. Tour. 26 (5), 740–758.
Riketta, M., 2005. Organizational identification: a meta-analysis. J. Vocat. Behav. 66 (2), 358–384.
Saifulina, N., Carballo-Penela, A., 2017. Promoting sustainable development at an organizational level: an analysis of the drivers of workplace environmentally friendly behaviour of employees. Sustainable Dev. 25 (4), 299–310.
Sobel, M.E., 1982. Asymptotic confidence intervals for indirect effects in structural equation models. Sociol. Methodol. 13, 290–312.
Steg, L., Vlek, C., 2009. Encouraging pro-environmental behaviour: an integrative review and research agenda. J. Environ. Psycho. 29 (3), 309–317.
Stritch, J.M., Christensen, R.K., 2016. Going green in public organizations: linking organizational commitment and public service motives to public employees' workplace eco-initiatives. The Am.Rew. Public Adminis. 46 (3), 337–355.
Tian, Q., Robertson, J.L., 2019. How and When Does Perceived CSR Affect Employees' Engagement in Voluntary Pro-environmental Behavior? J. Busi. Ethics 155 (2), 399–412.
Van der Werff, E., Steg, L., 2018. Spillover benefits: emphasizing different benefits of environmental behavior and its effects on spillover. Frontiers in Psychology 9.
Van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., Hauptmeier, M., Hoehfeld, C., Moltzen, K., Tissington, P.A., 2004. Should I stay or should I go? Explaining turnover intentions with organizational identification and job satisfaction. British Journal of Management 15 (4), 351–360.
Van Knippenberg, D., Sleebos, E., 2006. Organizational identification versus organizational commitment: self-definition, social exchange, and job attitudes. Journal of organizational Behavior 27 (5), 571–584.
Van Knippenberg, D., Van Schie, E.C., 2000. Foci and correlates of organizational identification. J. Occu.Organ. Psychol. 73 (2), 137–147.
Waddock, S.A., Graves, S.B., 1997. The corporate social performance-financial performance link. Strat. Manag. J. 18 (4), 303–319.
Wang, Y.F., 2016. Modeling predictors of restaurant employees' green behavior: comparison of six attitude-behavior models. Int. J. Hospitality Manag. 58, 66–81.
Wasserman, N., 2006. Stewards, agents, and the founder discount: executive compensation in new ventures. Academy Manag. J. 49 (5), 960–976.
Zappalà, S., Toscano, F., Licciardello, S.A., 2019. Towards sustainable organizations: supervisor support, commitment to change and the mediating role of organizational identification. Sustainability 11 (3), 805.
Zhu, W., Wang, G., Zheng, X., Liu, T., Miao, Q., 2013. Examining the role of personal identification with the leader in leadership effectiveness: a partial nomological network. Group. Org. Manag. 38 (1), 36–67.
Zhu, J., Tatachari, S., Chattopadhyay, P., 2017. Newcomer identification: trends, antecedents, moderators, and consequences. Academy of Manag. J. 60 (3), 855–879.
Zientara, P., Zamojska, A., 2018. Green organizational climates and employee pro-environmental behaviour in the hotel industry. J. Sust. Tourism 26 (7), 1142–1159.

Xuerong Peng, Ph.D., is an associate professor of the School of Tourism and Urban-rural Planning at Zhejiang Gongshang University and a postdoctoral fellow of Fudan University in China. She was a visiting scholar at The Pennsylvania State University from August 2017 to October 2019. She received a Ph.D. in Enterprises Management and a master's degree in Tourism Management both from Zhejiang University in China. Her research interests focus on sustainable corporate strategies (e.g., ecological innovation and CSR) in the hospitality and manufacturing industries.

Seoki Lee, Ph.D., is an associate professor of the School of Hospitality Management at The Pennsylvania State University in the USA. His research mainly focuses on hospitality and tourism issues in financial and strategic management, including the following topics: corporate social responsibility, internationalization, franchising, and diversification.

Zhenglan Lu, Ph.D., is an associate professor of the School of Tourism and Urban-rural Planning at Zhejiang Gongshang University in China. She received her Ph.D. in Environmental Engineeringfrom Zhejiang University in China. Her research focuses on green hotels.