
The influence of employees' perceived work performance on the pro-environmental behaviours: the role of organisational identification in the Vietnamese hospitality industry

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Abstract: Employees' involvement in eco-friendly action for protecting environment is playing a crucial role for helping lodging properties better ecofriendly to environment and enhancing the productivity. Through two methods of qualitative and quantitative research, this research examined the relationship between perceived work performance with pro-environmental behaviours, perceived work performance with organisational identification and the relationship between organisational identification and pro-environmental behaviours in the context of luxury hotels in Ho Chi Minh City, Vietnam. The research results show that organisational identification has the strongest and positive impact on pro-environmental behaviours of employees. This means that a strong organisational identity makes them more likely to participate in pro-environmental behaviours. Thus, organisational identification is an important determinant of pro-environmental behaviours among staff, and it can be enhanced by improving their perception on job performance. In addition, perceived work performance can affect employees' pro-environmental behaviours through organisational identification.

Keywords: perceived work performance; pro-environmental behaviours; organisational identification; hospitality industry, Vietnam.

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1 Introduction

In recent years, 'Going Green' has become an attractive topic and is interested by both hotel managers and tourists as the Earth tends to heat up, causing phenomena extreme weather as well as environmental protection are being taken care of everywhere. According to the sustainability travel's report of Booking.com released in 2019, up to

73% of global travellers intending to stay at least once in an eco-friendly or green accommodation in their future trips. Environmentally responsible tourism is gaining popularity, with 70% of international travellers saying that although they didn't purposely look for a 'green' hotel, they are still willing to book if they know it is an environmentally friendly hotel (Booking.com, 2019). The number of tourists with environmental protection awareness is increasing and therefore, the element of environmental friendliness becomes a prerequisite for hotels in the world as well as in Vietnam. The application of 'green' practices in hotels in Vietnam is not a new topic, however, each hotel segment has a different application based on the facilities and the way of operation on its own.

Environmental protection is an essential concern and nearly every industry has applied measures to preserve the natural environment. According Melnyk et al. (2003), most manufacturing organisations have improved their operational efficiency by eliminating waste generated throughout the time of creating and manufacturing products. Green endeavours in the service industry, such as hotels, include decreasing waste, lowering energy sources and water sources in their operations, and educating customers and staffs (Bohdanowicz et al., 2011; Rahman et al., 2012).

Currently, 'Going green' is not only a trend that hotels use to advertise or polish their reputation, but also has become a true lifestyle. Hotel owners, when realising significant impacts hotel can have onto the environment, admits that it is essential for them to apply green practices (Fukey and Issac, 2014). They have changed their perception from trying to apply green practices, such as saving the water in the hotels just to save the costs as there are many research papers show the positive relationship between water management and operation costs reduction, to a thought that saving water is for a greater purpose of saving for the future generation. In other words, hotel owners and investors are raising concerns for environmental sustainability, thus, actively and creatively find the ways to apply green practices in the hotels (Melendez et al., 2020)

In addition to travellers changing toward more environmentally responsible, hoteliers and managers have also begun to change their perceptions, step by step participating in responsible and sustainable environmental protection. As a result, hotels are becoming more and more creative in finding ways to protect the environment.

Green practices in Vietnam as well as in the world are no longer limited to popular and familiar actions. Thanks to changing perceptions and becoming more environmentally responsible, hotels in Vietnam are also gradually proactively adopting green practices in different ways suitable for each stage: from the idea of building hotel in the 'greenest' way to using environmentally friendly materials, saving resources and materials during operation. In particular, hotels that are adopting green practices should keep implementing these measures as this is a long-term trend that visitors will increasingly care about and is likely to be a factor in their decisions on choosing accommodation. Besides, the application of green practices in the long term also helps the hotel to save operating costs (electricity, water, materials, ...). Besides, managers in Vietnam also understand that without the togetherness of the staff, the hotel will not be able to 'Going green'. They argue that the importance of adopting green practices lies in the people who do them directly – every employee in every department. Therefore, they

create a green culture in their hotels to raise awareness of all employees about environmental protection, helping employees to have the habit of applying green practices in all daily activities. However, the staff at the hotels change frequently, making it difficult and costly to train new employees on environmental habits and awareness.

Therefore, what are the factors that influence employees' PEBs and how much do they affect? How can hotels improve PEBs? Can factors that improve PEBs like Organisational Identification (OI) help employees to love and stick more permanently with the organisation? From the above situation, we develop the topic "The influence of employees' perceived work performance on the pro-environmental behaviours: the role of organisational identification in the Vietnamese hospitality industry".

2 Literature review

2.1 Pro-environmental behaviours (PEBs)

PEBs as employees' voluntary behaviours are viewed as a fundamental variety of efficient and environmental actions in the place of work, including environmental studying and awareness, creating, and adapting strategies to minimise the impact on the ecosystem negatively, establishing eco-friendly goods and services, according to Graves et al. (2013).

In the hotel sector, the employees' awareness of environment is the key factor to enhance the Organisational Citizenship Behaviours (OCBs) for the environment (OCBE). Self-initiated and positive employee behaviour is called Organisational Citizenship Behaviours, OCB is voluntary. (Chiang et al, 2012). Accordingly, OCBE is a form of organisational citizenship behaviour, which refers to "constructive or cooperative gestures that are neither mandatory in-role behaviours nor directly or contractually compensated by formal reward systems" (Organ and Konovsky, 1989). In addition, OCBEs were defined by Daily et al. (2009) as "optional actions of employees in the organisation that are not rewarded or required towards environmental improvement".

Furthermore, OCBEs are discretionary actions performed by employees by which they prove their willingness to collaborate with their organisation and its members by performing acts in the workplace that bring value to the natural environment (Erath et al., 2021). Employees may participate in pro-environmental behaviours in diverse ways. For example, they may build up, propose, and share new practices (Boiral and Paillé, 2012), or look to prevent waste and reuse paper (Lee et al., 1995), or also perform separate actions in the workplace that contribute to improving natural environment (Daily et al., 2009). For instance, reduced usage of power, energy, documents, facilities, whereas the latter necessitates strengthening the company's name and brand in the marketplace. Since the hospitality sector is not a significant cause of pollution, and the primary force for introducing environmental behaviour's plans in accommodation sector is trying to boost profitability, eco-friendly actions in the accommodation industry help enhance the company's profitability rather than their ecological benefits (Kim et al., 2017).

From the above definitions, the author gives a general understanding of PEBs as follows: PEBs are employees' environmentally friendly activities in the workplace, this is voluntary behaviour and no direct reward, but organisations must enhance those voluntary actions to bring the most productivity of employees.

2.2 Organisational identification (OI)

Social identity theory (SIT) had already long been perceived as a critical academic foundation for predicting an employee's work performance (Van Dick et al., 2004). According to Mael and Ashforth (1992), OI is defined as the perception of togetherness and connectedness to a corporation. Based on SIT's theory, OI is formation in which members in corporations play as a part of the company (Van Dick et al., 2004). Individuals with higher self-identity in corporation seem to be a happy individual of the company and admire its ideals and successes. Moreover, they are also much more strongly encouraged and associated with favourable productivity in organisation (Kelman, 1958; Shayya, 2018) and tend to behave in conformity with the organisational standard and tradition (Godfrey, 1998). As a result, exceptionally employee's identity seems to be willing to put out extra work to support the company to succeed in order to boost their consciousness.

Thus according SIT, OI is the result of an employee's connection of emotion to their company. Therefore, when a worker believes mentally connecting to the organisation's goals or psychologically feeling of joy linked to a community, they will understand a strong value of OI (Riketta, 2005). Participants attempt to be recognised within corporations as they believe that corporations offer them with an awareness of public recognition (Edwards and Peccei, 2007; Zaraket and Halawi, 2017). Lu et al. (2016) mentioned OI must have been a significant mediating factor between affective commitment and customer behaviour in a research of hospitality industry.

Considering OI mentions employees' experienced connection with their company and reflects their behaviour, it should be a suitable concept to investigate this topic in the hospitality industry. As a result, OI is an effective and empirical technique of encouraging a hotel's staff to participate in protecting environment without incurring additional costs to the company, particularly in the hospitality sector.

2.3 Perceived work performance (PWP)

The system whereby the employees' performance is measured yearly unescorted by continuing efforts providing suggestions and learning, this seems to not be an effective management system; it is simply a effectiveness assessment system (Noe et al, 2021). Effectiveness evaluations are considered to become a structured characterisation of a staff's advantages and disadvantages (Mello, 2005). According to Abeysekera (2007), employees' evaluation system as well as remuneration provide a crucial part in the development of a company's operation by improved productivity. Datta et al. (2003) discovers that if an acceptable effectiveness management system was put in place and therefore is compatible with the remuneration technique related to the management of performance system, employees would expend greater effort with fewer limits. Based on Coens et al. (2000), outcome appraisal is a required procedure wherein employers analyse, assess, or describe from the perspective of all appraisers or a number of employees' working behaviours or effectiveness over a length of time, and the results are held by head of organisation.

According to Saetang et al. (2010), PWP is sum up from the reviews of perception and assessment of staff on their own acts or related behaviours and characteristics that impact on organisational objectives and respond to organisation's duties. It can be shown

by using systematic evaluation process whose results can be used for suitable managing organisation's human resources from organisations.

2.4 Perceived work performance and pro-environmental behaviours

Throughout this research, employee voluntary performance is comparable to PWP, whereas involuntary performance is comparable to PEBs, the author argues that PWP stand for involuntary performance influences voluntary performance, such as PEBs. Existing research has been undertaken at an employee's voluntary and involuntary output, but it has hardly ever looked into the linking of them (Randall et al., 1999; Lee et al., 2004; Miao et al., 2014; Newman et al., 2015).

According to Kim et al., 2017, PEBs demand employees work with extra tasks, which divert employees' attention away from daily working activities as a compulsory task; as a result, employees are hesitant to participate in PEBs and employees who perform well in their jobs are prone to perform poorly outside of their jobs. Furthermore, according to Park and Levy (2014) and Drosos and Skordoulis (2018), organisations with environmentally activities assist their staffs in identifying their purpose inside their companies; as a result, individuals with limited productivity may participate in PEBs to satisfy their meaning of being at workplace. This central argument is that voluntary and involuntary behaviours are incompatible. This notion may not be valid for all situations, according to this study, particularly in the hospitality sector.

However, these actions may be consistent with voluntary actions. Hotel staffs are likely to execute eco-friendly behaviours willingly in order to participate to service quality in hotel. As a result, hotel staffs who concentrate on job outcome should also highly provide eco-friendly action as a merit quality in hospitality business. So, staffs who want to enhance their productivity may concentrate on those voluntary behaviours for involuntary actions and indulge in PEBs to do so.

Hypothesis 1: Perceived job performance has a positive impact on pro-environmental behaviours in the context of hotel services.

2.5 Perceived work performance and organisational identification

SIT (Ashforth and Mael, 1989; Tajfel and Turner, 1979) is developed into a major strategy for understanding the improvement of OI (Van Dick, 2001). SIT aims to clarify why employees create connections with the others. The assumption that social connections form part of individual's self-conception is fundamental to SIT; when members are committed to a team, they will automatically consider themselves as part. Individuals are inspired to sustain and enhance their identity, according to a core premise of SIT. Tyler and Blader (2003) started developing a team implementation approach implies that the level of employee's recognition is impacted by how efficient they presented. They claim that firms that follow procedures effectively offer workers with guidance on what they're appreciated and regarded. Tyler and Blader (2003) claim, in line with SIT, whenever an employee performed productivity, it does have a beneficial influence on staffs' identity by enhancing their feeling of self-regard, hence raising the chance of staff's association.

Moreover, Eisenberger et al. (1986) recommends that staffs who believe in organisational cares about their performance seems to be more respond in kind by continuing to invest mentally and emotionally in the company and continuing to develop a greater feeling of connection to and identity with it (Eisenberger et al., 2001).

According to the latest research, hotel staffs who are efficiently working in hotel may achieve strong level of OI, since strong PWP helps to meet staffs' essential demands of self-improvement, which would be the crucial prerequisite of OI (He and Brown, 2013; Ellemers and Haslam, 2004). As a result, assisting staffs in improving their PWP, particularly in the temporary, seems to be an effective way of enhancing their OI with lodging properties.

The author of this research attempts to focus on the argument that people who seek to get better characteristic of their companies by picturing whether a strong staff could try to be an outstanding staff in the organisation (Ashforth et al., 2008). By achieving those goals, they might have strong OI after ensuring excellent PWP at the workplace. To be precise, work performance plays as the greatest essential factor for evaluating a staffs' success in a company, therefore employees have high PWP become further probably to determine themselves as positive examples for one's company, and so later OI would enhance. Additionally, staffs who perform well on the job are probably becoming to identify themselves as runners up rather than those who perform poorly on the job, which satisfies their desire for self-improvement, which would be a required motivation for a person to engage with a human community (He and Brown, 2013). As a result, a strong PWP employee is more likely to associate with the company, resulting in a strong OI. Furthermore, the profitability of a company is inextricably linked to the performance of its existing staff. Staff members with superior work outcome may experience greater confidence in their own future career path and also in their companies.

Hypothesis 2: Perceived job performance has a positively impact on organisational identification in the context of hotel services.

2.6 Organisational identification and pro-environmental behaviours

According to previous research on OI (Mael and Ashforth, 1992; Jones, 2010; Brammer et al., 2014), a staff member who begins to define oneself as a member of their company minimise the distinctions between them and their organisation. That strengthens their connections within their companies and promotes in the accomplishment of the company's objectives and reputation. As a result, staffs will want to engage themselves to internalise corporate views, norms, and targets (Mael and Ashforth, 1992; Ashforth et al., 2008), and to participate in any activities that really are consistent with those views, norms, and targets (Mael and Ashforth, 1992; Ashforth et al., 2008).

Several past researchers (Paillé et al., 2014; Kennedy et al., 2015) have established the impact of staffs' PEB on the company's sustainability impact. Those findings demonstrate that PEBs in the organisation improves the company's economic status considerably. As a result, the present research implies that a higher level of OI leads to a higher level of employee's eco-friendly behaviour. Furthermore, based on Kim et al., 2017, because the hospitality sector has a narrow profit margin, hotels' primary motivation for pushing their staff members to participate in PEBs is to cut-off money waste, consequently, hotel managers are not willing to assist any money for applying PEBs strategies. For those reason, to lower the amount of money when adopting an

ecological plan, hotel managers sometimes anticipate or indeed promote their staff to participate in PEBs on a voluntary basis.

Additionally, in compliance with above ideas, existing research also study the effect of OI with numerous perspectives of OCB (Bartel, 2001; Jones, 2010; Newman et al., 2016; Farooq et al., 2017), which could be similar with PEBs. Furthermore, previous research have already proved for the positive impact of OI to PEBs (Islam and Asad, 2019; King and Therrien, 2020; Akpapuna et al., 2020; Peng et al, 2020). As a result, the study claims that hotel staffs with stronger OI seem to be more inclined to participate in PEBs as they're more likely to cognitively integrate the beneficial spreading by PEBs from their companies whenever.

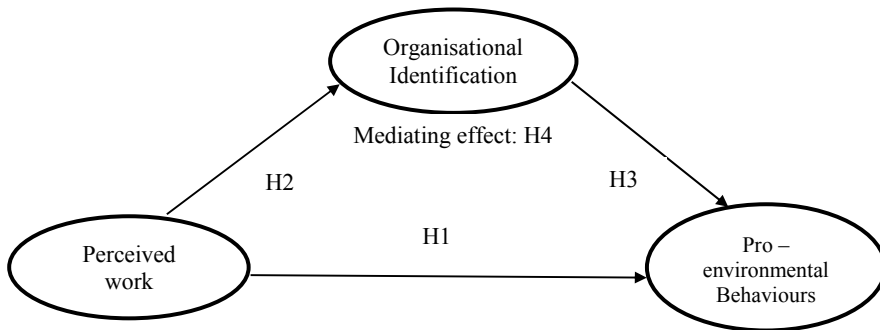
Hypothesis 3: Organisational identification has a positive impact on the pro-environmental behaviours in the context of hotel services.

Hypothesis 4: Organisational identification has a mediating impact on the relationship between perceived job performance and pro-environmental behaviours.

2.7 Conceptual framework

Based on the above theory and the research of Peng et al. (2020) on the effects of PWP on PEBs, the author found that the research model converges elements from previous studies, it was done in the context of hotels in China – an Asian country like Vietnam, so there is more similarity in the working style as well as the natural environment of the Asians. Therefore, the research model of Peng et al. (2020) may be suitable for application in this research topic. For all the above reasons, the author uses the research model of Peng et al. (2020) to do research with the context in Vietnam as shown in Figure 1.

Figure 1 Conceptual model



The scale used to measure the influence of these factors is the Likert scale. In the research scope, the author proposes a research model including 3 factors and 12 variables: perceived work performance, pro-environment behaviours and organisational identification.

To analyse and evaluate these variables, the author proceeds to build a scale of variables based on previous studies of scholars (Peng et al., 2020), and at the same time make adjustments to suit the actual research conditions.

3 Research methods and sample

3.1 Research methods

This study applies both qualitative research and quantitative research methods which are conducted through two main phases:

Qualitative preliminary research: qualitative research aims to explore, adjust and supplement observational variables used to measure research concepts. This study is made from the synthesis of the existing theoretical basis. As a result, the author builds up the proposed research model, from which a preliminary scale is proposed. Because this scale has not been tested yet, this scale is certainly not suitable for quantitative survey, so it is necessary to conduct a test to check the expression and language presented in this preliminary scale. Since then, the author better improved the preliminary scale and made an official survey.

Quantitative research: quantitative expected sample includes 150 observations, for the purpose of testing the model and hypotheses in the model. After the official questionnaire has been developed from the results in the qualitative research, the author will conduct official research by sending the questionnaire to staff working in 3-star 4-star and 5-star hotels in Ho Chi Minh city, Vietnam. Collected data will be encrypted and cleaned, then processed using AMOS 21.0 software.

In this research, the author uses two analytical softwares: Statistical Package for the Social Science (SPSS) and Analysis of Moment Structures (AMOS). The reason for using both softwares is because the author's research model needs to build structural models (SEM) to analyse models with higher precision than standard multivariate statistical techniques. SPSS software is not capable of handling in case there are many dependent and intermediate variables appearing in the model.

SPSS software supports the classification and analysis of primary data – information collected directly from the research object, commonly used in sociological and economic investigative studies. The author uses Descriptive statistic, Cronbach's Alpha reliability test, EFA Discovery Factor Analysis for research.

The author then continues to use AMOS software to identify, estimate, evaluate, and present the model in an intuitive interface to verify the relationship between hypothetical variables. In AMOS, the author conducted the analysis of affirmative factors confirmatory factor analysis (CFA) and structural equation modelling (SEM).

3.2 Sample

According to the experience of previous studies, research results are influenced by sample size. If the sample size is too small, it will affect the accuracy of the study. But if the sample is too large, it will not have enough money to collect data as well as time to process data. So how to choose a sample size to ensure accuracy but not too costly implementation is something to keep in mind in the study.

Based on research by Hair et al. (2010) for reference on expected sample size. Accordingly, the minimum sample size is five times the total number of observed variables. Calculation formula: $n = 5 * m$, note: m is the number of questions in the survey. Thus, in this study, there are 12 observed variables and 3 factors: $5 * 12 = 60$ observations.

However, in order to limit errors and shortages in data collection, the author took a sample size of 150.

Survey results are collected from Google form by sending directly to employees who work in hotels in Ho Chi Minh city. After conducting the survey, the author obtained 150 survey table. After re-checking, removing 30 unsatisfactory questionnaires. Therefore, the remaining observed actual sample is 120 observations.

4 Results and discussion

After data collection, out of a total of 150 online forms, there were 30 invalid forms, so only 120 forms were entered and analysed. The results of the description of the research sample are shown in the Table 1.

Table 1 Sample characteristics

	<i>Characteristics</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Gender		120	100
	Male	45	37.5
	Female	75	62.5
Age		120	100
	21 – 25	52	43.3
	26 – 30	50	41.7
	31 – 35	18	15
Hotel level		120	100
	3-star	3	2.5
	4-star	30	25
	5-star	87	72.5
Educational level		120	100
	High school	3	2.5
	College	27	22.5
	Undergraduate (BA)	75	62.5
	Postgraduate (MBA or PhD)	15	12.5
Position		120	100
	Staff	76	63.3
	Supervisor level	35	29.2
	Manager Department level	6	5.0
	Director of Department or Deputy General Manager or General Manager	3	2.5

Table 1 Sample characteristics (continued)

<i>Characteristics</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Department	120	100
Housekeeping	21	17.5
Food and Beverage – F&B	35	29.2
Front Office	39	32.5
Human resource	15	12.5
Accounting	7	5.8
Sale and marketing	3	2.5
Working experience	120	100
No more 1 year	14	11.7
Above 1 year to 3 years	45	37.5
Above 3 years to 5 years	37	30.8
Above 5 years to 7 years	24	20.0

Table 2 Test results Cronbach's alpha of variables

<i>Variable</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item-total correlation</i>	<i>Cronbach's alpha if item deleted</i>
<i>Perceived job performance (PWP), Cronbach's Alpha = 0.758</i>				
PWP1	10.23	5.235	0.564	0.703
PWP2	10.16	4.773	0.630	0.629
PWP3	10.20	4.497	0.577	0.695
<i>Pro-environmental behaviours (PEBs), Cronbach's Alpha = 0.805</i>				
PEBs1	14.98	8.269	0.609	0.762
PEBs2	15.01	6.597	0.736	0.696
PEBs3	15.12	8.396	0.590	0.771
PEBs4	14.81	8.207	0.562	0.784
<i>Organisational identification (OI), Cronbach's Alpha = 0.802</i>				
OI1	21.72	11.415	0.722	0.721
OI2	22.38	12.793	0.468	0.803
OI3	22.18	11.630	0.690	0.731
OI4	22.13	14.117	0.394	0.818
OI5	22.35	11.608	0.678	0.735

Through analytical results evaluating the reliability of the scale with Cronbach's Alpha coefficients, the results in Table 2 show that:

- all scales have Cronbach's Alpha coefficients > 0.7
- there is no observed variable with the total variable correlation less than 0.3, so no variable is eliminated

- three scales of PEBs, PWP and OI with 12 observed variables are reliable for the next analysis.

Discriminant Validity (DV) indicates whether a concept really distinguishes it from another in terms of both correlation and measurement variables within each concept. The scale reaches DV when:

- $MSV < AVE$
- $SQRTAVE > \text{Inter-Construct Correlations}$.

Table 3 shows, $MSV < AVE$ and $SQRTAVE$ (values in bold) $>$ Inter-Construct Correlations (the values below the values are in bold). Therefore, it can be concluded that the concepts have attained DV.

Table 3 Discriminant validity results between concepts

	<i>CR</i>	<i>AVE</i>	<i>MSV</i>	<i>SQRTAVE</i>	<i>MaxR(H)</i>	<i>PEBs</i>	<i>OI</i>	<i>PWP</i>
PEBs	0.811	0.522	0.328	0.723	0.848	1.000		
OI	0.826	0.549	0.328	0.741	0.851	0.573	1.000	
PWP	0.762	0.518	0.328	0.720	0.782	0.573	0.352	1.000

Table 4 shows the results after the SEM analysis. To be able to conclude whether the independent variable has an impact on the dependent variable or not, the author relies on the following regression weight table:

Table 4 Regression weights

			<i>Estimate</i>	<i>S.E</i>	<i>C.R</i>	<i>P value</i>
OI	←	PWP	0.325	0.106	3.066	0.002
PEBs	←	OI	0.421	0.123	4.151	***
PEBs	←	PWP	0.420	0.122	3.876	***

From the results in Table 5, based on P-value index, OI affects PEBs and PWP affects PEBs at the significance level of 1%, while PWP affects OI at the significance level of 5%. PWP had no significant impact on PEBs, but it did have a significantly positive indirect influence on PEBs via OI. As a result, OI acts as a complete mediating factor between PWP with PEBs, allowing H4 to thrive. Therefore, the author brings out conclusion for the following hypotheses:

Table 5 Conclusion for hypotheses

	<i>P value</i>	<i>Conclusion</i>
PWP → PEBs	***	H1 is accepted
PWP → OI	0.002	H2 is accepted
OI → PEBs	***	H3 is accepted
OI plays a mediating factor in the relation between PWP and PEBs		H4 is accepted

5 Conclusions

5.1 Implications

5.1.1 Theoretical implications

This research gives some contribution for expanding background of knowledge about PEBs in a wide variety of methods. Firstly, according to current research (Hameed et al, 2019; Islam and Asad, 2019; Afsar and Umrani, 2020), PEBs could be derived with a staff's responsibility to society. That is to say, OI is the factor that influences PEBs. However, in this research, authors give the conclusion that PWP is the factor which directly and indirectly influence PEBs as well as proved the relationship between PWP, OI and PEBs in the Vietnam hospitality market. Secondly, authors build on the work of Peng et al. (2020) by clarifying the framework that explains the variability in hotels in Vietnam that PEBs can be described. To be precise, authors discovered that staffs' awareness of their company's participation in environmental actions favourably influences their organisational identity, and as a result, staff members demonstrate friendly green behaviours to the ecosystem. Thirdly, researchers discovered why a staff's ecological actions are influenced by their cognition about performance. Staff members who really are concerned about the ecosystem's well-being seem to be more to experience the well-being with the assigned job at work.

5.1.2 Practical implications

No previous study has discovered the relationship between PWP, OI and PEBs in Vietnamese context, therefore this study is the first empirical research about those relationships in Vietnam context and lead to help Vietnamese's strategists in luxury hotels could extend more critical thinking in developing the hotel industry in Vietnam. Leaders, businesses, and governments will benefit from our findings. This research reveals that staffs' awareness of their effectiveness and their role in the company's involvement by encouraging PEBs among its workers. As a result, hotel businesses which would like to improve their staffs' sustainability actions might not only engage in ecofriendly actions, but also endeavour to inform them, help them to realise their role in the hotel business and help them to enhance their performance in work.

The research results show that OI factor has the strongest and positive impact on PEBs of employees working in 3, 4 and 5-star hotels. This means that a strong organisational identity makes them more likely to participate in PEBs. The results of this study have also been reported by previous study (Peng et al., 2020). Besides, PWP has a positive impact on PEBs, and it is the factor with strong impact behind OI. This indicates that employees with outstanding job performance are more likely to participate in PEBs more actively than the rest of the employees. Mostly if PWP promotes staffs' recognition with hotel properties lead to the result that PWP is significantly linked to PEBs. As a result, OI acts as a complete mediating factor between PWP with PEBs. In addition, PWP also positively affects OI. Because people with high PWP expect them to be the exemplar in the organisation, so the OI will increase. Moreover, when PWP is high, they will have more confidence in their future as well as the organisation, so their OI becomes stronger.

Those research contributions also have some benefit for financial and operational aspects in hotels. Huge amounts of money could be avoided by increasing efficiencies wisely and increasing environmental awareness. It is said that that PEBs created by staff members are not limited to the businesses. When you develop a regular routine, you can use it anywhere you need it.

5.2 Limitations and future research

Notwithstanding these advancements, the research is not without drawbacks. Initially, data collection only from Vietnam's hotel industry (i.e., 3-star, 4-star, 5-star hotels), that limited the research's generalisation toward this industry. Moreover, the survey's statistics are executed at a specific point of time, that might limit the development of correlation. As a result, longitudinal research is recommended for future research in this field.

The authors propose some future research directions as follows:

Firstly, there are two major parts to the process that underlies the link among PWP with OI: low and high PWP. In two circumstances, the comparative intraorganisational identity may be seen. As a result, improvements in lodging employees' comparative identity within their hotels can be accurately quantified, and mediation effects of PWP as well as OI could be evaluated, our argumentations could be more stable and have better content consistency.

Second, earlier research has found a strong link between OI and organisational citizenship behaviour, which would be a key determinant of PEBs (Stritch and Christensen, 2016; Hameed et al, 2019; Islam and Asad, 2019). As a result, next study will examine the effects of the two concepts on PEBs to determine which element seems to be more important for examining PEBs.

Third, the following studies should use better sampling methods, better data collection methods to improve the quality of responses. At the same time, expanding the scope of the study to increase the representativeness of the sample.

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Appendix

Dear Sir/Madam!

I am currently doing a research in hospitality field with the research topic: “**THE INFLUENCE OF EMPLOYEES’ PERCEIVED WORK PERFORMANCE ON THE PRO-ENVIRONMENTAL BEHAVIOURS: THE ROLE OF ORGANISATIONAL IDENTIFICATION IN THE VIETNAMESE HOSPITALITY INDUSTRY**”. We hope you will take your valuable time to do the survey below. We hereby commit, this survey is for research purposes only, not for any other purpose.

Sincerely thank you, wish you good health and success!

Part 1: Personal information

Gender

- Male
- Female

Age

- 20 and Below
- 21–25
- 26–30
- 31–35
- 36–40
- 41–45
- 46–50
- Over 50

Hotel Level

- 1 star
- 2 star
- 3 star
- 4 star
- 5 star

Educational Level

- Junior Middle School and Below
- Technical Secondary School or High School
- Junior College
- Undergraduate (Bachelor)
- Postgraduate (Master or Doctor)

Position

- Staff without A Managerial Title
- Team Leader or Supervisor
- Department Manager or Assistant of the Department Director
- Department Director or Assistant of the General Manager

Department

- Food and Beverage – F&B
- Housekeeping
- Front Office
- Human resource
- Accounting
- Sale and marketing
- Engineering
- Security

Years Working in the Hotel Industry

- 1 Year and Below
- (1, 3]
- (3, 5]
- (5, 7]
- (7, 9]
- (9, 11]
- Over 11

Part 2: Survey content

Please indicate your level of agreement on the following factors by marking (x) in the box of numbers that you think best reflects your opinion in the questions, corresponding to the level of degree:

Table A1 Perceived work performance

No.	Questions	Agree level						
		1	2	3	4	5	6	7
PWP1	How would you rate your performance as a work team member?	①	②	③	④	⑤	⑥	⑦
PWP2	How do you think your supervisor would rate your performance?	①	②	③	④	⑤	⑥	⑦
PWP3	How would you rate your job performance as an individual employee?	①	②	③	④	⑤	⑥	⑦

1 = very poor; 2 = poor;

3 = quite poor; 4 = normal;

5 = quite good; 6 = good;

7 = excellent.

Table A2 Pro-environment behaviours

No.	Questions	Agree level						
		1	2	3	4	5	6	7
PEBs1	At work, I try to reduce my energy use (e.g., turn off the lights when leaving, take the stairs to the lower levels).	①	②	③	④	⑤	⑥	⑦
PEBs2	At work, I always save water (e.g., I use just enough water to wash my hands, I don't let the faucet leak before leaving).	①	②	③	④	⑤	⑥	⑦
PEBs3	At work, I try to reduce use, recycle, and reuse materials (e.g., print double-sided).	①	②	③	④	⑤	⑥	⑦
PEBs4	At work, I offer ideas for reducing our hotels' impact on the environment.	①	②	③	④	⑤	⑥	⑦

1 = strongly disagree; 2 = disagree;

3 = quite disagree; 4 = normal;

5 = quite agree; 6 = agree;

7 = strongly agree.

Table A3 Organisational identification

<i>No.</i>	<i>Questions</i>	<i>Agree level</i>						
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
O11	When someone criticises our hotel, it feels like a personal insult.	①	②	③	④	⑤	⑥	⑦
O12	When I talk about this hotel, I usually say 'we' rather than 'they'.	①	②	③	④	⑤	⑥	⑦
O13	This hotel's successes are my successes.	①	②	③	④	⑤	⑥	⑦
O14	When someone praises this hotel, it feels like a personal compliment.	①	②	③	④	⑤	⑥	⑦
O15	If a story in the media criticised this hotel, I would feel embarrassed.	①	②	③	④	⑤	⑥	⑦

1 = strongly disagree; 2 = disagree;

3 = quite disagree; 4 = normal;

5 = quite agree; 6 = agree;

7 = strongly agree.