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From extra to *Extraordinary*: An academic and practical exploration of Extraordinary (E) Pro Environmental Behavior (PEB) in the hotel industry

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ABSTRACT

Over the past decades, organizations have become increasingly involved with environmental concerns to mitigate the negative consequences of their actions on the community. The hospitality industry, and especially hotels, aware of its effects, has taken steps to increase positive environmental behavior, attitudes, and initiatives, to lessen the harm to the greater community in which they are located. Encouraging employees in their pro-environmental behavior (PEB) within the organization is a long-standing initiative and well-cited in the literature. In this paper, we posit the need to extend the literature to an “extraordinary” (E) version of PEB i.e. extraordinary pro-environmental behavior via employee engagement. Our study examines traditional PEB through a systematic literature review deriving from eleven top-ranked journals for 79 articles, identifying key concepts through Leximancer. In addition, two workshops with international hospitality professionals were held to complement findings from the literature. Our contribution lies in developing a model that academics and hotel stakeholders can use to move beyond PEB to our proposition of E-PEB as well as address the practitioner-academia gap by comparing what the literature posits with the reality of the hotel industry.

1. Introduction

Over the past few decades, the hospitality industry has made concerted efforts to mitigate the adverse effects of tourism on the local environment. There is now considerable agreement that corporations significantly contribute to environmental degradation (Tian and Robertson, 2019), due to the (over)use of natural resources in their operations (Chan et al., 2014; Nisar et al., 2021; Pham et al., 2020a,2020b). Public concern has pushed the hospitality industry into environmental practices on the road to sustainability (Luu, 2017). The World Commission on Environment and Development (WCED) coined the term *sustainable hospitality* as making strategic decisions to meet the needs of today's hospitality stakeholders without compromising future hospitality stakeholders in their quest for a similar experience (Legrand & Sloan, 2010). Hotel managers appealing to stakeholder pressure have been implementing sustainability initiatives into their daily tasks but

have also realized that it involves an intricate system (Cotterell et al., 2020) of compromises.

Although several studies about pro-environmental behavior (PEB) focus on the consumer's point of view (Arshad et al., 2022; Hu et al., 2020), previous literature recommends that employees can be a critical element to consumers' adoption of green practices (Hon and Lu, 2013; Kim et al., 2019; Raza and Khan, 2022; Supanti and Butcher, 2019). Hotel management has formulated strategies to address environmental challenges (Arshad et al., 2022) by introducing ‘green practices’, and their success depends significantly on employee behavior (Yesiltas et al., 2022). Hotel employees' engagement and organizational commitment are crucial to sustainable hospitality management (Al-Hawari et al., 2021) due to the natural settings and scenery they are trying to promote to customers (Kim et al., 2016). If hotel employees are expected to go beyond the call of duty for daily tasks and service excellence, employers expect them to do the same for environmental tasks (Wang et al., 2021a,

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2021b). One way of ensuring this is through encouraging pro-environmental behavior (PEB) in the workplace and by influencing employees to engage in voluntary pro-environmental behavior (Tian and Robertson, 2019).

Peng et al. (2020) conceptualized PEB 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" (p. 1). Building on this concept, other studies have linked PEB to an organization's environmental sustainability efforts, suggesting that employees' behavior in completing work tasks in environmentally-friendly ways can contribute to positive outcomes (Kim et al., 2016; Baum et al., 2016; Karatepe et al., 2021). To promote environmental performance, it is crucial for hotel employees to demonstrate willingness and active engagement in PEB activities, both in task-related activities and voluntary initiatives. This engagement should be based on their knowledge, skills, and abilities for environmental initiatives, as highlighted by Nissar et al. (2021). Since the hospitality industry has often faced criticism as a significant environmental polluter due to its resource-intensive operations and waste generation (Luu, 2017), it becomes imperative for hotel employees to demonstrate willingness and active engagement in PEB activities. Both task-related activities and voluntary initiatives that focus on eco-friendly practices are crucial for fostering a culture of environmentally responsible behavior within hotels (Nisar et al., 2021). By fostering a culture of environmentally responsible behavior and encouraging PEB, hotels can enhance their overall environmental performance and contribute to a more sustainable future.

Typically, PEB entails a series of eco-friendly actions or initiatives in which employees engage. Some scholars have focused on the 'voluntary' nature of PEB (Nisar et al., 2021; Norton et al., 2015) which represents a type of workplace behavior that is consistent with a firm's socially and environmentally responsible values, beliefs, and goals (e.g., by enhancing the welfare of an external stakeholder—the natural environment) and that, in the aggregate, contributes to organizational success (Darvishmotevali and Altinay, 2022). However, many studies refer to the voluntary nature of PEB as expected behavior as it is inferred in the actions employees undertake (He et al., 2018; Oriade et al., 2021; Pham et al., 2020; Tian and Robertson, 2019; Wang et al., 2020; Zientara and Zamojska, 2018).

Previous studies (e.g. Zhang and Huang, 2019; Peng et al., 2020) have provided a narrow definition of PEB to primarily refer to actions related to reuse, recycle and conservation of resources, energy etc. For example, PEB in hotel settings was primarily represented by behavioral sub-categories such as reuse, recycling, green consumption, and conservation (Peng et al., 2020). These previous studies have predominantly focused on similar PEB tasks and initiatives with scant evolution of the sustainability actions that could be taken to remove the stigma of PEB being (simply) an 'extra task'. In our study, we aim to extend beyond the common argument to posit that a greater version of PEB, that is "extra-ordinary" PEB or E-PEB should be on the agenda. We define E-PEB as extraordinary engagement with all employees at all levels through emotionally-attached sustainability activities. We argue that employees who are emotionally engaged with sustainability activities are more likely to be passionate advocates for environmental responsibility since emotions have been considered an essential attribute to turn environmental attitudes into respectful outcomes towards nature (Thomas et al., 2009). This emotional attachment in turn drives the individual to go above and beyond their regular job duties to actively seek out opportunities for contributing to environmental initiatives. Our study contributes to the PEB debate by extending the concept of PEB to include E-PEB at all levels (lower, management, HR) with an emphasis on emotions (i.e., which were frequently cited in the literature that could provoke stronger engagement with PEB), thus leading to extraordinary PEB (E-PEB). From the practical angle, we conclude with innovative and 'extraordinary' examples and opportunities that hotel

management can implement.

This study addresses the following research questions: How can hoteliers (internal stakeholders) reshape the paradigm around PEB from an 'extra'-role to an extraordinary opportunity for all hospitality stakeholders? How can PEBs be reframed as extraordinary (i.e., special and recognized), thus leading to further engagement by hotel employees? Is the hotel industry prepared (and willing) to extend beyond traditional PEB to innovative E-PEB solutions for the future? To justify our suppositions that an innovative form of PEB is possible and necessary, this study begins with an analysis of the key themes and concepts from 79 articles through Leximancer, followed by a thorough examination of the literature and complemented by two workshops conducted with 24 hospitality professionals. The purpose is to offer potential recommendations on how to extend PEB to E-PEB in the hotel industry.

2. Methodology

A systematic literature review was chosen for several reasons. First, we want to explore the past and current literature on PEB (and its evolution) to identify common themes and concepts (Arshad et al., 2022; Hon and Lu, 2013; Kim et al., 2019; Raza and Khan, 2022; Supanti and Butcher, 2019). Through the systematic literature review, we were able to identify gaps and opportunities for extending (and reshaping) the existing image of PEB in the hospitality industry. Second, though the number of empirical studies on PEB continues to grow, we found no study that extended PEB actions and initiatives beyond the typical traditional solutions such as recycling, reusing, or waste management. Finally, this framework allows for a transparent, evidence-based approach to theory building that future scholars can use to advance an area of study (Petticrew & Roberts, 2006). The process of choosing articles is elaborated in the Prisma model in Fig. 1.

Of the 79 articles analyzed in this literature review, 73 were quantitative studies based on surveys and employed tests such as SEM, PLS, CFA, or a combination of such. Structural Equation Modeling (SEM) was the most common methodology as 44% of the articles used this type of testing. Of the six qualitative articles, two articles used a case study approach (Bohdanowicz et al., 2011; Sourvinou and Filimonau, 2018), one employed semi-structured interviews (Farmaki and Stergiou, 2021), one followed a phenomenographic approach (Cotterell et al., 2020), and two studies conducted a systematic literature review on partially related topics (Baum et al., 2016; Rhou and Singal, 2020). With a propensity and potential saturation of quantitative studies, we opted for a qualitative study that covered a significant time frame to identify the trends over time.

3. Keywords

The first keywords used in the article search were pro-environmental behavior/behavior, hotels, employees. The intent was to focus on PEB with employees, not customers, within hotels. We began our search within the following A or A+ ranked journals using the dates 2010–2022: *International Journal of Contemporary Hospitality Management*, *International Journal of Hospitality Management*, *Journal of Cleaner Production*, *Journal of Hospitality and Tourism Management*, *Journal of Sustainable Tourism*, *Tourism Management*, *Journal of Business Ethics*, *Journal of Hospitality and Tourism Research*, *Annals of Tourism Research*, *Tourism Management Perspectives*, and *Current Issues in Tourism*. The journals were divided amongst the authors for review using the keywords for the selected timeframe. Once articles were found, they were uploaded to a shared drive and cross-checked during weekly team meetings to validate their appropriateness for inclusion into the study. When perusing through the articles, though, we noted a propensity of three words (e.g., CSR, sustainability, and green human resource management) in their keyword lists. Thus, we added those three search terms in our journal search and replicated the search to find articles with the initial three and/or one of the following: CSR, sustainability, and green

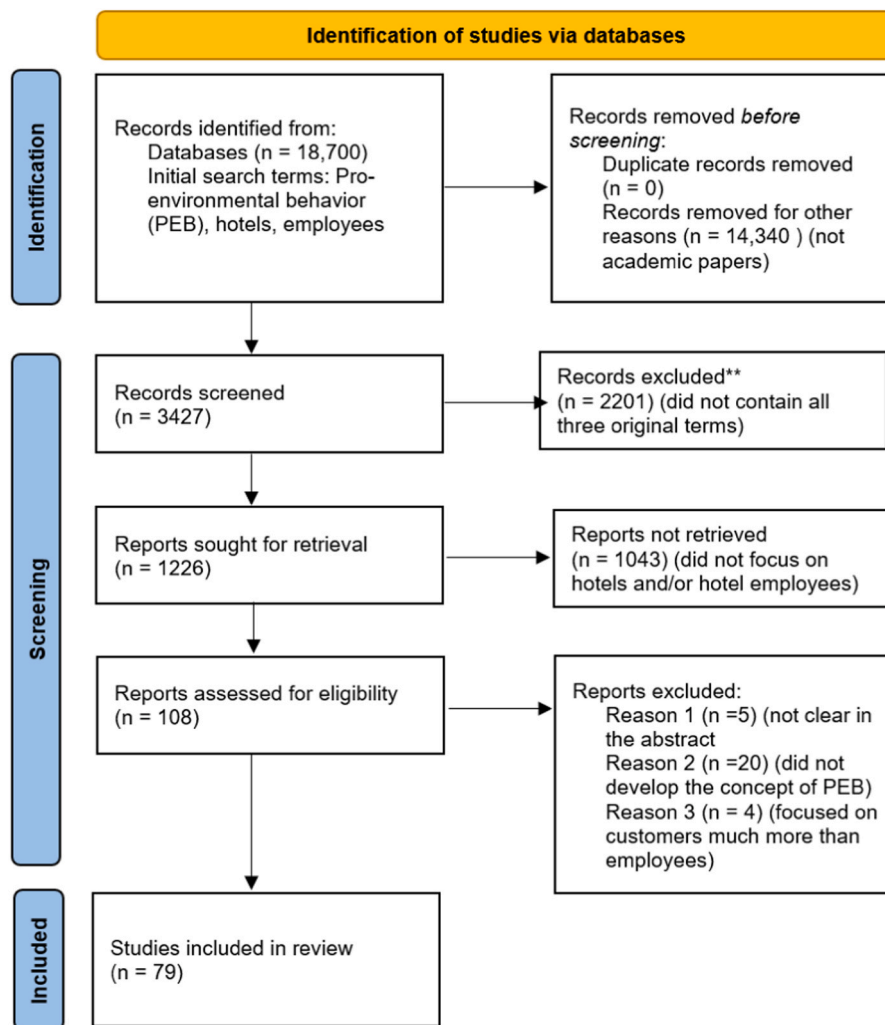


Fig. 1. Prisma Model. Adaptation from Page et al. (2021).

human resource management.

4. Leximancer

Leximancer is a qualitative analysis tool that interprets and visualizes complex data by transforming “lexical co-occurrence information from natural language into semantic patterns” (Smith and Humphreys, 2006, p. 262) to produce meaningful insights through concepts that can be clustered into higher-level themes and depicted as relationships between key concepts and themes. Leximancer is a useful tool when a researcher is exploring textual data to attempt to uncover important factors and does not have an ‘a priori’ set of factors or a model by which to analyze the data (Sotiriadou et al., 2014). Fig. 2 shows the dominant themes and associated concepts for our PEB study. The proximity of two concepts indicates how often they appear in similar conceptual contexts. The themes are the colored circles around clusters of concepts. The lines show the most likely path between concepts (Sotiriadou et al., 2014). The concepts are clustered according to weight and relationship to create a concept cluster map as seen in Fig. 2.

5. Workshop with hospitality professionals

To complement our findings from the literature, and bridge the gap between academia and industry, we conducted two workshops with 24 international top hospitality executives in decision-making roles who are currently completing their MBA in Hospitality Management at an

international hospitality school in Switzerland. The 24 professionals consist of two CEOs, seven managers, three assistant managers, two executive assistant managers, four directors, one associate director, two executives, one executive GM, one founder/partner, and one analyst. They work in 19 different countries and represent 15 different nationalities. In the workshop, they were asked to respond to specific questions about PEB in hospitality.

- 1) What environmental activities do you currently implement in your hotel/property/company?
- 2) What is your property doing for sustainability that other companies are not? What are other companies doing for sustainability that your company is not?
- 3) List all of the PEB behaviors, initiatives, or actions that you believe could lead to competitive advantage.
- 4) What is holding you back? What challenges have you faced/are you facing for implementing more PEB into your company?
- 5) What would you consider to be *extraordinary* PEB actions/initiatives? How would you gauge/recognize *extraordinary* PEB behavior by your employees, or stakeholders?

6. Findings

Our study will present its findings from two distinct perspectives: the comprehensive literature review and the qualitative insights obtained through two workshops involving 24 top hospitality executives from

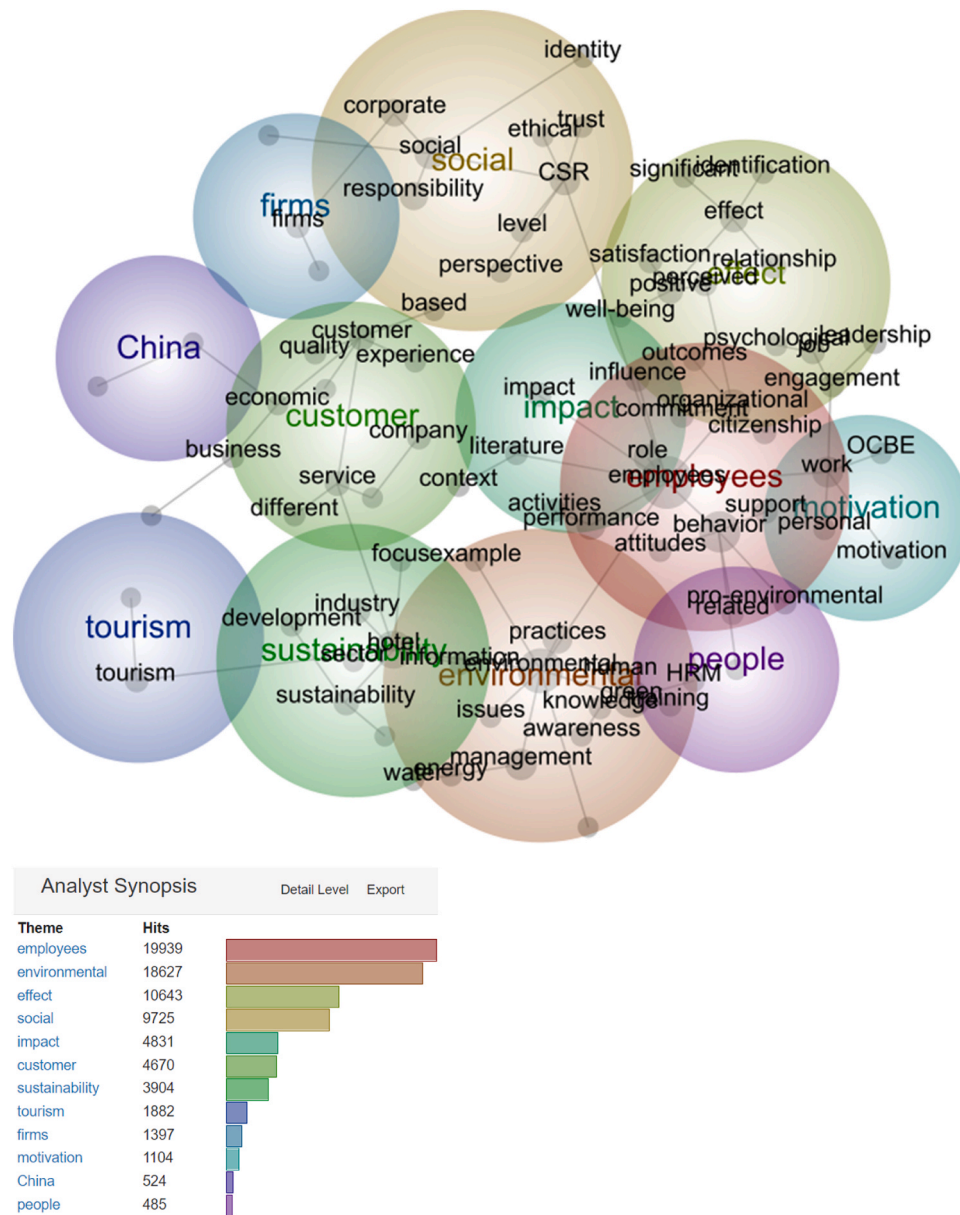


Fig. 2. Leximancer Results.

around the world. In this section, we discuss the outcomes of the literature review.

In the articles conserved for this paper, the geographical areas of study varied, with the vast majority (48%) deriving from Asia, followed by the Middle East and Europe (17% each), and USA and Africa (6%). For the theoretical framework used in previous studies, 60 different theories were used. Of those, only five theories were used in more than 5% of the articles: Social Identity Theory (20%); Social Exchange Theory (13%); Conservation of Resources Theory (12%); Resource-based View Theory (7%); and Self-determination Theory (5%). Regarding the methodology employed in prior studies, neither of the two literature reviews (Baum et al., 2016; Rhou and Singal, 2020) used a tool like Leximancer to identify the key themes and concepts for all of the articles. Further, no review complemented their study with a practical application through workshops as we did in our study. Thus, our study is original in the sense that we have expanded a traditional systematic literature review using a topic modeling tool on PEB and bridge the gap between academia and industry by conducting focus group/ workshop sessions with hospitality industry experts.

The following bubbles identify the key concepts and themes that derived from all the literature combined. This assisted us in choosing the key subsections for the rest of the literature review. With many directions that could have been taken, these results confirmed the topics that were the most relevant in the previous literature and should, thus, be included in our study.

Fig. 2 demonstrates the Leximancer results of all articles and journals combined, with a thematic summary of the results following the bubbles. The summary below the bubbles shows how the key words and concepts differed between journals.

As seen on Table 1, although the same search with the same keywords and dates were used by the same researchers to retrieve the articles, the Leximancer analysis of the text within each article and journal shows different results. For example, the word ‘employees’ appears first in five journals, within the top three for four journals, but not for JHTR. The integration of the literature review and Leximancer results is presented in Fig. 3. This figure depicts our vision of an employee ecosystem that derives from key terms we gleaned from the literature and Leximancer data structure. As illustrated, employees are situated in the

Table 1
Table of key words from Leximancer.

Journal	JUCH	IJHM	JCP	JHTM	JoST	TM	JBE	JHTR	ATR and TMP	CIT	ALL
Key terms	Employees Green Performance Environmental Organizational Management	Employees Environmental Green Work Social Organizational Leadership	Green Environmental Employees Management CSR Social	Employees CSR Social Environmental Work Behavior	Environmental Hotel Employees Green Behavior Management Work	Employees Environmental Social Service Customers Management	CSR Social Employees Corporate Environmental Organizational Work	Environmental Hotel Managers Behavior Organizational Positive	Workforce Social Employees Hotel Management	Employees Social Sustainability Organizational Environmental	Environmental Employees Green Social Tourism Customer Impact Motivation People
# articles	14	24	16	6	13	10	9	6	1 each	8	108

*This is the number before all the articles were read. Further articles were discarded once they were read.

center as they have been and continue to be the core of PEB in the workplace.

As seen in Fig. 3, employees' willingness to engage with PEB depends on how the organization and environment nurture employee attitudes, skills, satisfaction, and behavior around sustainability issues. These four elements can derive from personal motivation but can also be encouraged on an organizational level. When expanding out from the center, more organizational factors (i.e., GHRM, green culture, green strategy and vision, and person-organization fit) can be observed. These factors can encourage or impede an employee's adaptation of PEB practices in an organization. Nevertheless, organizations do not exist in bubbles; instead, their work extends to the external environment they affect. In the outer ring of the ecosystem, aspects such as awareness, consciousness, beliefs, and emotions play a more significant role in the PEB choices that are taken on an organizational and personal level. While this was our initial starting point, the analysis of the literature that follows will confirm the importance of each of these topics.

As part of our methodology, we also examined the perspective of hospitality professionals to establish how to move beyond traditional PEB practices that are recycled in the literature. In their groups, these professionals were asked to identify extraordinary PEB behavior that they conduct at their properties, that they have seen other properties initiate, and that could lead to competitive advantage. We used content analysis to explore the data of the two workshops and compared it with the literature review results. In Table 2, we illustrate several proposals based on the literature with examples from the workshops. In the left-hand column are the traditional PEB measures mentioned in the literature. In the right-hand column are the responses from the hospitality professionals on how to achieve E-PEB. While they, too, cited the typical PEB measures on the left, they were also able to offer creative propositions for extending PEB to E-PEB. In the table, PEB represents actual actions they have seen in their or other properties that they believe could lead to competitive advantage. The E-PEB column comes directly from their responses to the question about what designates extraordinary PEB.

In response to our research question: *Is the hotel industry prepared (and willing) to extend beyond traditional PEB to E-PEB solutions for the future?* Table 2 suggests the respondents in the workshops appear to be willing. If international hospitality professionals can cite extraordinary examples, differentiate between traditional and extraordinary behaviors, and identify those PEB actions that could lead to a competitive advantage, then there is hope for the hospitality industry. Though they can equally list the challenges in implementing PEB, green awareness, knowledge, attitude, and behavior are within reach.

From the literature, we have attempted to answer the following research questions: *How can hoteliers (internal stakeholders) reshape the paradigm around PEB from an 'extra'-role to an extraordinary opportunity for all hospitality stakeholders?* We have seen that this can be done through catered training, education, opportunities, and on-site PEB practices that are of interest to employees. If hotel managers communicate a clear strategy and implement GHRM practices which encourage PEB activities, employees will be inclined to engage in PEB. To address our final research question: *How can PEBs be reframed as extraordinary (i.e., special and recognized), thus leading to further engagement by hotel stakeholders?* This will take a concerted effort. All hotel stakeholders must be prepared to commit to sustainability and push traditional PEB into E-PEB through the proposed shape and comply employee ecosystem as situated in the organization and the environment. Fig. 4 provides an integration of the results from the literature review, Leximancer, and focus group sessions with hospitality professionals. Like Fig. 3's ecosystem, the employee remains at the center of our proposition.

Hospitality stakeholders have long expected employees to complete extra role tasks, i.e., PEB, in their daily work (Aboramadan and Karatepe, 2021; Bavik, 2019; Luu, 2017). These PEB extra tasks are encouraged at the management or organizational level and are often initiated by HR or GHRM. Nevertheless, these traditional PEB tasks have

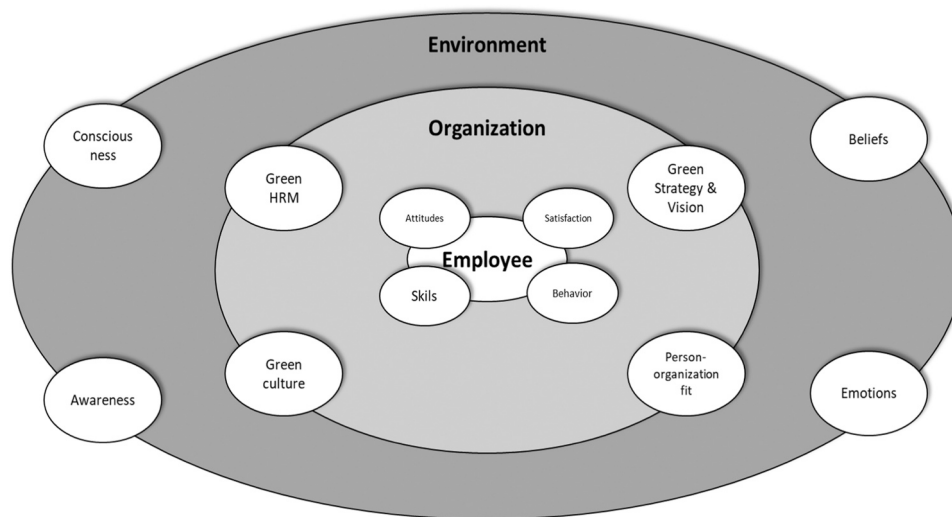


Fig. 3. Employee Ecosystem.

Table 2
PEB and E-PEB examples.

PEB	E-PEB
Green training for all internal stakeholders (general, obligatory or voluntary)	Management: Green training on strategy and organizational behavior HR Dept.: Annual training on green HR practices All: Targeted, interactive workshops within and across departments and hierarchy
Education on sustainable practices, including resources for internal stakeholders	Management: Strategic links to SDG on Education HR Dept.: Linking company policy to global educational policies All: Targeted courses on sustainability (paid by the company) and open for the local community as well
Local supplies (i.e., local organic foods in sales points)	Farm-to-table restaurants Animal farms Pink-light farms under the hotel Permaculture Vertical farming Farm on-site
Encouraging green travel (i.e., offering outlets to recharging green vehicles)	Providing only green pick-ups (i.e., cars, bikes, electric scooters) Off-setting for net zero emissions Carbon neutral or carbon negative objective
Controlling food waste (i.e., zero food waste, donating food to charity)	Zero waste stores to buy products to take home Waste disposal innovations

become more of a compliance issue, i.e., doing what society expects of an industry, more than authentic actions that would genuinely ‘shape’ employee motives, the greater community or environment in which they are situated, thus positioning the industry as a leader in environmental actions (Chan et al., 2014; Kim et al., 2019; Peng et al., 2020). Some PEB actions respond to regulations or market pressures. This is where E-PEB is crucial. E-PEB activities can be employed to shape, lead, or shift the public perspective of the adverse effects tourism can have on the planet, and, potentially, lead to a competitive advantage. Employees at all levels (low, middle, upper) and all departments must take ownership of E-PEB and spread it from inside a single property to the industry and, further, to society at large. Just as employees at all levels are included in our study, all employees live outside the hotel. They live in a community. Thus, the E-PEB must respect the internal needs of the hotel while respecting the external needs of the environment in which they are

situated.

Traditional PEB was predominantly individual; the E-PEB we recommend is holistic and inclusive, that it is the responsibility of all employees at all levels. This framework features a continuous feedback loop that is activated between internal stakeholders, to model E-PEB, strengthen each member’s sense of belonging by listening to employee opinions (esp. those on the frontline) and participating in activities that matter to them, thus allowing their voices to be heard (shape); in this way, employees will be motivated to sell the organizations PEB efforts as it is now part of their value system. This further extends to create a healthy organizational climate where employees find meaning in their work duties and develop trust in the organizations’ goals as they are trained in hotels’ sustainability efforts and are rewarded and recognized for pushing the organizations PEB efforts forward. These efforts will ultimately be visible in the environment as employees are now active participants who have been empowered to initiate PEB activities that are connected to them emotionally. The following section will discuss the themes as uncovered from the Leximancer results from literature that scholars can use to identify gaps and expand on in future studies.

7. Discussion

7.1. Environmental

Previous literature has posited that employees are more likely to undertake environmental tasks and initiatives beyond their mandated tasks if they are provided with increased knowledge, awareness, and concern (Chan et al., 2014; Kim et al., 2020; Sánchez-Ollero et al., 2021). Numerous definitions were provided in the literature to assist in understanding the environmental landscape. *Environmental knowledge* infers general knowledge of one’s impact on the environment and its significant ecosystems (Chan et al., 2014). *Environmental awareness* is the general attitude that leads to behavioral intentions (Chan et al., 2014). *Environmental concern* and *environmental attitude* are often interchanged as both consist of the collection of beliefs and intentions regarding environmental issues (Park et al., 2014) and the affect or worry associated with environmental beliefs (Kim and Lee, 2021; Zhang and Huang, 2019). Researchers defined ecological behavior as the actions that contribute to environmental preservation (Chan et al., 2014) linked to an environmental concern or attitude (Arshad et al., 2022). Finally, environmental consciousness was introduced as the psychological factor influencing individuals to display environmentally friendly and green behavior (Yesiltas et al., 2022).

As seen earlier, previous research suggested that it is crucial to

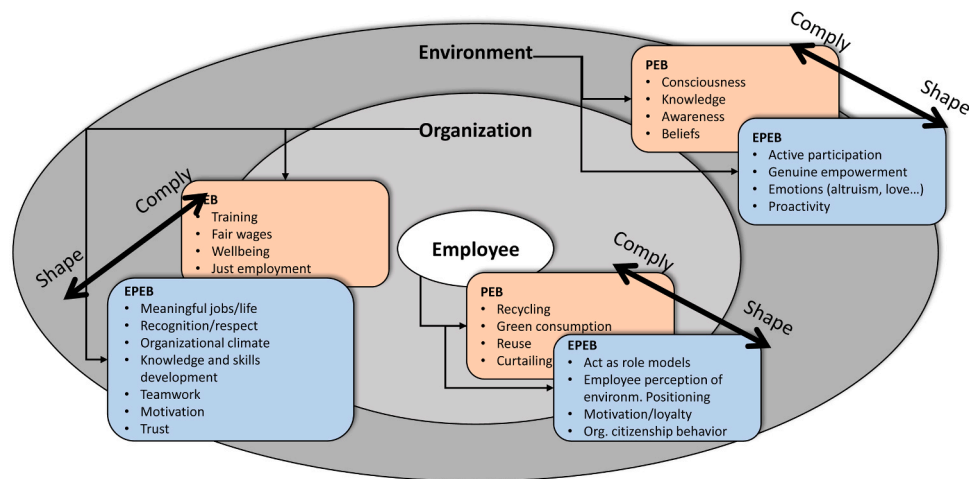


Fig. 4. Employee Ecosystem with PEB and E-PEB.

instigate a permanent change in employees' attitudes toward the environment through active participation and genuine empowerment. To do so, an eclectic and holistic strategy must be developed, combining the spirit of competition and employee empowerment with a sense of entertainment and innovative training (Bohdanowicz et al., 2011). This empowerment could lead to more significant environmental commitment, or 'a frame of mind denoting both a sense of attachment and responsibility to environmental concerns in the workplace' (Cabral et al., 2020, p. 4). Employees must believe in the organization and its commitment to doing good (Aboramadan and Karatepe, 2021) through the promotion of a green culture where members of the organization seek to improve the positive impact of the business activities of the organization on the environment (Umranı et al., 2022). When a green culture is effectively and sincerely established, employees do not see their jobs as a collection of tasks but as a way to participate in environmental behaviors that help develop a sense of purpose to contribute to something greater than themselves (Al-Hawari et al., 2021). Employees develop a high sense of calling that makes them stay in the organization and do more sustainability actions because they find their work valuable in terms of ideals and standards and want to give back to the community (Karatepe et al., 2021). Thus, if employees are aware of the benefits resulting from the adoption of green practices, they are more likely to follow PEB procedures and, more importantly, they will voluntarily engage with the company's green activities (Darvishmotevali and Altınay, 2022).

8. Employees

Many previous studies linked PEB to CSR. By definition, CSR is the integration of social and environmental concerns into business operations and interactions with stakeholders voluntarily (Al-Suwaidi et al., 2021; He et al., 2018; Oriade et al., 2021; Wang et al., 2020). Nonetheless, CSR means different things to different people (Oriade et al., 2021) and is difficult to measure (Wang et al., 2020). Further, CSR is weighted unevenly between different sectors and impacts from sector to sector (Rhou and Singal, 2020). Examples of CSR for employees include payment of fair wages, just employment, and labor practices, including diversity and inclusion so employers can better attract, motivate, and retain employees (Rhou and Singal, 2020). Further, due to deep-seated organizational trust, CSR also links to employees' well-being and taking responsibility (Wood et al., 2021). The more employees trust the company, the more they are willing to take responsibility for their actions (Wood et al., 2021).

Prior literature has shown a link between CSR and organizational citizenship behavior (OCB) through meaningful work (Nazir and Islam, 2020; Supanti and Butcher, 2019; Zhao et al., 2021). Employees'

voluntary behaviors may remain officially unrecognized, but they contribute to the organization's environmental goals (He et al., 2018; Pham et al., 2020). Often, employees do these tasks altruistically (Hu et al., 2019; Jung and Yoon, 2012) because they feel they belong to the organization and have emotional ties to its success; however, there are instances where this 'extra' help could lead to reciprocal favors and interpersonal trust from the supervisor (Hon and Lu, 2013). Nonetheless, if these 'extra' behaviors are forced or excessive, staff feel pressure to perform, which could lead to stress, burn-out, or deviance in work behaviors (He et al., 2018).

In the hotel industry, extra-role is seen as 'value-added' organizational citizenship behavior (OCB) or individual and discretionary behavior that goes 'above and beyond' established excellence in service (Cheng and Chen, 2017; Kim and Qu, 2019; Supanti and Butcher, 2019; Yoon et al., 2015). It is influenced by perceived CSR (Wang et al., 2020) and sound sustainability principles that increase the likelihood of environmental beliefs and encourage employees to enact extra roles (Arshad et al., 2022; Kim et al., 2020) beyond their everyday responsibilities (Aboramadan and Karatepe, 2021; Bavik, 2019; Luu, 2017). The predominant determinants of PEB in hotel settings are steeped in trade-offs and egocentric determinants, with the hotel-centric determinants playing only a secondary role (Miao and Wei, 2016). PEB in hotel settings was primarily represented by behavioral subcategories such as curtailing, reuse, recycling, green consumption, and conservation, with compromise and reduction making secondary contributions (Aboramadan and Karatepe, 2021; Bavik, 2019; Luu, 2017; Wang et al., 2021a, 2021b). Through extra roles, employees may receive positive recognition, praise, thank you notes, or friendships with customers who appreciate their extra behavior (Wang et al., 2021a, 2021b), which is necessary for maintaining service quality (Cheng and Chen, 2017) and motivating employees to do even more (Yoon et al., 2015). Nonetheless, it can be emotionally exhausting to add PEB to the existing role (Wang et al., 2021a, 2021b). Some employees resist as they are unwilling to change from their routine operations (or their core job) as they prefer the status quo and habitual behavior (Peng and Lee, 2019). Employers may believe their employees will willingly go beyond routine work tasks (Kim et al., 2020) to do that little bit more for customers (Cheng and Chen, 2017), but that is not always the case. Hence, monitoring employee PEB initiatives at all levels has the potential to remove the 'extra role' stigma and increase employee engagement through the collaborative efforts among all employees, regardless of department, title, or rank.

Past research suggests that employees are crucial to the success of sustainability initiatives in the workplace and will engage with PEB with more training, education on sustainability and opportunities to participate (Hon and Lu, 2013; Kim et al., 2019; Raza and Khan, 2022; Supanti

and Butcher, 2019). However, for that to happen, they need support from HRM and the (general) management. We refute this categorization for one reason: All of the workers in a hotel are employees of the hotel itself. Both HR staff and managers are themselves employees of the company. Further, many managers began in the company as lower-level employees. For this reason, we address PEB in a more inclusive manner by incorporating HR, management, and employees into the discussion and, more importantly, into the solutions. Further, employees should be seen as part of the greater employee ecosystem, rather than segregated by departments or titles.

In the most effective workplace environments, employee perceptions of a company's environmental position positively influence their attitudes toward the company and their job performance, leading to a positive, fulfilling state of mind filled with vigor and dedication (Wang et al., 2020). Further, perceived CSR increases employees' customer-oriented citizenship behavior by altering the way they do their work (Bavik, 2019), i.e., they may choose more sustainable methods for doing tasks, thus giving better customer service; however, there is the possibility that CSR impedes on their personal time where they are expected to support the company's actions outside of work (Bavik, 2019).

When the employee and the employer have similar perceptions about values, it is called organizational fit, which can lead to employee satisfaction, organizational commitment, and retention (Wang et al., 2020). Another term is person-job fit, i.e., when employees are job resourceful, they automatically adapt themselves to achieve work goals which are crucial if the organization is in a low-resource environment (Cheng and Chen, 2017). These employees are inclined to be engaged, implement positive work behaviors, and enhance customer relationships (Hu et al., 2020), which is crucial in the hospitality industry. Thus, employees who are 'fit' can find their own motivation to further the more significant objectives of the organization. These employees exhibit organizational commitment in how strongly they identify and are involved with their organization, leading to altruistic or prosocial behavior or extra efforts beyond their daily duties (Chan et al., 2014; Kim et al., 2019; Peng et al., 2020).

9. Green

Almost every study on PEB also included the key term 'green.' Cabral and Dhar (2019) defined many green terms, including green knowledge (i.e., general knowledge of facts, concepts, and relationships on environmental issues), green skills (i.e., professional, vocational, and generic skills to deal with environmental issues through problem-solving and innovation), green abilities (i.e., helping employees develop themselves to achieve environmental conservation, green awareness (i.e., enabling employees to be concerned about their adverse effect on the environment and how to mitigate their negative impacts), green attitude (i.e., an individual's cognitive assessment of the value of environmental protection which drives stakeholders to act), and green behavior (i.e., measurable actions and behaviors linked to sustainability (Cabral and Dhar, 2019; Luu, 2017). Luu (2017) added further terms such as green entrepreneurial orientation (i.e., strategic posture during change and progression to improve relationships with stakeholders), green service innovation (i.e., innovative services, eco-friendly designs to reduce wastes), and green creativity (i.e., an individual's formation of original solutions or ideas for the environment through green processes, products or services) which could give a competitive advantage (Al-Hawari et al., 2021; Ho & Julius, 2021; Muisyo et al., 2021). However, employees must have job autonomy and support to be innovative and creative (Luu, 2022).

In the literature, the word "green" appeared most frequently in the context of GHRM. Traditionally, sustainability and environmental actions were typically done by marketing and operations. Nevertheless, organizations have recently shifted to GHRM practices which include green recruitment and selection, green training, green performance management, a green pay and reward system, and green employee

involvement (Cabral and Dhar, 2019). Thus, GHRM positively affects individual perceptions of a company making the company more attractive to prospective employees (Umrani et al., 2022), which could, in turn, link to talent acquisition and retention (Kim et al., 2016). The hospitality industry has introduced GHRM to promote its employees and sustainable actions (Karatepe et al., 2022; Moin et al., 2021), as they have seen many benefits of this shift. GHRM enhances employees' perceptions of organizational support for the environment, and perceived org support fosters work engagement and task-related PEB and reduces quitting intentions (Karatepe et al., 2022); therefore, it is strategically beneficial for organizations to embrace GHRM (Ahmed et al., 2021a, 2021b). However, according to the literature, GHRM is not implemented effectively in hotels (and cost money), as many green star practices remain on paper and are used as a marketing tool rather than to promote employee green behavior (Yesiltas et al., 2022). Thus, GHRM needs an organizational vision about environmental issues, which may include a change in company culture to make this work (Al-Hawari et al., 2021; Ukeje et al., 2021).

To ensure authentic employee engagement, GHRM must promote practices to help form green motivation in employees, which is significantly and positively linked with employee environmental performance (Ahmed et al., 2021; Zientara and Zamojska, 2018). Employees must enhance their environmental knowledge which will then positively influence their environmental concern and ecological behavior (Chan et al., 2017). Previous studies have shown that employees' perceptions of GHRM enhanced their commitment to the organization, their eco-friendly behavior, and the environmental performance of the hotels (Kim et al., 2019). When employees perceive positive GHRM practices, their green intrinsic motivation increases. Green extrinsic motivation also increases when coupled with green compensation and rewards (Ahmed et al., 2021).

GHRM was linked to job resourcefulness and work engagement (Cheng and Chen, 2017; Raza and Khan, 2022) through the creation of meaningful jobs that motivate employees (Supanti and Butcher, 2019; Umrani et al., 2022). Meaningful jobs lead to greater job satisfaction which can lead to exceptional services and customer satisfaction (Aboramadan and Karatepe, 2021). Studies have shown that improving employee satisfaction and motivation is very profitable for both hotels and restaurants, regardless of size and strategy (Bagur-Femenías et al., 2015). Thus, with effective training, employees could tap into their inner drive to self-motivate during work and find creative methods to improve service and help others (Cabral et al., 2020; Hu et al., 2020; Kim et al., 2020; Pham et al., 2020; Su and Swanson, 2019; Yesiltas et al., 2022). In essence, employees, in their daily tasks, become role models for their colleagues by contributing to the organization's green practices (Kim & Lee, 2022). This is often referred to as proactive pro-environmental performance or the "employees' initiative to take part in green behavior besides their routine job duties" (Darvishmotevali and Altinay, 2022, p. 8). To do so, they need the support of the HR department through catered PEB training opportunities.

However, training alone does not suffice. Employees must have opportunities to implement what they learn in training, and they need to develop their knowledge, skills, and attitude toward environmental issues (Nisar et al., 2021). They need education, teamwork, practices, performance evaluations, and feedback to establish green behavior as routine practice (Chou, 2014). GHRM can motivate employees to learn about environmentally friendly prospects, skills, and work processes to further environmental performance in the company (Ahmed et al., 2021). With practical training and ample opportunities to apply what they have learned, employee engagement and environmental performance should rise and may stir pro-environmental behaviors among employees (Umrani et al., 2022), which could increase individual's abilities, motivations, and opportunities (Pham et al., 2020) and empower employees to enhance green consciousness (Muisyo et al., 2021).

10. Social

The literature discussed the key concept of emotions within an organization's internal and external social relationships. Some emotions included altruism (El Dief and Font, 2012; Farmaki and Stergiou, 2021; Garay and Font, 2012; Rezapouraghdam et al., 2018), gratitude, pleasure, and pride (Arshad et al., 2022; Fredrickson, 2013; Kim and Qu, 2019), empathy (Tian and Robertson, 2019), self-efficacy, hope, resilience, and optimism (Mao et al., 2021), and happiness, satisfaction, love, and interest (Fredrickson, 2013; Liu et al., 2021). These emotions can be used to ensure organizational outcomes, particularly in hospitality which is based on human relationships (Jung and Yoon, 2012). Hotels should consider implementing interventions to enhance employees' experience of positive emotions (Bagur-Femenías et al., 2015), such as creating a harmonious climate, implementing employee assistance programs, and stimulating positive emotions among employees. According to a study by Bibi et al. (2022), hotel employees care for voluntary CSR because it provides them with opportunities to fulfil their desire for self-realization, autonomy, and meaningfulness in life. These employees who perceive their hotel as more involved in voluntary CSR actions are high in self-esteem which directly influences their eudemonic happiness. The sense of meaningful and fulfilling work leads to increased job satisfaction and motivation, and contributes to employee loyalty (Sourvinou and Filimonau, 2018).

Nonetheless, not all emotions are positive. For example, employee pride can lead to more commitment and more extraordinary eco-friendly behavior (Kim et al., 2019) and strengthen the psychological relationship with the organization (He et al., 2018), which leads to more positive work attitudes (Yoon et al., 2015). Nonetheless, pride should not be confused with guilt when completing PEB tasks (Kim et al., 2020; Lu et al., 2020). Too many PEB obligations could lead to exhaustion or the problem of wanting to do more extra roles, but they just cannot (Karatepe et al., 2021), as they could lead to stress (He et al., 2018; Kim & Lee, 2022). Employees may engage in work for an increased sense of significance, enthusiasm, inspiration, and personal pride; however, this can be tiring on personal resources (Chen & Fellenz, 2020). Specific organizations witness a lack of total employee involvement, the cost of implementation and employee resistance to PEB as some cannot handle the extra stress of extra-role tasks (Luu, 2017).

One solution to this stress is by enhancing employee motivation to complete PEB tasks (Kim et al., 2016). Many studies discussed internal, autonomous motivation or the self-consistent, voluntary motivation that creates feelings of personal engagement which increases task effort and performance (Kim et al., 2016; Kim & Lee, 2022). However, researchers have questioned the motivation for PEB: Is it to meet job requirements, obtain rewards, or avoid sanctions (Kim et al., 2016)? Is PEB done to obtain approval or rewards or to meet job requirements and to avoid punishments (Kim & Lee, 2022)?

To mitigate the potentially negative emotions, hotel managers and GHRM must reassure employees that they are recognized and respected by the organization (Lu et al., 2020) and that their actions will be positively received (Wood et al., 2021). They believe that their work is meaningful and holds a positive meaning for the individual, leading to greater engagement with the job and greater commitment to the hotel (Al-Hawari et al., 2021; Nazir et al., 2021; Supanti and Butcher, 2019). Further, employees who believe in the organization's willingness to do 'good' gain increased trust and commitment to the company and performed better for them (Farooq et al., 2022; Liu et al., 2021; Wang et al., 2020; Yoon et al., 2015). These employees might feel a self-imposed obligation to perform PEB tasks because they care about the organization's well-being and goals (Kim and Qu, 2019). Nonetheless, employees must be aware of the hotel's sustainability actions to feel that their work is meaningful and makes a difference (Supanti and Butcher, 2019). If it is not effectively communicated, employees may not have the opportunity to feel the positive emotions linked to PEB actions.

11. Hospitality professionals: from PEB to E-PEB

The literature and managers agree on the traditional measures and the usual challenges for implementing PEB. They also agree that PEB could lead to competitive advantage. However, the literature does not extend beyond 'traditional' PEB and encouraging engagement, while 'real' hospitality managers can identify both traditional and *extraordinary* PEB. Thus, it is possible to identify E-PEB; it is difficult moving toward it. We have taken one step in that direction. These two scenarios derive from our findings:

Scenario 1- PEB: An employee suggests an environmental initiative to his/her manager (i.e., extra role, voluntary). The manager takes the idea to the C-suite and the management decides on the feasibility of the initiative and the manner in which it will be implemented. Management decides if employees will be rewarded for doing this behavior or sanctioned when not doing this behavior. They draft a set of measures to document the specific process. In the end, the initiative becomes an 'expected' behavior.

Scenario 2- E-PEB: An employee suggests (voluntary or discretionary behavior) an environmental initiative to his/her manager (green idea generation). The employee feels an emotional attachment to this topic and is willing to invest to make it happen (engagement). The manager discusses the idea further with the employee and, together, they take the idea to the C-suite where the employee pitches the initiative. All stakeholders around the table make a collective decision as to how the initiative can be implemented. The employee is proud to share the idea and happy to be included at all levels of the decision-making process (i.e., emotions).

In sum, although past research has studied employee pro-environmental behavior with a similar lexicon, such as sustainable/green employee behavior, organization citizenship behavior towards the environment, and others, our conceptualization of Extraordinary PEB extends previous understanding on several dimensions. They are

- a. Nature of action: E-PEB actions are voluntary, driven by sideways and bottom-up strategies that rely on innovation or continual process improvements, thus providing opportunities for businesses to shape, lead, and shift employee or community perspective, potentially leading to a competitive advantage
- b. Level of involvement: High, encompassing all levels of the organization
- c. Sustainability advocacy, which includes a desire to influence others to adopt pro-environmental behavior
- d. Alignment with organizational values: Alignment with holistic goals and values of social and environmental responsibility
- e. Level of effort: While the level of effort is high on the part of the employees because of the engagement and passion, it is not perceived as high or extra-role and cumbersome.

12. Conclusions and contributions

To create E-PEB opportunities, the general management, HRM, and employees must work together. Strategic management decisions must be reinforced through HR training, job postings, workshops, and seminars to encourage the employees to engage in environmentally friendly behavior (Ahmed et al., 2021). Employees at all levels should be included in problem-solving and follow continuous training programs (Aboramadan and Karatepe, 2021). Middle management should work with top managers and other departments like HRM to walk their talk about green policies, potentially by taking training themselves and/or coaching their employees (Luu, 2018). Top management must work with HRM to reinforce green values and actions particularly through training programs for employees (Luu, 2017) Hotel management must include HRM to develop and implement green training programs for employees to raise their positive feelings for the company (Yoon et al., 2015) and ensure that their hotels meet even the most ambitious

environmental goals (Ahmed et al., 2021). Top management can work with GHRM to promote employees' commitment and eco-friendly behavior through mission/vision statements, recruitment, and an understanding of the environmental needs required for each job (Raza and Khan, 2022) and to nurture green creativity at individual and team levels (Muisyo et al., 2021). Innovative GHRM practices can be used to acquire and retain talented employees whose environmental goals and values fit those of the company.

In short: We believe that the how and what of PEB are crucial for inspiring all hotel stakeholders to enhance PEB to a higher level to that of E-PEB. For E-PEB to occur, it will take authentic engagement from all hospitality stakeholders. We intend to use the recommendations from other researchers to create an E-PEB model that could be tested in an empirical study in the future. Finally, our review may help drive a future research agenda relevant and applicable to hospitality academics and practitioners.

13. Theoretical contributions

While past literature has discussed how important employees are to the PEB process, their recommendations typically include more training, more education on sustainability, and more opportunities to participate in PEB actions. Employees who believe in PEB could be identified and encouraged others to follow their lead. Nonetheless, the hotel industry is already suffering from attracting and retaining employees (particularly after Covid-19); thus, expecting employees to take on more 'extra-role' obligations when they are already overworked (and frequently, underpaid) is counterproductive. In this study, we have attempted to extend the systematic literature review on employee PEB through our addition of the E (meaning extraordinary engagement with employees at all levels with emotionally-attached sustainability activities) to the typical PEB acronym. Using Leximancer, we examined the most reported concepts for employees' and GHRM's PEB through a systematic literature review. Further, we complemented the systematic literature review to compare the academic ideas with 24 hospitality managers to gather further evidence from a management perspective. We also created a framework of recommendations that can be used to identify E-PEB activities/initiatives.

Concretely, we have made four contributions to the literature by: 1. Reinforcing the importance of employee PEB that is grounded in personal motivation for sustainability activities they are emotionally attached to. Previous literature posited that positive emotions in the workplace could explain employees' willingness to engage in voluntary PEB (Bagur-Femenias et al., 2015; Bibi et al., 2022; Chen & Fellenz, 2020; Fredrickson, 2013; Liu et al., 2021). We posit that with the right encouragement, it could lead to E-PEB moving forward. 2. Proposing a new employee ecosystem by extending who the employees are (i.e., including management and HR) and the relationship between them. Employees need to trust that the company is doing what they believe in (He et al., 2018; Jung & Yoon, 2021; Nazir and Islam, 2020; Supanti and Butcher, 2019; Zhao et al., 2021) and there is an authentic fit between the company, themselves, and external stakeholders in PEB actions and initiatives (Bavik, 2019; Wang et al., 2020). 3. Advancing existing knowledge about PEB by showing the importance of more proactive and broad dimensions through externalizing the influence outside the firm's border. This can be done through 'green' training offered by the HR department on environmental actions and initiatives that are most relevant for the hospitality industry (Ahmed et al., 2021; Al-Hawari et al., 2021; Cabral and Dhar, 2019; Luu, 2017; Ukeje et al., 2021). 4. Creating an integrative E-PEB model for future use (See Fig. 4). Previous research has shown that training on environmental issues is not sufficient and will not alone, encourage employees to do PEB (Chou, 2014; Darvishmotevali and Altinay, 2022; Kim & Lee, 2022; Nisar et al., 2021); rather, employees must have further opportunities to experience PEB and make innovative suggestions for E-PEB actions and initiatives.

14. Practical implications

The findings of the two workshops with hospitality management professionals allowed us to gauge if the literature and reality concur. We attempted to bridge the gap between academia and the hospitality industry on how to find solutions that extend far beyond the traditional PEB, leading to *extraordinary* PEB. This may entail finding other outlets for communicating these measures to hospitality management. Thus, this project is a first step toward defining authentic PEB actions and initiatives which go beyond the traditional measures to the new E-PEB status. Instead of being slow or resistant to change, the hospitality industry (one hotel at a time) could set the example for other industries to follow. In Fig. 5, we attempt to provide a PEB/E-PEB ecosystem to assist hotel professionals in differentiating and recognizing employee behaviors that exceed traditional extra-role duties. We propose a checklist of steps to assist hospitality stakeholders to embrace E-PEB in their establishments.

As seen in Fig. 5, hospitality stakeholders can begin by choosing one extraordinary action or initiative to test the waters. By including stakeholders from the entire ecosystem, hospitality managers could strategically implement a sustainability action plan that makes a difference to the employee, the organization, and the environment. With the support of GHRM, these sustainability actions could motivate employees to seek work and, more importantly, stay within the company. Motivated employees could have a more rewarding work experience that aligns with their personal behavior and attitude and encourages them to engage in more E-PEB.

15. Limitations/future studies

Our study, and the introduction of the new construct of E-PEB faced some limitations. Firstly, a systematic literature review while helpful to condense the literature and identify gaps, may provide limited support for our proposition of an E-PEB. Several previous studies, not necessarily in the hospitality industry domain, have discussed green employee behavior with a similar lexicon of formal and informal or task-related and proactive behavior (see Tang et al. (2023) for a review). Indeed, an analysis of the existing studies offered a solid foundation for the direction we took and the gap we established. Further, we mitigated that concern by including workshops with hospitality professionals to compare previous literature to the reality of practices and behavior in the industry. Future research can conduct a survey or extend the primary research to a more significant number of respondents with different types of behavioral motivations. Interestingly, research carried out with residents of Australia to promote PEB found that different kinds of PEB were considered high or low status by the respondents (Uren et al., 2021). The study found that efficiency behaviors, such as using energy-efficient appliances, conveyed greater social status than curtailment behaviors (e.g., reducing consumption) and activism behaviors (e.g., advocacy and campaigning). To encourage E-PEB amongst employees, the role of status, visibility, and empowerment can be a fruitful area of future research.

Secondly, a systematic literature review could contain bias when coding the key concepts and terms. For this reason, we utilized Leximancer to identify the key concepts. While we used the top recurring themes and concepts from Leximancer for all articles, future studies could be more inclusive of other concepts or categorize by journals for a more fine-grained approach. Finally, although we provided a model/checklist for hotel stakeholders to follow, there is the cost-benefit analyses that hospitality decision-makers are subject to which may preclude some suggestions being implemented in the short run. Also, there will be a need to disseminate the findings more practically and through other communication channels. Despite these limitations, we believe that the exigencies of the current dialogue on climate change and the U.N. sustainable development goals compel hoteliers and academics alike to go beyond what is known and done and move towards an extraordinary

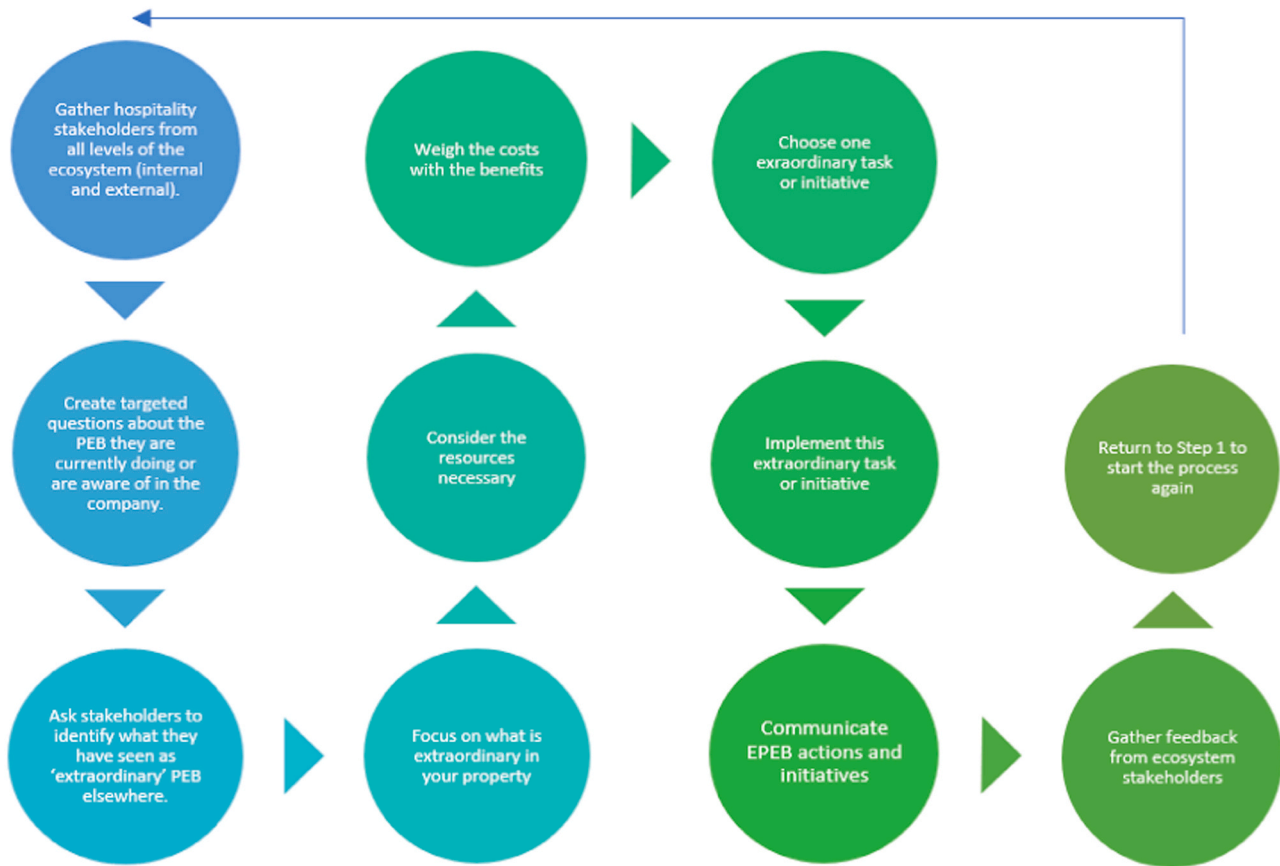


Fig. 5. Steps towards E-PEB.

path, for which we hope to have provided a first step.

CRediT authorship contribution statement

Bernard Simpson Shaniel: Conceptualization, Data curation, Formal analysis, Methodology, Validation, Writing – original draft, Writing – review & editing. **Singal Manisha:** Conceptualization, Data curation, Formal analysis, Project administration, Supervision, Writing – review & editing. **Dias Alvaro:** Conceptualization, Data curation, Formal analysis, Methodology, Writing – original draft. **Ho Jo Ann:** Conceptualization, Data curation, Writing – original draft. **Zizka Laura:** Conceptualization, Data curation, Methodology, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

None.

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