Green and non-green outcomes of green human resource management (GHRM) in the tourism context

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\textbf{A R T I C L E   I N F O}

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\textbf{Keywords:} & Green HRM  \\
& Narcissism  \\
& Time-lagged study  \\
& Personality  \\
& Employee  \\
& Performance  \\
& Satisfaction  \\
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\textbf{A B S T R A C T}

Globally, organizational espousal of green and sustainable operations has been critically facilitated by green human resource management (GHRM) initiatives, especially in the tourism and hospitality sector. This research is an effort to examine the nuances of employees’ responses to GHRM and contribute to this field by examining how narcissism, an individual trait and boundary condition, influences GHRM’s relationship with employees’ green (voluntary and task-related practices) and non-green outcomes (task performance and job satisfaction). Our hypotheses, grounded in social identity and trait activation theories, were tested with data obtained through a time-lagged two-wave survey of 219 UK-based hotel employees via the Prolific Academic platform. Analysis revealed significant associations between GHRM and all employee outcomes. Narcissism was shown to have a significant moderating effect on GHRM’s associations with both green and non-green (task performance) behaviors. Our results imply important understandings for the advancement of theoretical knowledge and practical implementation of GHRM.

1. Introduction

The global impetus of climate change concerns (United Nations, 2022) and environmental sustainability initiatives (Zaidi & Azmi, 2022) has emphasized the critical need for ‘greening’ of workplaces and organizations (Khalid et al., 2022). As a result, the extent to which core organizational entities in the tourism sector, such as hotels, engage in implementing green practices has become a point of attention and monitoring on a global scale (Chaudhary, 2021; Pham et al., 2020) for two primary reasons. First, consumers increasingly prefer green and eco-friendly hotels which implement services like zero-waste recycling (Hotel Management, 2022). This demand is reflected in current projections which expect the global eco-tourism market to be worth 333.8 billion USD by 2027 (Allied Market Research, 2021). Secondly, popular media often claims that despite their energy-intensive operations, hotels have been slow to adopt sustainable practices and support climate change action (Hillsdon, 2022). Policy support for hotels to implement green practices and achieve net zero emissions by 2050 has been galvanized by recent initiatives like the Glasgow Declaration on Climate Action in Tourism (UNWTO, 2021), and so it appears that the business environment is primed to sustain the prolific integration of green practices in tourism and hospitality. However, whether such implementation succeeds is largely dependent on employees’ involvement and support. Scholars such as Pham et al. (2019) and Renwick et al. (2013) highlight the crucial role of human resource management (HRM) in ensuring organizations’ success in this regard (see also Khalid et al., 2022; Tanova & Bayighomog, 2022; Pham et al., 2020). Subsequently, the past decade has witnessed a rapid growth in academic research examining the assimilation of green practices within HRM, a phenomenon referred to as green HRM (GHRM).

GHRM is identified as a mechanism pertinent to “recognizing relationships between actions that influence the environment and the

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plan, development, application, and effect of HRM systems in organizations” (Ren et al., 2018, p. 778). It encompasses three core dimensions: developing employees’ green capability, motivating employees to adhere to green standards, and providing employees with opportunities for application (Renwick et al., 2013; Pham et al., 2020). Moreover, GHRM involves various functional issues such as performance management, compensation, and rewards (Aboramadan & Karatepe, 2021; Shah & Soomro, 2023). While scholarly investigations into GHRM have gained ground in the past five years, it remains a developing field constrained by significant knowledge gaps, two of which we identify as motivations for this study.

First, there seems to be a lack of consensus on how and to what extent GHRM facilitates employees’ engagement in green behaviors (Pham et al., 2020). For example, Tanova and Bayighomog (2022) report that multiple prior studies have focused on employee-level consequences regarding green behavior, yet scholars such as Chaudhary (2021) and Rubel et al. (2021a; 2021b) have called attention to the lack of empirical studies investigating GHRM’s effect on employee-level green behavioral outcomes. Even recent studies such as Li et al. (2023) and Rashid et al. (2023) have argued for the need to delve deeper into explicating GHRM’s influence on employee-related outcomes.

Such inconsistency has also been noted in recent systematic literature reviews (SLRs) which emphasize that, to date, scholars have focused primarily on specific behavioral elements like green commitment and creativity (Benevene & Buonomo, 2020). Scholars (Tang et al., 2023; Zacher et al., 2023) contend that there is ample cause to expand knowledge on GHRM’s determinants at the individual level and embark on a deeper exploration of its influence on employees’ behavior. Such exploration is particularly required in context of tourism and hotels (Alreahi et al., 2023; Yong et al., 2023) which still face challenges in implementation (Dumont et al., 2017; Garavan et al., 2023; Khan et al., 2023). However, prior literature has given insufficient attention to boundary conditions or moderators that may indirectly influence GHRM’s associations with non-green outcomes. We respond to this call by examining the moderating influence of narcissism on GHRM’s efficacy may be contingent on contextual differences (Pham et al., 2020; Tang et al., 2023; Tanova & Bayighomog, 2022). Moreover, its influence on employees can occur through the intervening effects of various psychological processes (Dumont et al., 2017), such as regulatory focus (Mo et al., 2022; Zhang et al., 2022). However, prior literature has given insufficient attention to boundary conditions or moderators that may indirectly influence GHRM’s associations with non-green outcomes. We respond to this call by examining the moderating influence of narcissism on GHRM’s efficacy may be contingent on contextual differences (Pham et al., 2020; Tang et al., 2023; Tanova & Bayighomog, 2022). Moreover, its influence on employees can occur through the intervening effects of various psychological processes (Dumont et al., 2017), such as regulatory focus (Mo et al., 2022; Zhang et al., 2022). However, prior literature has given insufficient attention to boundary conditions or moderators that may indirectly influence GHRM’s associations with non-green outcomes.
knowledge on GHRM’s influence on employees’ green behaviors, as scholars like Darvishmotavali and Altinay (2022) have noted our limited understanding of how GHRM influences both task-required and voluntary green behaviors in the tourism and hospitality sector (i.e., hotels). Thus, our consideration of green (both voluntary and task-required) and non-green outcomes promises to provide a deeper understanding of GHRM’s influence on employee behavior. We therefore expect that our findings will aid practitioners in developing strategic GHRM initiatives. Furthermore, our investigation concentrates on the UK, wherein the government has demonstrated its commitment to achieving a net-zero emissions target and ceasing all contributions to global warming by 2050 (Department for Business, Energy & Industrial Strategy, 2019; Deloitte & IEMA, 2022). Recent publications (e.g., Alreahi et al., 2023; Tanova & Bayighomog, 2022) have observed that the UK is under-researched regarding GHRM’s effect on employees’ green and non-green behaviors, on which our study specifically centers.

Secondly, our focus on narcissism as a moderator of the tested associations offers unique insights into the role of personality traits in employees’ actions when considering their understanding of the organization’s GHRM initiatives. This is a valuable contribution, as our study sample comprises employees working in hotels, a setting in which employees’ personalities can significantly influence customers’ satisfaction (Milliman et al., 2018) and perception of an organization’s sustainability initiatives. Given the lack of focus on narcissism despite personality traits being identified as significant influencers of employees’ organizational behaviors, our study has the potential to elucidate a hitherto unexplored boundary condition that could significantly affect GHRM implementation. Lastly, by grounding our study variables using the dual theoretical lenses of SIT and TAT, we answer the call for expanded theoretical perspectives in GHRM research, and further address the identified need to conduct such research utilizing empirically validated scales (e.g., Ren et al., 2018; Tanova & Bayighomog, 2022).

The rest of the paper is organized into six sections. Section 2 presents a brief overview of our study context and theoretical background. Section 3 presents our hypotheses and outlines our justifications for the identified associations. Sections 4 and 5 detail our methodological approach and findings, respectively. Finally, sections 6 and 7 discuss the results and present our concluding remarks, including our study’s implications, limitations, and future research agendas.

2. Background and theory

2.1. GHRM and tourism

The hospitality sector has grown in tandem with international tourism (ReportLinker, 2022) but recent reports (e.g., Hillsdon, 2022; Zero Carbon Forum, 2022) have called attention to the extensive contribution of hotels in particular, and the tourism sector in general, to pollution levels (Triffo, 2020) and detrimental environmental impacts (Ahmed et al., 2021). Further, the recognition of carbon footprints and the energy-intensive nature of the tourism sector has led to increased pressure to understanding how this sector’s negative influence on the environment can be reduced (Hillsdon, 2022; Nisar et al., 2021; UNWTO, 2021). Subsequently, certain scholars (e.g., Mittal & Dhar, 2016; Sourvinou & Filimonau, 2018) have turned their attention to investigating how green practices can be employed in the hotel industry in order to reap benefits, such as improved productivity, cost reduction, and augmented employee retention (Akgunduz et al., 2020; Chaudhary, 2021). This attention has highlighted the role of GHRM, an assemblage of environmentally conscious practices adopted at the organizational level to achieve positive environment management outcomes (Shah & Soomro, 2023; Tanova & Bayighomog, 2022) by encouraging green behaviors among employees (Rubel et al., 2021b; Zhu et al., 2021).

Past research has discussed GHRM’s potential for promoting and facilitating initiatives targeting pro-environmental activities (Pham et al., 2020; Tanova & Bayighomog, 2022). For instance, Chan and Hsu’s (2016, p. 905) study noted that “without staff involvement, a company’s environmental program will very likely fail, as frontline employees execute many environmental measures.” However, how employees perceive GHRM, and how it influences their behaviors, intentions, and attitudes has not yet been thoroughly examined (Chan et al., 2017; Sourvinou & Filimonau, 2018). Certain recent studies (e.g., Darvishmotavali & Altinay, 2022; Rubel et al., 2021b) have highlighted the need for more detailed investigation into how GHRM affects employee behavior, especially when considering both voluntary and task-required facets across various sectors and industrial contexts (e.g., Pham et al., 2020; Tanova & Bayighomog, 2022).

2.2. Social identity theory

The Social Identity Theory (SIT) asserts that individuals devote considerable time and energy to developing and preserving a satisfactory social identity, and do so largely by relying on membership, affiliation, and alignment with groups perceived as high-status and prestigious (Tajfel & Turner, 1979, 2010; Tanova & Bayighomog, 2022). The theory suggests that focusing on an organization’s socially valuable standards and attributes can promote employees’ sense of self-importance through their relationship with a laudable institution (Dutton et al., 1994; Tajfel & Turner, 1979) and their subsequent identification with it. It has also been suggested that employees who embrace the positive conduct and standards of their organizations identify more strongly with these organizations (Tanova & Bayighomog, 2022) and demonstrate greater commitment to them (Ashforth & Mael, 1989).

Prior research has used SIT to explain the association of GHRM with employees’ pro-environmental behavior (e.g., Rubel et al., 2021a; Veerasamy et al., 2023; Zhu et al., 2021). Because green initiatives are a valued organizational attribute in the current business climate, an organization’s clear communication of its green objectives and values through GHRM may create a sense of pride among its employees (Chaudhary, 2021) and lead to positive outcomes (Kim et al., 2019). We further leverage SIT to suggest that in adopting and executing GHRM practices, employees may believe that they would garner social and inter-organizational appreciation – thus, building a positive social identity. They may even feel a greater sense of inclusion with their organizations’ environmental performance visions (e.g., see Veerasamy et al., 2023; He et al., 2021, Thabet et al., 2023), and hence GHRM initiatives may foster an overall green culture with which employees may strongly identify. Such beliefs would robustly propel their performance in meeting both voluntary and required green behaviors. Hence, we follow the example of prior research and draw on SIT to posit that employees with explicit knowledge of their organizations’ GHRM initiatives may be more inclined to perform both green and non-green activities to higher standards (i.e., H1 – H4).

2.3. Trait activation Theory

Trait Activation Theory (TAT) proposes that an individual’s personality traits and corresponding behaviors are triggered by situational cues that call for these traits’ expression (Tett & Burnett, 2003; Tett & Guterman, 2000). Workplace-related situational cues may be found in tasks (daily work activities), social interactions (group or individual), and organizational features (culture and climate) (Liu et al., 2021; Tett et al., 2021). These situational characteristics can significantly influence individual behavior and reveal differences in how traits are expressed in given situations (Lang et al., 2022; Tett et al., 2021). How strongly a person perceives a situational feature can influence how the associated personality trait is expressed, and TAT proposes that such expression may be seen as rewarding (Li et al., 2021).

We draw on TAT to propose that GHRM acts as a powerful organization-level situational feature that influences employees’ green behaviors among employees (Rubel et al., 2021b; Zhu et al., 2021).
and non-green behaviors through the expression of the personality trait of narcissism (H5a-d). Narcissism is understood as “an inflated sense of self and preoccupation with having that self-view continually reinforced” (Chatterjee & Hambrick, 2007, p. 353). While narcissism is usually viewed as a negative or dark personality trait, prior research suggests that it may sometimes lead to positive outcomes, such as change-oriented organization citizenship behavior (OCB) (Lang et al., 2022). Such behavior is tentatively attributed to narcissists due to their need for admiration (American Psychiatric Association, 2000; Wan et al., 2021) and desire to participate in self-promoting activities (Liu et al., 2021).

We apply this characterization and the preceding discussion of TAT to propose that an employee who perceives GHRM initiatives as essential to the organization may be stimulated by the situational cue of GHRM and so driven by narcissistic tendencies to demonstrate strong performance (for both green and non-green outcomes) in the hopes of garnering admiration and status. Hence, our conceptual framework includes employees’ narcissism as a trait and boundary condition.

3. Framework and hypotheses

The theoretical framework adopted in our study is illustrated in Fig. 1, and Table 1 describes the study variables.

3.1. Non-green outcomes: task performance and job satisfaction

Past research (e.g., Benevene & Buonomo, 2020; Ren et al., 2018; Tanova & Bayighomog, 2022) has examined how GHRM is related to non-green outcomes but indicates that they are significantly associated. Regarding job performance, Ragas et al. (2017), Chuah et al. (2021), and Hastuti and Muafi (2022) found that GHRM positively influences employees’ job performance, correlating to our concept of task performance. Similarly, Delmas and Pekovic (2013; 2018) discuss how introducing environmental standards to an organization can improve employees’ productivity. In addition, certain other studies have found GHRM to be indirectly associated with employees’ non-green performance through mediators such as perceived organizational support (Aboramadan & Karatepe, 2021) and social identity (He et al., 2021). By contrast, Ismail et al. (2021) found no significant association between GHRM and employee job performance.

Despite these inconsistencies in the literature, we suggest that GHRM may be positively associated with task performance and ground our rationale in the tenets of SIT, which proposes that employees’ perception of their organizations are contingent on their interpretation of information disseminated by these entities (Tajfel & Turner, 1979). We believe that the communication of GHRM initiatives and policies can form a solid foundation of organizational knowledge and ensure that employees receive clear, consistent information about their

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Study variables and conceptualization.</th>
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<tbody>
<tr>
<td>Variables</td>
<td>Concept (references)</td>
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<tr>
<td>GHRM</td>
<td>“GHRM is an HRM program that is environmentally friendly as it seeks to ensure and mobilize employee involvement in the form of superior green efficiencies and lower costs to stimulate an organization to conserve and condense resource use wherever possible.” (Rubel et al., 2021a, p. 1000)</td>
</tr>
<tr>
<td>Task Performance (TP)</td>
<td>Non-green tasks that are required within a job role and lead to “positive workplace performance outcomes.” (Aboramadan &amp; Karatepe, 2021, p. 3207, p. 3207)</td>
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<tr>
<td>Job Satisfaction (JS)</td>
<td>“A positive emotional state resulting from an employee’s appraisal of their experiences in the job and subsequently perceived satisfaction” (Tietjen &amp; Myers, 1998)</td>
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<tr>
<td>Voluntary Green Behavior (VGB)</td>
<td>Environmentally friendly initiatives that are performed autonomously by employees but not formally required by the organization (Bissing-Olson et al., 2015, Zhu et al., 2021)</td>
</tr>
<tr>
<td>Task-related Green Behavior (TRGB)</td>
<td>Employees’ engagement with green behavior and environmentally friendly activities while completing core work tasks required by their job description and the organization (Bissing-Olson et al., 2015, Zhu et al., 2021)</td>
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<tr>
<td>Narcissism</td>
<td>A moderately steady individual trait comprising of “grandiosity, self-love, and inflated self-views” (Campbell et al., 2011, p. 269) accompanied by a “preoccupation with having that self-view continually reinforced” (Chatterjee &amp; Hambrick, 2007, p. 353, p. 353)</td>
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Fig. 1. Conceptual model.
organizations’ green activities as well as desired and mandatory performance indicators. It is possible that, armed with clear expectations and information, employees may experience deeper alignment with their organizations’ green culture and devote more effort to improving their performance (Ismail et al., 2021).

Further, GHRM initiatives are poised to garner substantial societal appreciation in the current business environment, which is highly focused on promoting the bioeconomy (Baicus et al., 2019; Mercade Mele et al., 2019) and circular economy (Jabbour et al., 2019; Koval et al., 2022). SIT indicates that the socially appreciated attributes (Dutton et al., 1994; Tajfel & Turner, 1979) of an organization strengthen employee identification, and so it is possible that employees’ understanding of their organizations’ GHRM policies can alleviate social uncertainties (Rubel et al., 2021a) and foster more substantial organizational commitment. In turn, this could encourage employees to display a positive attitude (Ren et al., 2018) and increase OCB, which may lead to improvements in job performance (Delmas & Pelovic, 2018). Thus, SIT offers us grounds to understand how GHRM may positively influence task performance – that is, through expected accumulation of social appreciation, stronger employee identification and commitment which culminate in higher task performances.

As with task performance, research on GHRM’s association with employees’ job satisfaction is somewhat limited. Pinzone et al. (2019) found that green training improves employee job satisfaction and attributed the significant association to green training’s potential to provide a personal resource applicable in different situations and to its positive spillover effects in employees’ personal lives. Similarly, Shafaei et al. (2020) discussed that GHRM could cultivate higher job satisfaction by allowing employees to find more meaning in their work. In addition, GHRM has been found to mediate the association of job satisfaction with organizational antecedents such as environmental culture (Hastuti et al., 2020) and extra-role (voluntary) green behaviors among employees (Aboramadan, 2022). SIT indicates that the socially appreciated attributes (Dutton et al., 1994; Tajfel & Turner, 1979) of an organization strengthen employee identification, and so it is possible that employees’ understanding of their organizations’ GHRM policies can alleviate social uncertainties (Rubel et al., 2021a) and foster more substantial organizational commitment. In turn, this could encourage employees to display a positive attitude (Ren et al., 2018) and increase OCB, which may lead to improvements in job performance (Delmas & Pelovic, 2018). Thus, SIT offers us grounds to understand how GHRM may positively influence task performance – that is, through expected accumulation of social appreciation, stronger employee identification and commitment which culminate in higher task performances.

The following existing research on this association, we expect GHRM to positively influence the non-green outcome of job satisfaction. SIT proposes that individuals strive to build and maintain secure group memberships that enable them to uphold a particular identity (Veerasamy et al., 2023). This identity consequently translates into specific behaviors that conform to the group norms (Tajfel, 2016; Tajfel & Turner, 1979). Evoking SIT, we contend that executing GHRM practices would allow employees to establish a strong identity among external stakeholders (Chaudhary, 2020; He et al., 2021), like consumers. Moreover, such positive self-identities may also be reinforced by employees’ belief of acting in alignment with their employers’ environmental performance objectives (Nisar et al., 2022). Further, participating in GHRM activities may also instill a sense of pride (Ismail et al., 2021) among employees; leading them to feel and exhibit higher job satisfaction in their work (e.g., Shafaei et al., 2020). This proposal also aligns with those of Karatepe et al. (2022), who discussed that GHRM can improve work engagement among employees who develop positive feelings after witnessing examples of organizational commitment to environmental protection. Thus, to our knowledge, while few studies have investigated GHRM’s direct relationship with employees’ non-green behavioral outcomes of task performance and job satisfaction, we extend the above discussion and the tenets of SIT to propose the following hypotheses:

**H1.** GHRM is positively associated with task performance.

**H2.** GHRM is positively associated with job satisfaction.

### 3.2. Green outcomes: voluntary and task-related green behavior

It has been found that GHRM influences both in-role (task-related) and extra-role (voluntary) green behaviors among employees (Aboramadan, 2022; Rubel et al., 2021a). Although the findings specific to the tourism sector are limited (e.g., Mo et al., 2022; Zhu et al., 2021), we draw on the literature from other service-related contexts like higher education (Veerasamy et al., 2023) and banking (Khan & Muktar, 2021) to support our arguments.

As GHRM incorporates core aspects of green recruitment, training, and skills, its effective deployment and policies can improve employees’ practical capability to perform task-related green behaviors and solve task-related challenges in an environmentally friendly manner (Aboramadan, 2022; Zhu et al., 2021). For instance, Karatepe et al. (2022) found GHRM to be positively associated with task-related pro-environmental behaviors and attributed this association to employees’ beliefs about learning new skills and making valuable contributions to their organization’s green practices. Similarly, Khan and Muktar (2021) and Aboramadan (2022) identified significant associations between GHRM and task-related green behavior, with the former determining the association to be mediated by commitment. In addition, GHRM incorporates rewards, performance appraisals, and promotions based on employees’ achievement of an organization’s green goals. These initiatives signal official admiration, and offer incentives for employees to strive for, by performing task-required green behaviors (Chaudhary, 2020; Shah & Soomro, 2023). The findings of Veerasamy et al. (2023) confirmed a positive association between employees’ green behavior and GHRM elements of performance management and appraisals, as well as compensation and rewards. Because GHRM specifies employees’ task descriptions and performance indicators, it is plausible to suppose that such specifications act as baselines for contribution to and inclusion in the organizational group (e.g., see Khan & Muktar, 2021; Bartram et al., 2021). Thus, we propose that GHRM may incentivize employees to accomplish the specified behaviors by promising inclusion within a unique and desirable group (i.e., a green organization).

Additionally, an organization’s commitment to green initiatives may encourage employees to demonstrate reciprocal behavior (Aboramadan, 2022) and perform voluntary green behaviors to express closer alignment with organizational policies (Rubel et al., 2021a). GHRM policies can permeate an environment and culture in a way that promotes strong employee identification with the organization’s green objectives, as suggested by SIT. This identification may, in turn, strengthen employees’ emotional attachment to such organizational initiatives (Khan & Muktar, 2021), motivating them to go beyond specified objectives and perform voluntary green behaviors. Our reasoning is supported by recent studies which have determined that GHRM shares a significant relationship with voluntary green behavior. For instance, Dumont et al. (2017) found that GHRM creates a psychological green climate that positively influences employees’ inspiration to engage in both task-related and voluntary green behaviors. More recently, Garavan et al. (2023) and Shah and Soomro (2023) also determined GHRM to directly and positively influence employees’ pro-active and voluntary green behavior.

We therefore believe that GHRM can promote both task-related and voluntary green behavioral outcomes by creating an environment that fosters a strong employee-organization identification and promoting internalization of the organization’s eco-friendly values (e.g., Kim et al., 2019). Simply put, GHRM may signal that green activities are expected, apposite, and valuable (Garavan et al., 2023), encouraging employees to go beyond routine execution of task-related duties and engage in green behaviors voluntarily. This aligns also with SIT’s tenets which proposes that strong identification with an organizational group may accelerate their commitment (Khan et al., 2022). In our view, hotels’ GHRM initiatives may signal organizational establishment of a socially appreciated, unique group (i.e., of being green, e.g., see Veerasamy et al., 2023; Khan et al., 2022). Employees would strive to be part of this group by performing task-related green behaviors to exhibit congruency with their organizations (Tanova & Bayighomog, 2022). Further, we believe that employees would even voluntarily participate in GHRM activities to ensure that their membership and identification with their organizations (i.e., unique group) remains secure (Veerasamy et al., 2023). Thus, aligning with the prior literature, we hypothesize the following:
3.3. The moderating role of narcissism

While past research has investigated personality in the context of tourism and hospitality (Doan et al., 2021), little is known regarding its moderating effects on GHRM’s associations (Tanova & Bayaghomog, 2022). Moreover, prior examination of narcissism’s influence on pro-environmental (Naderi, 2018; Pavalauche-Ilie & Cazan, 2018; TM et al., 2021) and prosocial behaviors (Liu, Zhu, et al., 2022) in the workplace has yielded inconsistent results. Such inconsistencies (Prun-deau et al., 2019) have led some scholars to propose that, in general, there is no association between narcissism and work performance (e.g., Grijalva et al., 2020). However, we believe that inconsistent results may indicate narcissism to be a boundary condition for workplace behaviors. Our supposition is based on findings that employee responses are contingent on self-enhancement motives (Dutton et al., 1994), typifying the narcissistic employee’s need for social recognition, opportunistic self-affirmation, and enhancement (Ahmad et al., 2021; Han et al., 2020; Lang et al., 2022; McCain & Campbell, 2018). TAT emphasizes that individual traits are activated and enacted through specific behaviors consequent to emergence of appropriate situations (Liu et al., 2021). And opportunities to exhibit prosocial behaviors which garner admiration could be an appropriate situation for activating narcissism (Liu, Zhu, et al., 2022). Participating in GHRM practices could present narcissists a chance to distinguish their performance in accordance with organizations’ green objectives. We believe that these individuals would seize the chance and show stronger GHRM-driven green performance. We further believe, that once activated, narcissism would drive these individuals to establish their superiority among colleagues by showcasing voluntary green, and even non-green behaviors.

To begin, we expect that narcissism will moderate the association of GHRM with task performance. Our expectation is derived from prior research which suggests that narcissistic individuals may exhibit OCB out of a desire to enhance their status, reduce perceived inequity, or maintain a positive self-impression (Campbell et al., 2011; Chou & Ramser, 2022). Moreover, scholars have noted that narcissists exhibit traits that positively associate with good work performance, such as self-confidence, determination, and decisiveness (Soyer et al., 1999). Such abilities may enable narcissists to be proactive (Liu, Mao, et al., 2022), promote new ideas (Harms et al., 2022), and obtain promotions (Nevicka & Sedikides, 2021). These studies indicate that narcissists may seize organizational opportunities to exhibit superiority and proactivity (Chou & Ramser, 2022; Liu, Mao, et al., 2022). Drawing on TAT and the above discussion, we propose that GHRM implementation can act as a situational stimulus that triggers narcissistic employees to demonstrate their preeminence, abilities, knowledge, and skills (Raza & Malik, 2020; Walch et al., 2020).

Lang et al. (2022) have explained that narcissists strive to achieve a distinctive status among their peers by meeting and exceeding expected performance levels. We expect that high levels of narcissism will lead to a stronger association between GHRM and task performance. Although we found little a priori evidence for the exact nature of narcissism’s influence in the GHRM context, our hypothesis finds some support in the extended literature. For instance, Han et al. (2020) found that team members’ narcissism positively moderates the association between task performance and empowering leadership, and Zhong et al. (2022) found narcissism to attenuate the influence of received help on employees’ prosocial motivations. Based on the above discussion, we hypothesize:

H5a. Narcissism moderates the association of GHRM and task performance such that higher levels of narcissism lead to a stronger association.

To the best of our knowledge, narcissism has not yet been investigated as a boundary condition for employee satisfaction in the tourism and hospitality sector and has only been superficially explored in other organizational contexts, again with inconsistent findings. For example, Choi (2019) and Kopelman and Mullins (1992) found that narcissism decreases employees’ job satisfaction. Contrarily, Mathieu (2013) and Michel and Bowling (2013) determined the opposite and identified a positive association between those two variables. More recently, Liu et al. (2020) found that narcissism moderates the associations between workplace incivility and emotions, which in turn affected employees’ perceived family satisfaction. Although these studies are not specific to the GHRM context, they indicate that narcissists may be more likely to experiencing job satisfaction given their inflated sense of self-confidence and self-importance (Crevani & Hallin, 2017; Macenczak et al., 2021).

In the absence of a priori evidence on this relationship, we leverage TAT to propose that employees may perceive GHRM as an opportunity to differentiate themselves, and that those with higher levels of narcissism may report higher job satisfaction pursuant to GHRM implementation. Considering that GHRM initiatives have begun to garner considerable organizational attention, highly narcissistic employees may believe that their proactive participation in these green activities will generate a more public sense of admiration within the organization, thus resulting in GHRM’s positive influence on job satisfaction. Moreover, Akçunguz et al. (2020) found that proactive personality positively influences employees’ perception of the meaningfulness of their work. Because proactivity is among the attributes shown by narcissists, this finding seems to support our reasoning: narcissistic employees are likely to experience enhanced job satisfaction due to opportunities afforded by GHRM initiatives for displaying their superior attributes. Hence, we hypothesize:

H5b. Narcissism moderates the relationship between GHRM and job satisfaction such that higher levels of narcissism lead to a stronger association.

To our knowledge, only Raza and Malik (2020) have considered narcissism as a moderator in the GHRM context, and they determined it to negatively moderate associations between GHRM, knowledge sharing, and OCB. However, we expect the moderation to be positive, as most extant literature indicates that narcissistic employees strive to achieve organizational goals due to their desire for social admiration and affirmation of their superiority (Lang et al., 2022; Raza & Malik, 2020; Spurk & Hirschi, 2018). For example, Lata and Chaudhary (2022) consider how employees with high narcissistic tendencies are primed to display positive relational behaviors (i.e., civility) in ethical work climates.

Furthermore, prior works have posited that narcissistic employees proactively lead organizational change as a way to demonstrate their superiority (Raza & Malik, 2020; Spurk & Hirschi, 2018). Liu et al. (2021) found that narcissistic leaders are often responsible for introducing and adopting radical innovations and technologies. Similarly, Mao et al. (2020) confirmed that psychological ownership led employees’ narcissism to be positively associated with their initiative-taking behavior. Macenczak et al. (2021) discuss narcissists’ ability to gauge their contextual environment to adjust perceptions and subsequent strategies for managing their self-worth. We draw on TAT to propose that in a GHRM-oriented climate, narcissists are likely to demonstrate behaviors that emphasize their superior performance in achieving green “outcomes over others’ by performing voluntary green behaviors. As a contextual stimulus, GHRM would activate employees’ narcissistic tendencies such that they view voluntary green behavior as a means of re-affirming their self-worth and increasing social admiration. Thus, we propose:

H5c. Narcissism moderates the relationship between GHRM and voluntary green behavior such that higher levels of narcissism lead to a stronger association.
Narcissistic individuals are driven by the need to be the center of attraction, obtain appreciation, and be respected for their accomplishments (Campbell et al., 2011). As a result, several scholars (e.g., Akgunduz et al., 2020; Nevicck & Sedikides, 2021) have widely discussed narcissists’ proclivity to be more results-driven than others in the workplace. For such employees, rising through the organizational ranks may bestow a greater sense of power and worth (Nevicka & Sedikides, 2021). It is therefore plausible that narcissistic employees are strategically driven to achieve task-related targets in pursuit of workplace promotions (Fatfouha, 2019), in line with the propositions of TAT. Given the pressure placed on hotels to achieve GHRM objectives, narcissistic employees may be even more impelled to meet and exceed green performance targets as a means of achieving glory and admiration (Wallace & Baumeister, 2002) as outstanding performers. On the basis of the preceding discussion, we propose:

H5d. Narcissism moderates the association between GHRM and task-related green behavior such that higher levels of narcissism lead to a stronger association.

4. Methodology

4.1. Questionnaire and measures

We utilized formerly validated scales to develop our survey questionnaire, which was anchored on a five-point measurement scale ranging from 1 (strongly disagree) to 5 (strongly agree; see Table 2 for details). We measured GHRM by using Dumont et al.’s (2017) scale with six items, and task performance with five items adapted from Babin and Boles (1998). To assess job satisfaction, we used the ten-item scale proposed by Macdonald and Machntraye (1997), and for task-related green behavior, we used three items developed by Bissing-olson et al. (2013). Voluntary green behavior was measured using a scale by Kim et al. (2017) composed of six items. For narcissism, seven items were taken from the NPI-16 scale (Ams et al., 2006). Additionally, we recorded respondents’ sociodemographic data. We also included a brief statement about GHRM and other green practices at the beginning of the questionnaire to ensure that respondents had a clear and uniform understanding of the concepts before answering the survey. The final questionnaire was developed on Google Forms.

We constructed and administered our questionnaire in the English language. Four academic experts in the fields of psychology, HRM, and management were asked to assess the questionnaire’s face and content validity. They suggested clarifying three items and improving the wording for four items, and these suggestions were incorporated into the final questionnaire. Before conducting the final survey, we conducted a pilot test with 20 respondents from the target population (UK-based hotel employees) in order to confirm the questionnaire’s efficacy.

4.2. Data collection

A time-lagged two-wave survey was implemented using Prolific Academic in June and July of 2022 to obtain data from hotel employees in the UK. Prolific Academic has been used extensively in the past for data collection and is preferred for its user-friendliness, quick response times, and rigorous recruitment standards (e.g., Bhutto et al., 2021; Tandon et al., 2022). To identify a relevant sample, we used screening features available on Prolific Academic to shortlist possible respondents based on our objectives. We chose to distribute our survey only to respondents active on the platform (standard sample) and located in the UK. Next, we applied the screening criteria for employment status (full-time) and sector (hospitality & tourism). We invited all respondents who met these criteria to participate in our study, but to further ensure their suitability we included a ‘suitable to participate’ question at the beginning of the online survey, during the section informing them about the purpose and

Table 2

<table>
<thead>
<tr>
<th>Study Measures</th>
<th>Measurement items</th>
<th>CFA</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHRM Dumont et al. (2017)</td>
<td>“My organization sets green goals for its employees”</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>“My organization provides employees with green training to promote green values”</td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>“My organization provides employees with green training to develop knowledge and skills required for green management”</td>
<td>0.93</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>“My organization considers employees’ workplace green behavior in performance appraisals”</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>“My organization relates employees’ workplace green behavior to rewards and compensation”</td>
<td>0.87</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>“My organization considers employees’ workplace green behavior in promotion”</td>
<td>0.84</td>
<td>0.84</td>
</tr>
<tr>
<td>Narcissism Ames et al. (2006)</td>
<td>“I like to be the center of attention”</td>
<td>0.83</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>“I think I am a special person”</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>“I like having authority over people”</td>
<td>0.66</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>“I am apt to show off if I get the chance”</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>“I really like to be the center of attention”</td>
<td>0.61</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td>“I can make anybody believe anything I want them to”</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>“I am an extraordinary person”</td>
<td>0.64</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>“I am in the top 10% of frontline employees in my organization”</td>
<td>0.81</td>
<td>0.81</td>
</tr>
<tr>
<td>Task performance Babin and Boles (1998)</td>
<td>“I am a top performer in my organization”</td>
<td>0.52</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td>“I get along well with customers than others”</td>
<td>0.86</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>“I know more about services delivered to customers than others”</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>“I know what my customers expect better than others”</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td>Task-related green behavior Bissing-olson et al. (2013)</td>
<td>“At my workplace, I perform tasks that are expected of me in environmentally friendly ways”</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>“At my workplace, I adequately complete assigned duties in environmentally friendly ways”</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>“At my workplace, I fulfill responsibilities specified in my job description in environmentally friendly ways”</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Voluntary green behavior Kim et al. (2017)</td>
<td>“I avoid unnecessary printing to save papers”</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>“I use personal cups instead of disposable cups”</td>
<td>0.84</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>“I use stairs instead of elevators when going from floor to floor in the building”</td>
<td>0.72</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>“I reuse papers to take notes in the office”</td>
<td>0.65</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>“I recycle reusable things in the workplace”</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>“I sort recyclable materials into their appropriate bins when other group members do not recycle them”</td>
<td>0.64</td>
<td>0.64</td>
</tr>
<tr>
<td>Job Satisfaction Macdonald and Machntraye (1997)</td>
<td>“I receive recognition for a job well done”</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>“I feel close to the people at work”</td>
<td>0.64</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>“I feel good about working in this organization”</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>“I feel secure about my job”</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>“I believe that management is concerned about me”</td>
<td>0.67</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>“On the whole, I believe work is good for my physical health”</td>
<td>0.68</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>“My wages are good”</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>“All my talents and skills are used at work”</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>“I get along with my supervisors”</td>
<td>0.71</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>“I feel good about my job”</td>
<td>0.65</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Note: CFA = “Factor loadings measurement model”; SEM = “Factor loadings structural model”
nature of our research. We asked potential respondents to confirm whether their employing organizations had implemented GHRM initiatives more than one year before the study. Only the participants who answered in the affirmative participated in the full survey.

In the first wave (T1) survey, we asked respondents to answer questions relating to the independent variable (GHRM) and moderator (narcissism). In this wave, we also recorded details of respondents’ sociodemographic profile (see Table 3 for details). T1 was answered by 242 respondents, who were then contacted 21 days after completing T1 and asked to respond to the second wave (T2). In T2, respondents answered questions about the criterion variables (i.e., task performance, job satisfaction, and voluntary and task-related green behaviors). Of the 242 original respondents, 219 answered the survey at T2, and these 219 responses were taken forward for further analysis.

Our respondents were employed by hotel chains (e.g., Hilton, Marriott, Holiday Inn, Premier Inn, and Hyatt) as well as by family-owned (e.g., Clovelly Bay, and Ardgowan) and luxury hotels (e.g., Hotel du Vin and Rosewood Hotel). The sample included frontline employees (e.g., receptionists, bartenders, waiters/waitresses) and managerial employees (e.g., bar managers, sales managers, shift managers, operations managers, and assistant managers).

4.3. Control variables

The sociodemographic indicators (i.e., age, gender, and education) and work experience were included as control variables, based on prior studies which indicated these variables’ potential to influence employees’ green behavior (Bhutto et al., 2021; Li et al., 2020).

5. Analysis and results

We tested the conceptual model with IBM SPSS 28 and AMOS 28 by adopting a two-step approach (Anderson & Gerbing, 1988). In this approach, we evaluated the variables’ reliability and validity through confirmatory factor analysis (CFA). Having confirmed appropriate CFA results, we used CB-SEM to assess our model’s fitness and test the stated hypotheses. As the data comply with the multivariate requirements (assessing reflective relationships and testing existing theory, Talwar et al., 2020), CB-SEM seems to be appropriate for our study.

Prior to the analysis, we confirmed the absence of missing values and outliers as well as the normality of our data by assessing the skewness and kurtosis results (Hair et al., 2010). We also confirmed that multicollinearity was not an issue by checking the correlation between latent variables that were less than 0.90, which is suggested as a threshold value (Bagozzi et al., 1991; Pavlou and Xue, 2007). In addition, the tolerance value and variance inflation factor values (VIF) were also within recommended threshold (0.2 < tolerance < 5) as indicated by past studies (e.g., Talwar et al., 2020; Tandon et al., 2022), further confirming that the data were free of multicollinearity.

5.1. Biases: common method, social desirability, non-response

Because we used the survey methodology, we took steps to address the possibility that social desirability bias and common method bias (CMB) could influence the responses. To counteract the possibility of social desirability bias, the respondents were informed and assured of the anonymity, confidentiality, and purely academic use of their answers (Nederhof, 1985). The questionnaire items were presented in a randomized order to restrict participants’ ability to decipher which construct they related to, as this approach has been shown to help reduce the social desirability effect in prior studies (Li et al., 2020). Our time-lagged survey design reduced the possibility of CMB (Podsakoff et al., 2012), but we confirmed its absence with Harman’s (1976) single-factor method. The extracted single factor explained 38.2% variance – well below the suggested threshold of 50% (Harman, 1976), thus confirming CMB was not a problem in our study. In addition, our study was not affected by late-response or non-response bias, as the data were obtained from Prolific Academic. The platform automatically ensures that delayed responses are timed out, thereby returning only eligible responses.

5.2. Measurement model: reliability and validity

CFA was utilized to assess the measurement model, and the results portrayed a good model fit ($\chi^2$/df = 1.77, CFI = 0.91, TLI = 0.90, RMSEA = 0.06; Tabachnick et al., 2007). The internal reliability was satisfactory, as the constructs’ composite reliability (CR) values were above 0.70 (see Table 4). For every variable included in the framework, we determined the average variance explained (AVE) to be greater than 0.50, confirming convergent validity.

We used three methods to evaluate discriminant validity: (i) the Fornell and Larcker (1981) test established that the AVE square root for every variable was greater than its most substantial correlation with other variables (Table 4); (ii) each factor loading was higher than 0.5 and loaded onto its respective study construct (Chen & Tsai, 2007) (see Table 2); and (iii) the heterotrait-montrait ratio of correlations (HTMT, see Table 5) showed that all HTMT values were lower than 0.85, as recommended by Henseler et al. (2015). These results confirm the discriminant validity among the constructs.

5.3. Structural model

The structural model showed a good model fit ($\chi^2$/df = 1.86, CFI = 0.93, TLI = 0.92, RMSEA = 0.06). As can be inferred from the results in Table 6 and Fig. 2, our analysis supported all four direct hypotheses. Positive associations were found between GHRM and task performance (H1: $\beta = 0.35^{**}$), job satisfaction (H2: $\beta = 0.36^{**}$), voluntary green behavior (H3: $\beta = 0.17^{**}$), and task-related green behavior (H4: $\beta = 0.30^{**}$).

The potential confounding effects of previously mentioned

---

Table 3

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>130</td>
<td>59.4</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>89</td>
<td>49.6</td>
</tr>
<tr>
<td>Years of experience</td>
<td>Up to 2</td>
<td>53</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>2-4</td>
<td>49</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>27</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>6-8</td>
<td>20</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>8-10</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>Age (years)</td>
<td>More than 10</td>
<td>56</td>
<td>25.6</td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td>93</td>
<td>42.2</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>64</td>
<td>29.2</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>41</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td>Above 50</td>
<td>21</td>
<td>9.6</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Lower than high school</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>49</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>Higher education degrees</td>
<td>168</td>
<td>76.7</td>
</tr>
<tr>
<td>Hotel star rating</td>
<td>One</td>
<td>3</td>
<td>1.36</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>8</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Three</td>
<td>77</td>
<td>35.2</td>
</tr>
<tr>
<td></td>
<td>Four</td>
<td>106</td>
<td>48.4</td>
</tr>
<tr>
<td></td>
<td>Five</td>
<td>25</td>
<td>11.4</td>
</tr>
<tr>
<td>Number of employees in organization</td>
<td>0-9</td>
<td>16</td>
<td>7.31</td>
</tr>
<tr>
<td></td>
<td>10-49</td>
<td>59</td>
<td>26.94</td>
</tr>
<tr>
<td></td>
<td>50-99</td>
<td>23</td>
<td>10.50</td>
</tr>
<tr>
<td></td>
<td>100-150</td>
<td>12</td>
<td>5.48</td>
</tr>
<tr>
<td></td>
<td>150-200</td>
<td>11</td>
<td>5.02</td>
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<td></td>
<td>200-250</td>
<td>10</td>
<td>4.57</td>
</tr>
<tr>
<td></td>
<td>250-500</td>
<td>6</td>
<td>2.74</td>
</tr>
<tr>
<td></td>
<td>more than 1000</td>
<td>4</td>
<td>1.83</td>
</tr>
</tbody>
</table>

*Note: Higher education refers to people with a college, bachelor’s, master’s, or professional degree.
5.4. Moderation analysis

The moderating influence of narcissism was estimated using Model 1 in the PROCESS macro (Hayes, 2013) and bootstrapping 1000 times at a 95% confidence level. As shown in Table 7 and Fig. 3a-c, we found that narcissism moderated GHRM’s association with task performance (H5a: $β = 0.12^*$), voluntary green behavior (H5c: $β = 0.09^*$), and task-related green behavior (H5d: $β = 0.09^*$). However, narcissism had no moderating effect on the relationship between GHRM and job satisfaction (H5b: $β = 0.03$, $p > 0.05$).

6. Discussion

Our findings support H1 and H2, confirming that GHRM positively influences the non-green behavioral outcomes of task performance and job satisfaction, respectively. Our findings are exciting as prior scholars have called for a deeper exploration of employee-level individual outcomes of GHRM (e.g., Tang et al., 2023), and we are able to confirm a

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Table 4
Validity and reliability analysis.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
<th>VGB</th>
<th>GHRM</th>
<th>TP</th>
<th>NARC</th>
<th>TRGB</th>
<th>JS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VGB</td>
<td>0.87</td>
<td>0.53</td>
<td>0.26</td>
<td>0.08</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHRM</td>
<td>0.95</td>
<td>0.79</td>
<td>0.16</td>
<td>0.11</td>
<td>0.23</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TP</td>
<td>0.89</td>
<td>0.64</td>
<td>0.16</td>
<td>0.05</td>
<td>0.13</td>
<td>0.40</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NARC</td>
<td>0.90</td>
<td>0.51</td>
<td>0.06</td>
<td>0.02</td>
<td>−0.15</td>
<td>0.24</td>
<td>−0.08</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRGB</td>
<td>0.93</td>
<td>0.82</td>
<td>0.26</td>
<td>0.09</td>
<td>0.51</td>
<td>0.37</td>
<td>0.19</td>
<td>−0.06</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>0.92</td>
<td>0.53</td>
<td>0.16</td>
<td>0.05</td>
<td>0.17</td>
<td>0.40</td>
<td>0.16</td>
<td>0.12</td>
<td>0.18</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Note: All values are significant at $p < 0.01$ level, CR = “Composite Reliability”; AVE = “Average Variance Extracted”; MSV = “Maximum Shared Variance”; ASV = “Average Shared Variance”; VGB = “voluntary green behavior”; TP = “task performance”; NARC = “narcissism”; TRGB = “task-related green behavior”; JS = “job satisfaction”.

Table 5
HTMT analysis.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>VGB</th>
<th>GHRM</th>
<th>TP</th>
<th>NARC</th>
<th>TRGB</th>
<th>JS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VGB</td>
<td>0.219</td>
<td></td>
<td></td>
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<tr>
<td>GHRM</td>
<td>0.154</td>
<td>0.395</td>
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</tr>
<tr>
<td>TP</td>
<td>0.171</td>
<td>0.255</td>
<td>0.081</td>
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<tr>
<td>NARC</td>
<td>0.122</td>
<td>0.365</td>
<td>0.180</td>
<td>0.083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRGB</td>
<td>0.186</td>
<td>0.407</td>
<td>0.188</td>
<td>0.151</td>
<td>0.183</td>
<td></td>
</tr>
</tbody>
</table>

Note: All values are significant at a $p < 0.01$ level.

Table 6
Path analysis.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Path</th>
<th>$β$</th>
<th>$t$</th>
<th>$p$-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>GHRM → TP</td>
<td>0.35**</td>
<td>5.601</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>GHRM → JS</td>
<td>0.36**</td>
<td>5.624</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>GHRM → VGB</td>
<td>0.17**</td>
<td>2.501</td>
<td>0.002</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: ** = $p < 0.01$.

sociodemographic and employment indicators were controlled, and none of these variables exerted significant effects on any of the dependent variables.

5.4. Moderation analysis

The moderating influence of narcissism was estimated using Model 1...
relationship between these two variables in the case of Lebanese em
contradict those of Ismail et al. (2021), who did not find a significant
ated to the novelty of GHRM as a concept and the low degree of green
ployees working in the construction sector
management between GHRM and task performance. However, our results
findings show an overarching influence of GHRM on employee green
GHRM positively influences employees
concerns about the environment may affect their job satisfaction post-
actions, which could reasonably translate into organizations
valuable job resources. In both cases, we
advance of GHRM-imparted skills, which could provide them with core
improved performance. It is also plausible that GHRM may have led to
employees to perform innovatively and to the best of their abilities (e.g.,
Aboramadan, 2022). Indeed, recent studies support our supposition as
the latest research in the field suggests that supportive organizational
environment (Karatepe et al., 2023) and responsible leadership (Akhtar
et al., 2023) have positive associations with employees’ green innova-
tive behaviors. We contend that GHRM practices underlie such respons-
able and supportive environment, and hence elicit employees’
enhanced task performance.

The findings for H2 were also unsurprising, considering that what
prior literature exists (e.g., Pinzone et al., 2019; Shafaei et al. (2020),
reaches a similar conclusion and suggests that GHRM can influence
employees’ work engagement and subsequent job satisfaction. This is an
unsurprising yet valuable finding, considering that the UK has shown a
deep commitment to developing a green workforce (Deloitte & IEMA,
2022). The UK has recently passed the Net-Zero Emissions law, which
obligates the UK to reduce “greenhouse gas emissions to net-zero by
2050” (Department of Business, Energy & Industrial Strategy, 2019).
Such policy changes in the UK, as well as global initiatives (UNWTO,
2021) being undertaken by hospitality and tourism operators to reduce
their carbon footprints (Ahmed et al., 2021; Tritto, 2020), will require
employees to build green skills. Employees’ recognition of this fact could
explain the significant influence of GHRM on job satisfaction (H2).

Further, recent reports from Statista (Jaganmohan, 2022a; 2022b)
also suggest a rising public awareness of net-zero and climate change
actions, which could reasonably translate into organizations’ being held
to higher standards of sustainability. It is also plausible that employees’
concerns about the environment may affect their job satisfaction post-
GHRM implementation, as was suggested by Karatepe et al. (2022).
Thus, the significant results for H2 could be dually motivated by em-
ployees’ individual environmental values and by the perceived rele-
vance of GHRM-imported skills, which could provide them with core
professional strengths and valuable job resources. In both cases, we
believe that employees recognize GHRM as a means of increasing the
meaningfulness of their work (Shafaei et al., 2020). Moreover, em-
ployees may feel that GHRM may facilitate their inclusion and improve
their sense of belonging (e.g., see Veerasamy et al., 2023; He et al.,
2021) in social groups focused on green practices and consumption, both
within an organization and outside of it (e.g., professional associations
and familial or peer groups). For example, Thabet et al. (2023) deter-
mined green inclusive leadership and climate that support green ini-
tiatives can positively influence employee pre-environmental, i.e., green
behaviors. We believe that such a duality of motivational origins is
worth examining in future research, as the absence of research on
GHRM’s influence on employees’ non-green outcomes makes it difficult
to draw conclusions.

H3 and H4 were also supported by the results and confirm that
GHRM positively influences employees’ voluntary and task-related
green behaviors, respectively. The findings were relatively
unsurprising and conform with prior research (Aboramadan, 2022;
Chaudhary, 2020; Zhu et al., 2021). Yet, the novelty of our findings
rests in the concurrent consideration of both forms of green behaviors,
which recent studies (e.g., Tang et al., 2023) have called for. Our
findings show an overarching influence of GHRM on employee green
behaviors which have been examined more prolifically in separate

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we propose that the dampening public versus private tasks due to their propensity to seek glory and accomplishment (Campbell et al., 2011). We propose that the dampening effect is a result of narcissists’ focus on performing green behaviors is based on agentic motives, especially garnering admiration and establishing superiority (Spurk & Hirschi, 2018), rather than communal motives such as morality and affiliation (see Nehrlich et al., 2019). This could be one reason why our results differ from Raza and Malik’s (2020), as knowledge sharing, and OCB could be viewed as communal motives. However, due to the lack of studies on these associations, we recommend further investigations into narcissism’s role in facilitating or hindering GHRM implementation.

7. Conclusion

The significance of GHRM in promoting sustainable production and developing the workforce is critical given the global calls for action and emphasis on promulgating pro-environmental business practices (Chaudhary, 2021; Pham et al., 2020; United Nations, 2022). While GHRM-oriented research is still in the nascent stages (Rubel et al., 2021a, 2021b; Tanova & Bayighomog, 2022), recent studies have supported the notion of GHRM’s capacity to facilitate green behaviors among employees (Aboramadan, 2022; Ren et al., 2018). To further investigate this notion, we posed and answered two research questions (RQs). In response to RQ1, we found that GHRM exerts a positive influence on both green and non-green employee behaviors, including those behaviors that are voluntary and those that are required by their task or job descriptions. In answering RQ2, we determined that employee narcissism positively moderates GHRM’s associations with green outcomes, but negatively moderates GHRM’s impact on the non-green outcome of task performance.

Our findings offer intriguing insights into GHRM’s significance in eliciting favorable employee responses while considering the role of their traits in the process, thereby adding valuable insights to the literature for GHRM in particular, and hospitality research in general. These results also suggest actionable implications for practice, which we discuss in the following sections. Despite these considerable findings, we believe that our results could be refined in future studies by adopting a different theoretical perspective than STT and TAT. For instance, we recommend seeking deeper insights into the role of narcissism by exploring different facets of it, such as agentic vs. communal (Nehrlich et al., 2019) or maladaptive vs. adaptive (Fatfouta, 2019; Nevicka & Sedikides, 2021) narcissism. Similarly, adopting Back et al.’s (2013) framework for Narcissistic Admiration and Rivalry could further explain the psychological mechanisms through which employees’ narcissism may affect...
their GHRM behavior.

Further, our application of SIT prompted us to focus on hotel employees’ desire for social identity, but there may be other reasons for responding to and engaging with GHRM initiatives that can be explored through different theoretical lenses. The person-environment fit theory (Edwards et al., 1998) is one such lens that may be applied to examine whether and to what extent the alignment of GHRM-oriented organizational and employee values affects the success of these initiatives.

7.1. Theoretical contributions

We offer four key contributions to the literature on this topic. First, our focus on hotel employees in the UK provides insight into a hitherto under-studied economy in the context of GHRM. The significance of employees’ behavioral outcomes in our analysis seems to affirm the UK government’s commitment to building a green workforce (Deloitte & IEMA, 2022) and emphasizing sustainability through initiatives such as Net Zero 2050 (Department for Business, Energy & Industrial Strategy, 2019), which has so far yielded positive results in shaping employee behavior. Further, as Tanova and Bayighomog (2022) suggest, “the context matters” (p. 441), and our attention to the contextual significance of green practices in the UK highlights the impact of local conditions on employees’ behavior in response to the country’s dedicated GHRM initiatives.

Secondly, our examination of both green and non-green behaviors, as well as both voluntary and task-required outcomes, offers a more comprehensive understanding of GHRM’s role in influencing employees’ behaviors and contributes significantly to existing knowledge, as few prior studies have investigated such an array of employee outcomes (e.g., Darvishmotevali & Altinay, 2022; Khalid et al., 2022). Our findings indicate that GHRM practices can indeed foster a green culture and mindset amongst employees to whom organizational communication conveys the importance of green behaviors. Such clear communication can encourage employees to adopt a comprehensive green approach to working, leading them to adopt environmentally friendly practices even in the absence of formal guidelines. Future research may be directed towards understanding whether such green approaches also impact employee’s personal lives or customer interactions, thereby encouraging employees to show an overall stronger commitment to sustainability.

Third, our use of a dual theoretical lens to examine the associations provides a deeper, more nuanced explanation of how GHRM is linked to employees’ behavioral outcomes. By applying both SIT and TAT, we answer recent calls to expand the theoretical perspectives through which GHRM is explored (Tanova & Bayighomog, 2022; Yong et al., 2020). Further, to our knowledge, we are the first to apply TAT in GHRM literature as a means of explicating the role of GHRM policies as a situational cue that may trigger employees’ personality traits, which may in turn strengthen their response to these policies. We encourage scholars to adopt other theoretical guidelines and approaches, such as the spillover theory and service-dominant logic, to further examine the nuanced effects of GHRM implementation on employees’ behaviors and perhaps even service design.

Lastly, our findings on narcissism’s moderating effects present a less-considered bright side of this dark personality trait, which recent studies have acknowledged as a strong yet under-studied aspect of organizational psychology (Patton et al., 2019; Lang et al., 2022). While certain recent studies have found narcissism to influence positive employee outcomes, such as psychological ownership (Mao et al., 2020) and performing under stressful conditions (Papageorgiou et al., 2019), our study expands our understanding of the positive outcomes that employees’ narcissistic tendencies may have on green behaviors. Our findings validate prior research which has also utilized TAT (albeit not in the GHRM context) to show that narcissism manifests differently in different situations, and that some situations may manifest narcissism in a positive manner (e.g., Lang et al., 2022). To the best of our knowledge, we have pioneered the investigation of narcissism’s impact on employees’ GHRM-driven behaviors, and the significance of our findings suggests that future explorations of other facets of personality may yield beneficial results. We therefore recommend pursuing this line of inquiry by examining the variable influence of covert versus overt narcissism or by applying HEXACO personality models to investigate the interplay between employee personality, GHRM, and other related concepts.

7.2. Managerial implications

We build on our findings to propose four practical implications for hotel managers and policymakers seeking to further develop policies and strengthen existing GHRM initiatives to improve employees’ green behavior.

First, our results suggest that HR managers in hotels and other organizations develop a comprehensive understanding of their employees’ personality traits by deploying tests like the DiSC Personality Test. Such tests could also be customized, and the results used to explore how the evident traits could be best leveraged to encourage the employees to exhibit green behavior through rewards, training, and skill development. For instance, employees with a dominant personality could be tasked with responsibilities for encouraging their teams and co-workers to perform green behaviors, while employees with traits suited to relationship-building could be involved in broadening the scope of GHRM initiatives to include other stakeholders, such as suppliers and customers. Such tailoring of GHRM initiatives to appeal to the personalities of individual employees could yield benefits in the long and medium terms, for instance, by enhancing their citizenship behaviors. We also suggest that organizations share their findings with policymakers in cooperatives and government bodies dedicated to sustainability in the UK, such as the Zero Carbon Forum. Such entities could use the findings to develop personality-based campaigns to promote green behaviors among the general public as well.

Second, our conclusions about the role of narcissism prompt us to suggest that top management recognize employees for meeting green objectives not only through formal means such as financial rewards, but through also informal channels such as identifying high-achieving individuals or teams as “green champions.” In addition, employees may be offered the opportunity to apply their commitment to sustainability and allied causes like animal welfare through theme-based events. Such initiatives could allow employees to bridge their personal and work lives in terms of their green values and enable them to achieve a green work-life balance (Ari et al., 2020). For example, vegan employees could be given the resources to hold a company potluck to educate their co-workers about the impacts of veganism on the environment. In the context of hotels, food workers could use such an event to discuss the issue of food waste within hotel settings, including its environmental impact and counteractive measures. Such events could further strengthen the organization’s green culture and so strengthen employees’ perception of GHRM’s importance.

Third, we encourage top management and decision-makers to consider expanding the scope of GHRM initiatives in order to address green empowerment and teamwork (Ari et al., 2020) and strengthen the perceived benefits of exhibiting green behaviors. Such initiatives may particularly appeal to narcissistic employees who seek real or symbolic power and control. Organizations could enable such initiatives by clearly informing employees about hard and soft rules and regulations promoting pro-environmental behavior. For instance, green teamwork could be promoted by encouraging employees to brainstorm ideas through which green practices may be further incorporated and executed in hotels while involving other stakeholders such as suppliers and customers. This could help to build a holistic understanding of GHRM’s benefits and possible applications, allowing employees to identify as champions of change regarding pro-environmental behaviors.

Lastly, during green teamwork and work-life balance activities,
managers could also communicate to employees how green behaviors may result in promotions and rewards. This could allow for the development of a healthy competitive environment among employees by creating tangible benefits to engaging in green activities.

7.3. Limitations and future research directions

While we have attempted to ensure the rigor of the research process while conducting this study, the process was subject to certain limitations that need to be acknowledged. First, our survey was limited in terms of the geographic (UK) and sectoral (hotels) contexts. In future studies, scholars may replicate our study design to conduct multi-country and cross-industry research to develop a comparative and generalizable knowledge about how GHRM influences employee behaviors. Second, we examined GHRM through a singular construct encompassing various aspects such as green rewards, training, and performance appraisals. Future studies may interrogate the distinct influence of these specific GHRM practices on employees’ non-green and green behavioral outcomes. Third, we only included a single variable – narcissism – as a boundary condition. In the future, researchers may expand this conceptual framework to include other moderators, such as leaders’ characteristics and employees’ personal beliefs, as well as psychological processes such as ownership, in order to explicate further nuances of GHRM’s influence on employee outcomes. Lastly, we time-lagged study design limits our ability to identify causal relationships, and so future scholars may utilize experimental and longitudinal research designs to expand on our results. Qualitative research methods may also be applied to investigate how employees perceive GHRM policies, as well as identify motivations and barriers to adopting green practices. Such methods could also significantly add to existing knowledge on GHRM.

Impact statement

The results indicate that GHRM strategies may be viewed by employees as a proactive measure that enables them to be prepared for a future employment landscape that predominantly engages a green workforce. As the UK is one of the leading nations promoting sustainable business practices, and is yet under-researched in terms of explicating the effect of GHRM strategies on employees, this study offers insights that could be leveraged for application in other developing and developed countries to promote green practices. The impact of this study is made stronger because it addresses individual traits as a boundary condition, as it is employees who execute GHRM strategies at the frontline, communicate with customers, and act as brand ambassadors for their organizations. Consideration of employee traits while formulating strategies, and raising their green awareness, can enable policymakers and management to create green strategies that could be more successfully deployed in the long-term.

Credit author statement

Anushree Tandon: Conceptualization, Investigation; Methodology, Roles/Writing – original draft; Writing – review & editing. Amandeep Dhir: Conceptualization, Investigation; Formal analysis; Funding acquisition; Methodology, Rules/Writing – original draft; Writing – review & editing, Supervision. Poornima Madan: Data curation; Formal analysis; Writing – review & editing. Shalini Srivastava: Data curation; Formal analysis; Writing – review & editing. Juan Luis Nicolau: Investigation, Writing – review & editing, Supervision.

Declarations of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

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