The Impact of Green Transformational Leadership on Green Behavioral Intentions: Evidence from the Hospitality Industry

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Abstract

This study investigates the influence of Green Transformational Leadership (GTL) on Green Behavioral Intentions (GBI) within the UAE hospitality sector, focusing on high-end hotels. GTL integrates environmental consciousness into traditional leadership practices, inspiring employees toward sustainable behaviors. The study highlights GTL's role in driving GBI and Green Empowerment (GE), with Green Intrinsic Motivation (GIM) as a moderating factor. GE acts as a critical mediator, translating leadership strategies into actionable sustainability practices by fostering employee autonomy, ownership of green initiatives, and innovative commitment. Data collected from 281 employees in Dubai's 4 and 5 star hotels underscores GTL's significant impact on GBI and GE. GE was found to mediate the relationship between GTL and GBI. GIM moderates the relationship between GTL and dependent & mediator variables. GTL promotes a culture of environmental responsibility, enabling employees to align their behaviors with organizational sustainability objectives, such as waste reduction and energy conservation. Findings reveal that GE amplifies this relationship by empowering employees to take initiative, fostering creative solutions, and ensuring organizational commitment to sustainability goals. The study provides actionable insights for UAE hotels to align with national sustainability frameworks, including the UAE Vision 2030 and Dubai Clean Energy Strategy 2050. It recommends hotel leaders adopt GTL to cultivate an empowered and intrinsically motivated workforce, thus enhancing operational efficiency, environmental performance, and brand reputation. By emphasizing leadership's pivotal role, this research offers a pathway for the hospitality industry to contribute to global environmental goals and meet growing consumer demand for sustainable practices. The integration of GTL in organizational strategies represents a transformative approach to achieving long-term sustainability in the UAE hospitality sector.

Keywords: Green Transformational Leadership, Green Empowerment, Green Behavioral Intentions, Green Intrinsic Motivations, Hotel Industry, UAE.

Introduction

Transformational leadership has been identified as a critical catalyst in driving organizational change and inspiring employees to excel. This form of leadership inspires and motivates employees to accomplish collective visions through a sense of direction and purpose (Aslam, Shi, and Sahibzada, 2024). Recently, the definition of transformational leadership has been amended to be integrated with sustainable development, giving birth to the greening of transformational leadership. GTL expands the leadership axiom of old into an internalization of environmental consciousness in the organizational strategy and practice. It requires inspiring the employees to behave greenly and strengthening them for the same, along with inculcating a culture of sustainability (Çop, Özçelik, and Özçelik, 2021). Some specific, differentiating features of GTL are green creativity, green innovation, and environmental alignment of the organizational goals.

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GTL is seen as playing a significant role in the process of driving organization change, especially towards promoting environmental initiatives. Leaders practicing GTL engage employees by putting out the importance of sustainable practices and linking it to broader ecological ends. This approach has been seen to promote GBI in employees since leaders inspire them into the internalization of sustainable values and their translation into action (Cahyadi, Suryani, and Suryani, 2022). For example, organizations operating in the hospitality industry of the world, embracing GTL, have highlighted green creativity and better operational efficacy through energy conservation programs or waste reduction strategies (Khalid et al., 2024). In addition, the mediation between organizational culture and a green ethos emphasizes that management forms workplace environmental behavior (Çop et al., 2021).

The UAE hospitality sector, a primary sector in the country, increasingly adopts sustainable practices to ensure the national and international goals of protecting the environment. With the emphasis laid by Vision 2030 on sustainability as a backbone of development, the role of GTL in the hotel sector comes into proper play. Such leadership supports the plans of Dubai Clean Energy Strategy 2050 that will make Dubai the global center for clean energy and a capital for the green economy (Khalid, Shahzad, and Baig, 2024). Additionally, hotels in UAE are seeking energy-efficient technologies coupled with sustainable operations to respond to increased demand by tourists on earth-friendly tourism (Kim & Hyun, 2021). Incorporating GTL into the UAE hotel industry can help boost employee morale and engagement in sustainability initiatives. In fact, recent studies now show GTL has positive outcomes in GBI, which are necessary for long-term environmental performance (Aslam, Shi, and Sahibzada, 2024). For instance, the top leading hotels here in the UAE such as Jumeirah and Rotana have introduced green policies and realized significant waste reduction and energy savings through green leadership strategies.

GE refers to the process of allowing employees to actively participate in and contribute to environmental sustainability initiatives within their organizations. It seems that GE mainly builds on the concept of employee autonomy as well as giving people the tools, resources, and authority to apply green practices (Çop, Özçelik, and Özçelik, 2021). Main elements of GE involve capacity-building, decision-making autonomy, and individual goal alignment with organizational environmental objectives. Employee empowerment allows more employees to take ownership of sustainability initiatives, which leads to better environmental performance and increased organizational commitment (Cahyadi, Suryani, and Suryani, 2022).

Setting clear sustainability goals, creating a supportive culture, and encouraging proactive participation, leadership holds a crucial role in facilitating GE. Through GE, leaders inspire employees to innovate and enforce green practices on their own, hence developing an organizational culture of sustainability (Chen and Chang, 2013). For example, training programs in green technologies and schemes of reward for friendly behavior toward the environment have depicted best results in employee engagement in environmentally conscious practices. GTL is an inherent concept of GE. GT motivates employees to learn to adopt sustainable values, and provides them with confidence and capabilities to do so on their own (Çop, Özçelik, and Özçelik, 2021). Green Transformational Leader empowers employees toward role modeling behaviors, inspirational motivation, and intellectual stimulation in the creation of innovative solutions to challenges. GTL stresses shared goals and an accountability sense for employees through a demonstration of such commitment to sustainability.

The benefits of GE toward achieving organizational sustainability goals are substantial. The behavioral intentions of the employees, such as energy reduction, recycling, and supporting

green innovations, are more likely to be exhibited by empowered employees (Cahyadi, Suryani, and Suryani, 2022). Organizations with empowered workforces also achieve higher levels of green creativity and operational efficiency. In the hospitality industry, GE has been positively related to service quality, guest satisfaction, and reputation (Chen and Chang, 2013).

The UAE hotel industry offers some very interesting examples of GE in action. First, Jumeirah Group and Atlantis, The Palm are examples of hotels that incorporated employee trainings programs along with other eco-friendly practices in operations which empowered employees and directly engaged them in sustainability practices. For example, in Jumeirah, the "Sustainability Champions" scheme engages employees to design and implement green initiatives, resulting in substantial energy and water saving Khlaid et al., 2024. Also, Rotana Hotels operate on an "Eco-Engage" framework that empowers employees in carrying out green practices at the operational level-for example, in terms of waste management and resource efficiency. Empirical data supports the effectiveness of these initiatives. A recent study in the UAE hospitality sector revealed that employee empowerment in green practices led to a 25% reduction in energy consumption and a 15% increase in recycling rates (Cahyadi, Suryani, and Suryani, 2022). These successes highlight the transformative potential of GE in driving sustainable outcomes and underscore its importance in achieving the UAE's Vision 2030 environmental goals.

GBI implies individuals' desire to make environmentally friendly behavior, either employee or guest. It is a critical driver of hospitality green practices, which include an effort at energy conservation, waste reduction, and eco-friendly consumption (Saleem, 2021). For employees, GBI operates as the impulse behind sustainable practice in daily operations, while for guests, it would operate as an influence for preferences over accommodations and services. GBI of the stakeholders increase hotels' reputation and operating performance, ultimately leading toward accomplishment of international sustainability goals within the hospitality industry. According to this study, it is established that guests having positive GBI show a higher level of support toward the hotel adopting environmental initiatives like water conservation programs and the use of biodegradable products (Sarkis, Gonzalez-Torre, and Adenso-Diaz, 2010). Similarly, green intention employee behavior actually contributes toward reducing the ecological footprint of hotel operations, making behavioral intention a crucial factor to achieving long-term sustainability.

Leadership, specifically GTL, is pivotal in influencing the GBI of employees; they motivate their followers to live sustainable lifestyles by discussing their values on the environment, aligning the organizational goals with environmentally-friendly practices, and demonstrating what they preach (Singh and Sachdeva, 2023). By a shared vision about sustainability, these leaders encourage employees to adopt green values and translate them into action. Alignment between leadership vision and individual action is essential to achieve sustainability initiatives. According to Zhou, Zhang, and Zhang (2018), GTL significantly influences the GBI of employees, especially through intrinsic motivation. For instance, creative problem-solving would lead leaders to facilitate effective innovative solutions of their employees regarding saving energy and waste management. Additionally, the employees tend to adopt similar behavior patterns when they perceive that leaders are committed to sustainability and will create a ripple effect within the organization.

By and large, cultural factors, in addition to regulatory factors, influence GBI within the UAE hotel industry. The foresight and commitment of the UAE government toward sustainability, as

evident from initiatives such as the Dubai Clean Energy Strategy 2050 and UAE Vision 2030, thus create an ideal environment for developing green practices. This is also because the hotels are gradually being assimilated into sustainable operations while abiding by national agenda and guest expectations of being environmentally responsible. To some extent, the cultural values of responsibility toward the environment also influence GBI by employees and guests in the UAE. For example, according to Saleem (2021), 65 percent of hotel guests in developing countries, including the UAE, prefer accommodations that implement environmental-friendliness. On the employee side, green training programs and incentives have proven effective in enhancing GBI, which contributed to improving energy efficiency and reducing waste within UAE hotels (Sarkis, Gonzalez-Torre, and Adenso-Diaz, 2010). Moreover, local hotel chains like Jumeirah and Rotana have used green leadership frameworks to facilitate the implementation of GBI among employees. These initiatives have not only resulted in reduced operational costs but also enhanced brand loyalty in environmentally conscious guests.

GIM is defined as the natural inner drive of an individual to carry out pro-environmental acts based on his values, beliefs, or commitment to the well-being of the environment rather than extrinsic rewards or pressures (Zhou, Zhang, and Zhang, 2018). Unlike extrinsic motivation, which is driven by tangible rewards like promotions or monetary incentives, intrinsic motivation is a genuine concern for an environment and a person's desire to contribute to sustainability. Internalized commitment assures that the green behavior is continued even when the internal stimulations are absent, and hence it becomes one important reason for a long-term sustainability practice. As such, the importance of intrinsic motivation lies in its potential to drive consistent and innovative green practices. In other words, employees with robust GIM are likely to take initiative for a given environmental activity by reducing energy consumption or introducing ecological innovations and will not require constant supervision or external incentives for so (Saleem, 2021). Therefore, in a hospitality industry, the fostering of intrinsic motivation among the employees is quite crucial as their activities directly affect operational sustainability and guest experience.

GTL acts as a strong promoter for GIM. Since green leaders share the shared vision of environmental sustainability and also lead the way by examples, these inspire workers to internalize green values and translate them into action in behaviors. As per Zhou, Zhang, and Zhang (2018), GTL encourages intrinsic motivation through the stimulation of employees' intellectual stimulation, recognition of employees' contributions to sustainability, and empowerment of them to explore innovative solutions for their vulnerability towards environmental challenges. Motivational practices by green leaders of the hospitality sector involve employee engagement, environmental awareness trainings, and eco-friendly initiatives recognition systems. For instance, Singh and Sachdeva in their 2023 publication suggest that hotel establishments with a leadership approach about sustainability significantly increased employee motivation and innovation in proposing new green innovations. In addition to improving motivation, these strategies result in organizational performance enhancement, as well as guest satisfaction. Intrinsic motivation in the UAE hospitality sector is rather unique, as it is affected by distinct cultural and regulatory aspects. The fact that the UAE has quite a serious approach towards sustainability-founding initiatives such as Dubai Clean Energy Strategy 2050 and UAE Vision 2030 often evokes in employees self-satisfaction, pride, and meaningfulness in achieving the national goals of sustainability (Saleem, 2021).

Cultural factors also shape intrinsic motivation. The major cultural aspect adopted in the UAE that encapsulates the culture of collective responsibility and environmental stewardship aligns

well with the principles advocated by GIM. Sarkis, Gonzalez-Torre, and Adenso-Diaz (2010) argue that training programs devised around the values of a culture, such as community wellbeing, foster employees' commitment to green practices. In the UAE, programs like Jumeirah and Rotana hotels have activated motivational programs that appeal to intrinsic values for employees. For example, through the "Sustainability Champions" initiative at Jumeirah, employees are encouraged to bring forward ideas for "green" practices, thereby feeling owned and intrinsically motivated. Consequently, those programs do result in measurable performance output - for example, reductions in resource usage - and improved employee satisfaction.

Problem Statement

Among the many hotel sectors in the UAE, considerable operational challenges are encountered by this industry to achieve sustainability goals. Despite environmental issues being increasingly recognized, there are some observable inadequacies in adopting and implementing green behavior. Most of these hotels fail to systematically integrate the bulk of their operations with sustainability strategies because of resource constraints, lack of skill, and erratic enforcement of green policies. Employee engagement in environmental initiatives is not up to par, and GBI often do not translate into actionable outcomes Saleem 2021. One of the greatest challenges is the adoption of GTL, a practice which has been used effectively in developing green practices worldwide. While there are some UAE hotels that have embraced the concept of GTL, many suffer from managerial resistance to change, lack of training, and unsustainable frameworks for sustainability. Moreover, the UAE cultural and regulatory environment creates its own set of challenges, mainly from the differences in environmental awareness and compliance from one hotelier or stakeholder to another (Singh and Sachdeva, 2023).

The present study addresses the significant gap concerning the GTL of the UAE hotel industry. Indeed, the country is undertaking efforts toward sustainable development through initiatives such as the Dubai Clean Energy Strategy 2050 and the UAE Vision 2030. Hence, it is imperative to nurture green practices in the hospitality industry. The hospitality industry, in particular, has a crucial role to play in achieving these ends because of its wide-ranging energy usage, waste generation, and carbon footprint. This study focuses on the role of GTL in shaping GBI, organizational culture, and environmental performance. It aims to bridge a long-standing knowledge gap by understanding how green leadership can overcome barriers or empower employees toward adopting sustainable practices for UAE hotels. Moreover, the findings will influence the international hospitality industry more broadly. Sustainability is increasingly encouraged through regulatory drivers and consumer demand for 'green' accommodations (Zhou, Zhang, and Zhang, 2018).

Significance of the Study

The study is valuable for hotel managers and industry stakeholders in the hospitality industry of UAE by bringing actionable strategies to implement GTL. Facilitating GBI and enhancing the empowerment of employees may significantly enhance employee engagement, morale, and job satisfaction under GTL. These developments enhance both the operation's operational efficiency and its environmental performance, which helps hotels comply with sustainability goals, including those envisioned in the UAE Vision 2030 and Dubai Clean Energy Strategy 2050. Moreover, embracing GTL enables hotels to enhance their competitive positioning and brand reputation by keeping abreast of changing customer preferences for greener accommodations, according to Saleem (2021). Findings for industry stakeholders provide direction for overcoming barriers and enhancing organizational culture in terms of green leadership.

This study significantly contributes to the academic literature on green leadership and sustainable practices, especially in the hospitality industry. The focus was on the UAE as a means of filling a gap in research associated with GTL based on cultural and regional nuances. Findings of this research enrich the knowledge on how leadership shapes GBI and environmental performance in singular regulatory and cultural contexts. Additionally, the study strengthens the mediating role of organizational culture, showing in detail that which, how, and when change leadership practices can stimulate sustainability. In support of scholars and practitioners, such knowledge is useful for the development of more effective practice frameworks further patterned to regional and industry-specific contexts (Singh and Sachdeva, 2023).

Literature Review

The Impact of GTL on GBI

GBI refers to the extent that an individual is prepared and willing to engage into environment friendly behaviour in order to reduce the use of resources, recycle or support sustainable endeavors (Norton et al., 2017). Thus, in the hospitality industry GBI comprises employee actions, for instance, implementing energy conservation measures, and visitor actions, for example, selecting a green hotel and service products. High GBI representatives are most likely to embrace organisational sustainability values and behave in a manner that is guided by the environmental goals of the organisations, as well as guests' GBI influence choice preferences of eco-responsible hotels.

Creating GBI is essential for sustainable hospitality in the long run. According to research, organizations where employees and guests participate in green behaviors would exhibit better operational efficiency and lower environmental impacts (Norton et al., 2015). An example is the work of Pham et al. (2019), which revealed that GBI among staff significantly contributed to the implementation of green human resource management, including recycling programmes and energy-saving initiatives. Likewise, tourists with high GBI prefer hotels that provide green services, thus affecting market demands for sustainable tourism. Encouraging GBI on the part of hospitality organizations allows them to meet regulatory demands, such as sustainability goals from UAE Vision 2030, as well as growing consumer preferences for operations with environmental awareness.

GTL plays a critical role in shaping employees' GBI. GTL extends the traditional transformational leadership in that it emphasizes the sustainability of value underpinning the core of organizational practices. Leaders executing GTL stimulate employees to adopt pro-environmental behaviors in mechanisms like role modeling, inspirational motivation, and intellectual stimulation (Graves, Sarkis, and Zhu, 2013). This leadership encourages a culture of environmental responsibility, aligning the actions of employees with the organization's sustainability objectives. The practical validity of GTL in an organization enhances GBI. For example, Kim et al. (2017) established that GTL has a significant influence on voluntary environmental behaviors at work, such as conservation of resources and reduction of waste. The study pointed out that employees act more sensibly towards GBI when their leaders show high compatibility towards sustainable development and the need to positively approach issues. Similarly, Luu (2019) observed that GTL positively impacted organizational citizenship behavior for the environment, with employees going beyond their formal roles to support green initiatives.

Another essential mechanism whereby GTL affects GBI is through role modeling.

Sustainability-minded leaders encourage employees to emulate these practices and hence create a culture in an organization. Graves, Sarkis, and Zhu (2013) showed that green behaviors are more likely to be adopted by employees when they consider their leaders as environmentally responsible role models. Inspirational motivation is another important mechanism. GTL generates a common vision of sustainability, encouraging employees to align their behavior with the organizational objectives. The more leaders make green practices critical for the success of the organization and for societal well-being, the greater will be the commitment of employees toward environmental initiatives (Norton et al., 2015). For instance, in the hospitality industry, GTL has been found to enhance participation by employees in eco-friendly programs related to water saving campaigns and sustainable procurement practices.

Intellectual stimulation is also a factor of GBI since it makes the workforce provoke the most creative solutions to problems causing environmental impacts. GTL leaders make employees critically question any form of sustainability issue and create new strategies to solve such issues. Such an approach does not only enhance GBI but also power green creativity within an organization (Luu, 2019). The effect of GTL on GBI is also of major concern in the hospitality industry, whereby hotels are under pressure to adapt to sustainability. GTL thus acts as a behaviorally aligned model for employees, against such organization-wide sustainability goals. In a study by Pham et al. (2019), GTL in hotels led to good engagement by employees towards green projects; this consequently reported significant decreases in energy and waste generation. The previous discussion helps us to develop the first hypothesis:

H1. GTL positively relates to GBI

The Impact of GTL on GE

GE refers to the act of giving employees the necessary authority and resources to be able to carry out their work sustainably, including efforts toward green initiatives. According to the concept, only the empowerment of the employees will lead to ownership of green projects, proactive environmental behaviors, and innovations to solve the challenges in sustainability on the part of employees (Pham, Tučková, and Jabbour, 2019). Powered employees are no longer passive contributors to an organization's sustainability goals but active proponents of alignment of action with broader environmental objectives.

In the hospitality context, GE is very significant. Hotels are highly resource-intense-considerable energy and water use and also considerable waste generation. Employee freedom to freely implement green practices like energy saving initiatives or adopting proper waste management systems may, therefore, have a quantified effect on the reduction of industry ecological footprint (Zientara and Zamojska, 2018). It means in case of employees that have freedom to decide about conserving hotel resources, they are most likely to raise and propose workable solutions, including switching to biodegradable materials or optimizing energy during low-occupancy periods. Thus, GE is being an agent of change that promotes innovation and operational efficiency in sustainability initiatives.

GTL is highly critical in the initiation of GE. GTL substitutes and adds sustainability to the core principles of the traditional transformational leadership. Leaders exercising GTL inspire employees to combine their personal values to achieve organizational environmental objectives, creating a sense of empowerment and responsibility among them (Robertson and Barling, 2013). The three GTL components—intellectual stimulation, inspirational motivation, and individualized consideration—are especially suited for activating GE in organizations.

GTL promotes intellectual stimulation as a means of challenging employees to think at deeper levels regarding environmental concerns and finding innovative solutions. Critical thinking here leads to creative ideas about sustainability, which may entail implementing energy-efficient technologies or waste reduction plans or programs - an approach that develops problem-solving capability and increases employee commitment toward sustainability initiatives, since their ideas are valued and implemented (Tuan, 2019). For instance, in hospitality, GTL has also been found to enhance green creativity through the designing of environmentally friendly programs by employees to minimize destruction of the environment (Pham, Tučková, and Jabbour, 2019).

In GTL, inspirational motivation is a major characteristic, whereby leaders share a motivating vision of sustainability to inspire their employees to take initiative. The explanation by Robertson and Carleton, 2018 establishes that the approach taken by leaders gives employees a reason to serve the organization with purpose and will. For example, hotel leaders can result in strong ownership among the staff if they have clear sustainability goals and own green practices. Employees are thus motivated to implement eco-friendly programs, such as reducing single-use plastics or enhancing recycling efforts, aligning their actions with the organization's sustainability vision (Saeed et al., 2019).

Individual consideration entails leaders to understand the needs and goals of their workers. GTL assists GE to enhance the organization green practices through offering necessary training and materials that ensures employees improve on their green practices on the workplace (Norton et al., 2015). The culture of work to empower is championed by leaders who encourage employees, provide feedback on their contributions towards sustenance, and reinforcement of those inputs towards sustainability. For example, enhancing knowledge through training and encouraging hotel employees to engage in sustainability activities can make the organization improve the levels of employee's perceived empowerment ant job involvement as postulated by Robertson and Barling (2013).

Some empirical studies provide strong evidence for the positive relationship between GTL and GE. Robertson and Barling (2013) stated that GTL directly affects employees' pro-environmental behaviors based on the predispositions of activation and empowerment, showing a sense of autonomy within their role. Employees who work under green transformational leaders are more likely to take initiative in environmental activities, such as reducing energy usage or proper waste management.

Similarly, in the hospitality industry, Zientara and Zamojska (2018) underlined the role of GE in the propagation of green organizational climates. The study established that employee empowerment was a tool towards sustainable practices through the supportive, transformational leaders within the green transformational manager. Pham, Tučková, and Jabbour (2019) further established the relationship between GTL and GE, wherein leaders who are committed to sustainability make an environment such that employees feel emboldened and empowered to contribute to the cause of green initiatives.

H2: GTL positively relates to GE

The Impact of GE and GBI

GE has become a paramount significance in the creation of GBI among employees. GE empowers employees with the initiative, resources, and decision authority to take part in environmental action so that they have ownership and accountability towards environmental outcomes. This type of empowerment is directly related to GBI because an empowered

employee will have more opportunities to show pro-environmental behaviors like reducing consumption of energy, reducing wastage, and adopting eco-friendly innovations (Norton et al., 2015). Studies in organizational and environmental psychology highlight the importance of GE in enhancing employees' commitment to sustainability initiatives. Robertson and Barling (2013) found that empowered employees are more likely to internalize organizational sustainability goals, translating them into actionable green behaviors. This link is critical in the hospitality industry, where employee actions directly impact energy use, waste generation, and the overall environmental footprint of hotel operations. Empowerment, in this way, provides employees with the motivation and tools to be environmentally friendly, thereby causing both individual and organisational benefits.

In addition, GE has been proven to enhance the confidence of the employees in proposing and implementing green practices. Self-motivated and initiative-taking employees can bring about innovations, such as optimizing energy systems or proposing biodegradable materials in hospitality activities. These initiatives match the green targets of the organization and improve its overall environmental performance (Pham, Tučková, and Jabbour, 2019).

A number of studies have provided empirical proof of the effects that GBI has on GE. As an illustration, Saeed et al. (2019) demonstrated that employees who perceive themselves as empowered are significantly more likely to engage in pro-environmental behaviors. The study pointed out that green human resource management practices, such as training and resources for employees to implement sustainability initiatives at work, are key enablers of GE. Empowered employees do not only adopt green behaviors themselves but also the practice influences their peers, creating a ripple effect throughout the organization.

In another research, Zientara and Zamojska (2018) explored the position of GE in creating green organizational climates in the hospitality industry. Their result indicated that only employees who feel empowered to contribute toward sustainability will eventually develop a strong GBI, which propels them toward participation in activities such as recycling programs, campaigns for energy saving, and waste management strategies. Those behaviors are crucial for lessening the ecological footprint of hotels while enhancing operational effectiveness.

GE acts as a critical mediator between GTL and GBI, linking the overall strategy of leadership and action driven by employees for sustainability. GTL motivates employees to support organization-specific goals toward environmental concerns; however, empowerment translates such intentions into observable, environmentally friendly behaviors. This is because GE leads to increased autonomy and equips employees with the means, resources, and confidence to enact green behavior. Based on the previous discussion, the authors suggest the following hypotheses:

H3(a): GE positively Relates to GBI

H3(b): GE mediates the relationship between GTL and GBI

The Moderating Role of GIM

GIM refers to the internal drive to engage in sustainable practices based on personal values, ethical beliefs, and commitment to environmental well-being, rather than external rewards or pressures. It is a key psychological factor influencing pro-environmental behavior, as it encourages individuals to take consistent and meaningful action toward sustainability goals (Robertson & Barling, 2013). High GIM employees are driven by a sense of eagerness to do something about environment-related issues, thereby keeping them engaged for the long term in

activities like green practices that reinforce organizational aims (Norton et al., 2015).

Intrinsic motivation is contrasted with extrinsic motivation that operates on extrinsic reward systems such as financial incentives, promotion, or recognition. Although extrinsic incentives may encourage short-term behavior, intrinsic motivation stimulates deeper and long-term commitment toward sustainability (Saeed et al., 2019). For instance, whereas for an intrinsically motivated employee, the practice of protecting the environment is adopted out of personal conviction by reducing waste or saving resources, an extrinsically motivated employee may follow the culture by trying to meet performance targets or earning rewards.

GTL inspires employees to engage in environmentally friendly behaviors by fostering GBI. Nevertheless, the existence of GIM enhances this relationship because it indicates that besides inspiring employees, the employees are personally committed to pro-environmental behavior. The employee with high GIM is more likely to internalize the sustainability vision communicated by his or her leaders and translate the vision into great green actions (Pham, Tučková, and Jabbour, 2019). Empirical evidence supports the moderating role of GIM in the GTL-GBI relationship. Norton et al. (2015) found that employees with high intrinsic motivation were more responsive to transformational leadership practices. Leaders who demonstrated environmental commitment and encouraged innovative thinking had a stronger impact on intrinsically motivated employees, leading to higher levels of GBI. For example, the employee can tend to adopt other behaviors like saving energy, waste reduction, and membership of green activities without any extra motivation from the outside.

In hospitality companies, GTL usually focuses on some level of congruence that organizational sustainability objectives have in relation to employee's values. Employees with high GIM levels are more likely to have this kind of effective alignment, as they regard their actions as a part of personal responsibility towards environmentalist practices. For instance, Robertson and Carleton (2018) emphasized the fact that intrinsically driven employees were likely to advocate green initiatives established by transformational leaders because such initiatives led to tangible environmental enhancements such as lower energy consumption and improved recycling rates.

GIM also plays a significant role in mediating the interaction between GTL and GE. Whereas GTL offers employees a sense of autonomy, resources, and support, intrinsic motivation enhances the outcomes of that empowerment by making employees to take ownership of sustainability efforts (Robertson and Barling, 2013). Employees high on GIM will be more likely to seize the opportunities that GE provides to them and utilize their autonomy in finding innovative green practices.

Research has highlighted that intrinsically motivated employees are more favorable to empowerment practices of GTL. According to Saeed et al. (2019), employees with high levels of GIM were more engaged in decision-making processes and sustainability projects if their leaders highlighted power and empowerment. That is, within hospitality studies, intrinsically motivated employees would be more likely to initiate and implement innovations regarding eco-friendly practice like optimizing water usage or switch to renewable sources of energy as a result of feeling empowered by the leaders. GIM also makes sure that empowerment efforts through GTL are sustainable in nature. Intrinsic motive-driven employees perceive their empowered roles as an opportunity to contribute meaningfully to environmental sustainability rather than just fulfilling job requirements. This perspective enables workers to engage continuously in green practices even without close or immediate reward or recognition (Zientara and Zamojska, 2018).

Based on the abovementioned discussion, the following hypotheses are suggested:

H4(a): GIM moderate the relationship between GTL and GBI

H4(b): GIM moderate the relationship between GTL and GE

Underpinning theories to support hypotheses

Theory of Planned Behavior (TPB)

Ajzen (1991) developed TPB, which has been one of the widely used psychological frameworks in understanding and predicting human behaviors, especially pro-environmental actions. According to TPB, the most significant predictor of behavior is defined as behavioral intention, which is directly influenced by attitude toward the behavior, subjective norms, and perceived behavioral control (Conner, 2020).

Within the GBI framework, TPB explains how, through a combination of an individual's positive attitude toward sustainability practices, social expectations to act sustainably, and their confidence in their capability of performing these actions, one develops an intention to conduct green practices. This model is particularly important in regard to the employees of the hospitality industry, where day-to-day operations, such as saving energy, waste management, and eco-friendly products, are fundamentally critical in ensuring that the organization meets its sustainability objectives.

TPB is integral to linking GTL to employee behavior in the hospitality sector. Transformational leadership influences the attitudes of employees, as sustainability becomes part of the organization's central values. Through role modeling and inspirational motivation, the leader influences subjective norms, thus creating a culture that expects and values sustainable practices. GTL also enhances perceived behavioral control by giving the employees the necessary resources, training, and support in engaging in green practice (Conner, 2020).

In the hospitality sector, TPB offers a good insight to understand the reasons why leadership influences employee behaviors. For instance, employees in hotels with a robust GTL are likely to assume positive attitudes toward green practices as their leaders will focus more on the prospect of an environmentally friendly approach. Subjective norms, enhanced through team-based green initiatives and peer recognition, are likely to propel employees toward achieving the organizational sustainability goals. Furthermore, empowerment practices in the form of green-training programs and decision-making authority will be related to employees' perceived behavioral control, thus actualizing GBI.

The application of TPB to the study of GTL and GBI can help the researcher and practitioner understand the influence of leadership practices on employee behaviors. This can further inform the activity of driving sustainability in the hospitality sector.

Transformational Leadership Theory

Transformational Leadership Theory focuses on leaders who inspire and motivate employees to exceed expectations by fostering a shared vision, promoting innovation, and addressing individual needs. According to Bass and Avolio (1993), transformational leaders use four key components: idealized influence (role modeling), inspirational motivation (creating a compelling vision), intellectual stimulation (encouraging creativity), and individualized consideration (personalized support) (Korejan and Shahbazi, 2016). This leadership style creates a culture of trust and empowerment, enabling employees to align their actions with

organizational goals.

In recent years, the theory has been extended to incorporate green practices, evolving into GTL. This extension emphasizes sustainability as a core organizational value. Green leaders integrate environmental goals into their vision, inspire employees to adopt sustainable behaviors, and promote innovation in solving environmental challenges. Providing intellectual stimulation stimulates employees to critically reflect about the issues of sustainability, and Individualized consideration ensures them appropriate support to live the green initiative (Ghasabeh, Soosay, and Reaiche, 2015).

Transformational Leadership Theory is actually relevant to this study that focuses on the role of GTL in fostering GBI and GE. GTL directly influences GBI by building organizational culture that promotes sustainability and motivates employees to act. For instance, through idealized influence, a leader can act as a role model in pro-environmental behaviors that inspire others to do the same. Inspirational motivation promotes a shared vision of sustainability that aligns personal actions with organizational environmental objectives.

This theory also supports the role of GTL in empowering the workforce to contribute towards sustainability. Intellectual stimulation under GTL encourages innovation in resource consumption reduction and waste management as employees are stimulated to develop innovative ideas. Individualized consideration ensures that the employee feels valued and supported, thus enhancing employee's autonomy and commitment to green initiatives (Korejan and Shahbazi, 2016).

By extending Transformational Leadership Theory to include green practices, this study highlights how GTL fosters pro-environmental behaviors and empowerment, driving organizational sustainability. Understanding this dynamic provides actionable insights for leaders in the hospitality industry, particularly in culturally and environmentally focused contexts such as the UAE.
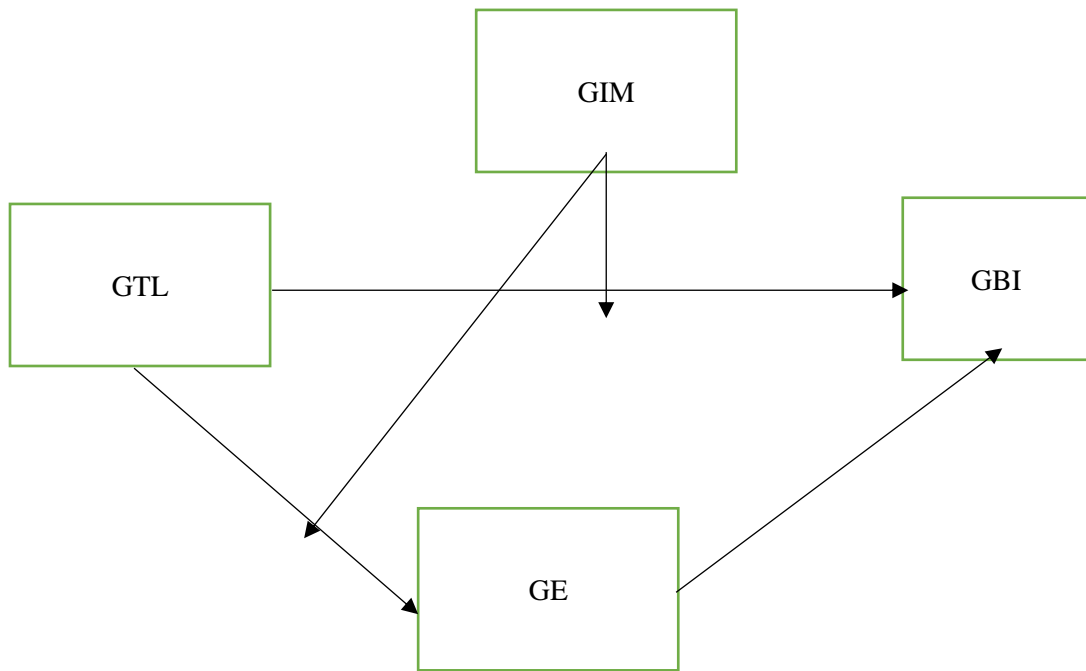
Figure 1: Research Model

Research Methodology

The United Arab Emirates (UAE) has earned a global reputation for its thriving hospitality sector, underpinned by world-class infrastructure, innovative offerings, and a strategic focus on tourism. Key drivers include the country's position as a major business hub, the popularity of mega-events such as Expo 2020 Dubai, and its appeal as a luxury travel destination. In 2024, the sector continues to experience significant growth, with rising visitor numbers fueled by initiatives like the UAE Tourism Strategy 2031, which targets 40 million hotel guests annually by the end of the decade. The UAE's ability to cater to diverse travelers, from luxury seekers to budget-conscious visitors, has been instrumental in cementing its position as a hospitality powerhouse (Department of Economy and Tourism, 2024)

The emirate continues to experience robust growth in the tourism sector, surpassing prepandemic levels and positively contributing to economic growth. The tourism sector contributed to the UAE's economy, registering an 11.7% increase in Gross Domestic Product (GDP) in 2023, amounting to AED220 billion. Government officials stressed that the sector is anticipated to contribute 12% to the UAE's GDP, equating to AED236 billion in 2024.

The hospitality industry of the United Arab Emirates flourishes on the back of tourism, business travel, and expatriate influence. The presence of iconic structures such as the Burj Khalifa and the Palm Jumeirah and luxurious hotels and beaches attests to the UAE remaining at the pinnacle of the tourist's imagination. Luxury hotels such as the Burj Al Arab in Dubai cater to discerning

luxury travelers through. Similarly, the country's dining scene ranges from Michelin-starred fine dining restaurants by celebrity chefs to Emirati food. The country is host to a dynamic business environment that operates on business and MICE tourism, with Dubai being the favorite stopover for international conventions and exhibitions. The country motivates visionary investors by focusing attention on attractions such as Dubai Parks and Resorts, Yas Island, and others.

Moreover, hotels and resorts across the country are embracing sustainable tourism practices. First and foremost, the country has a historical and cultural background maintained in rusty sites, souk markets, and museums. Spa and wellness tourism is a large segment catering to relaxation and rejuvenation. The manpower in the hospitality sector comprises Emiratis and expatriates, with diverse skills and expertise driving industry innovations. However, the future of the UAE hospitality sector shows additional growth inspired by infrastructure advancements ahead of the Expo 2020 Dubai.

Despite ongoing geopolitical challenges, Dubai continues to solidify its position as a premier global tourist hub. In the first six months of 2024, the city hosted an unprecedented 9.31 million overnight visitors, a 9% growth compared to the 8.55 million recorded during the same period in the previous year. This remarkable achievement underscores the strategic foresight of Sheikh Mohammed Bin Rashid Al-Maktoum, Dubai's ruler, as articulated in the Dubai Economic Agenda D33. The agenda aspires to establish Dubai among the world's top three tourism destinations (Cavendish Maxwell, 2024)

The research design

This research follows a quantitative approach and employs purposive sampling. This method allows researchers to choose the most appropriate sample, focusing on high-star hotels, as these hotels are more likely to implement advanced environmental practices due to their organizational framework and culture, which promote the acceptance and implementation of green management and leadership programs. Many previous studies utilized purposive sampling technique to collect data from 4 and 5 star hotels to explore green practices such as green human resource management and GTL (e.g. Ababneh, 2021; Darvishmotevali and Altinay, 2022; Pham et al., 2019; Pham et al., 2020).

In order to collect relevant data for this research, the researcher adopted the quantitative research approach. Campbell and Stanley (1963) stated that qualitative research can be considered as a part of empirical researches or study. Qualitative approach includes traditional ways in which psychology and behavioral sciences depended on for a long time. Indeed, it has been the key trend in social sciences research. Instead of using qualitative research in this study, which is always classified under ethnographic studies and depends usually on grounded theory and interviews. The current study utilized quantitative approach because variables used in the current study have been studied previously and have high validity. It is true that qualitative approach provides us better and deeper understanding of the phenomenon being researched, but no need to use it in the current study since all variables have been tested in different settings.

There are 354 four and five star hotels in Dubai according to Statista (2024). It is impossible for the authors to cover all hotels. Thus, the top management of thirteen hotels in Dubai were contacted, six of them are 5 star hotels and seven are 4 star hotels. However, only four 5 star hotels and three 4 star hotels responded positively and allowed authors to collect data. After getting approval from talent management at those hotels, three hundred questionnaires were

distributed to employees in person. Two hundred and ninety four questionnaires were retrieved. However, thirteen questionnaire were excluded due to missing information. Thus, two hundred and eighty one questionnaires were used in statistical analysis. The questionnaire has 24 questions except the demographics. All scale items were measured by using five point Likert scale which range from 1 (strongly disagree) to 5 (strongly agree).

Measures

GTL was measured by using 6 items adapted from Chen and Chang (2013). The scale was used and validated widely in many studies. For example, Li et al (2020) used the scale in their study. The items included in the scale "The leader provides a clear environmental vision for the employees to follow"; "The leader inspires employees with the environmental plans". GE was measured by 9 items adapted from Hameed et al (2020). Items included "I am self-assured about my capacities to perform my green work activities"; "I have significant autonomy in determining how I do my green job". GBI was measured by three items adapted from Norton, Zacher, Parker, and Ashkanasy (2017). Items included " I intend to act in environmentally friendly ways", " I intend to carry out environmentally friendly behaviors at work". In order to measure GIM, referring to Amabile et al. (1994) and Deci (1972), Li et al (2020) developed a scale to measure GIM. The scale included items like: "He/she enjoys coming up with new green ideas", "He/she enjoys trying to solve environmental tasks on job".

The questionnaire was prepared and distributed in English because having a high level in English language is a must in the hospitality industry in Dubai. So, there was no need for back translation. Confidentiality and anonymity were assured to all respondents. The researcher ensured that collected data will not be shared with their management. The cover page of each questionnaire declared that clearly.

Data Analysis and Interpretation

SPSS version 22 was used to analyze data. The analysis started with demographic breakdown which is shown in Table 1. In terms of gender, males formed 55.2% while females formed 44.8%. Table 1 shows that more than of 60% of respondents are between 18 and 27 year old, while 37% of respondents are between 28 and 37 years old. Fifty five percent of respondents are single while 43.4% of them are married. Almost 83% of respondents has whether vocational school or college degree (Bachelor's degree) and this is expected since most of hotels ask for an academic degree when they hire. Around 15% of respondents have primary or high school certificates and the rest have graduate degree. In terms of organizational tenure, more than 81% have experience between one to ten years, while more than 13.5% have less than one year of experience.

	Frequency	Percentage
Age		
18-27	172	61.2
28-37	104	37
38-47	5	1.8
48-57	0	0

Over 58	0	0
Total	281	100.0
Gender		
Male	155	55.2
Female	126	44.8
Total	281	100.0
Education		
Primary & High School	42	14.9
Vocational School	58	20.6
College Degree	174	61.9
Graduate Degree	7	2.5
Total	281	100
Marital Status		
Single	155	55.2
Married	122	43.4
Divorced	4	1.4
Widowed	0	0
Total	281	100.0
Job Experience		
Less than 1 year	38	13.5
1-5	105	37.4
6-10	123	43.8
11-15	9	3.2
16-20	6	2.1
Total	281	100

Table I Respondents' Summary (n = 281)

Scale of entries	Factors Loadings	Eigenvalue	Percentage of Variance	α
GTL		7.65	22.126	.90
The leader provides …	.92			
The leader inspires…	.73			
The leader gets …	.91			
The leader encourages …	.88			
The leader acts …	.74			
The leader stimulates …	.61			
GE		5.67	17.758	.92

The green work that …	.63				
My activities are …	.71				
The green work I …	.78				
I'm confident about …	.84				
I'm self-assured about…		.81			
I have mastered …		.83			
I have significant …	.79				
I can decide on …	.83				
I have considerable …	.74				
GBI			4.09	14.821	.90
I intend to act …		.87			
I intend to carry …	.83				
I intend to perform …	.88				
GIM			2.54	11.871	.87
He/she enjoys coming up…	.80				
He/she enjoys trying …	.88				
He/she enjoys tackling…	.79				
He/she enjoys improving …	.62				
	.69				
He/she feels excited …	.86				
He/she feels like …					
NOTE, every entry is computed by a five point scale.	KMO weight of sampling Adequacy= .838	Bartlets' Test of Sphericity = 5242.51	DF= 276, p<.001.		
The explained Total Variance of all factors is 66.577%					

Table II Scale of entries, Reliability, and Exploratory Factors Analysis Outcomes

Exploratory Factors Analysis (EFA) was applied on data. It utilized the Varimax rotation, KMO, and Principle Components Analysis (PCA). Table II shows factor loadings which ranged from .61 to .92. The table also shows that all the items were vital since there was no item which failed to load or cross loaded with other items at .50. Moreover, the analysis made for four factors and the eigenvalues are more than 1.00. The analyzed four variables explained 66.58% of the total variance. All Cronbach's alphas exceeded the cut-off .70. which was suggested by Nunnally (1978). Based on that, the data is reliable and valid and can be used to test the hypotheses.

In order to check if common method variance (CMV) threatens the data, the authors conducted Harman's Single Factor test as suggested by Podsakoff et al (2003). In this test, all measurements are tested as one single factor. The outcome of the test shows 25.56% and this less than the cut off 50%. This result indicates that CMV is not a threat to the study.

Factors	Mean	Std.D	GTL	GE	GBI	GIM	
GTL	4.11	1.13	-				
GE	3.92	1.21	.110*	-			
GBI	3.69	1.04	.422** .153*		-		
GIM	3.45	1.09	.089 .154**		.103	-	

Table III Correlations of the variables

Note; Std. D = Standard Deviation

** Correlation is substantial at the 0.01 level (2-tailed).

*   Correlation is substantial at the 0.05 level (2-tailed).

Table III shows the correlations of variables, means, and Std.D. Table III proves some significant correlations between independent, mediator, and dependent variables. Baron and Kenny (1986) suggested four conditions to conduct mediation analysis. The first condition is related to the correlation between the independent and the mediator variable. The third table shows a significant correlation between the independent variable (GTL) and the mediator which is GE (relation = .110*). Thus, the first condition is achieved. GTL is significantly correlated with GBI (relation = .422**). Therefore, the second condition which states that predictor variable should be significantly related to the criterion is met. The third condition which stipulates significant correlation between the mediator (GE) and the criterion variables (GBI) is achieved (relations = .153*). We conclude from those findings that we have direct effect between the independent variable (IV) and the dependent variable (DV).

The 4th condition examines the whole mediating impact. The authors added the IV and the mediator (GE) together and examined their impact on the DV. Table IV shows that GE mediates the relationship between GTL and GBI because the relationship became weaker when we added the mediator (It went down from 5.95 to 2.36 after adding the mediator). Thus, the fourth condition in Barron and Kenny which states that the relationship between the predictor variable and the criterion should be non-significant or weaker when we add the mediator is achieved. The same method was used in previous studies (e.g. Lee & Ok, 2014)

Based on table III and IV, the first hypothesis is supported (r = 422**). H2 which states that GTL positively relates to GE is supported (r = .110*). H3(a) which highlights the relationship between GE and GBI was supported (r = .153*). Hypothesis 3(b) which discusses the mediating role of GE is accepted (β = .195, t =2.36).

In regards to H4 (a) and 4 (b), the authors examined the moderated mediation via four conditions as suggested by Preacher et al., (2007). The first condition which predicts GTL to have significant effect on GBI is supported as reported in H1. In regards to the second condition, the authors examined if the interaction of GE and GIM can predict GBI. This condition is achieved (β = .007, P =.022). In regards to the third condition regarding the significant impact of GE on GBI, it was supported as reported in H3(a). In regards to the fourth condition regarding the indirect effect of IV on DV via mediator is met as reported previously. GTL was found to be significantly related to GBI and GE. Since all conditions are met, GIM moderates the

relationship between GTL and GBI. The hypothesis 4 (a) is accepted. By applying the same method on H4(b), the authors found that the second condition is also accepted (β = .003, P =.012). Thus, GIM moderates the relationship between GTL and GBI, and the relationship between GTL and GE.

	GE			Step I		Step II	
	Step I						
	β	t		β	t	β	t
Factors			Factors				
GTL	.193	2.54**	GTL	.407	6.82*	.367	5.95*
			GE	-	-	.195	2.36**
F 5.96 R² at each step .020 ΔR² .018 Sobel test for GTL → GE → GBI = 1.88**							

Table IV Regression Outcomes: Direct and Mediating Effects

Note: The results do not show any problems of multicollinearity. *** P < .10, ** P < .05, * P < .01

Mediator variable model (dependent variable GE)				
Predictor	*B*	SE	t	P
Constant	11.215	6.421	1.92	.062
GTL	.510	.319	1.57	.144
GIM	.097	.264	.340	.715
GTL x GIM	.003	.091	-.047	.012

Table V: Regression For Moderation Test

Dependent variable model (dependent variable- GBI)

Constant	13.12	1.802	6.01	.000
GTL	.405	.068	6.27	.000

GIM	-.092	.090	-.855	.405
GE	.029	.174	.092	.937
GE x GIM	.007	.004	2.504	.022

Discussion, Implications, and Conclusion

This study focuses on examining the role of GTL in fostering GBI and GE among employees working in the hospitality sector, particularly in 4- and 5-star hotels (Filimonau et al., 2023). The research thoroughly investigates this topic and proposes several hypotheses, all of which were validated by the findings. These results underscore the significance of GTL practices in cultivating a green organizational culture and promoting behaviors that enhance employee innovation and empowerment. Discussing these implications is crucial, as they provide insights into integrating sustainable practices into leadership strategies within the hotel industry (Mohamed, 2017).

This result supports the hypothesis that GTL has an immediate and significant impact on employees' GBI. Organizational green leadership by providing direction, inspiring change, modeling, and fostering green schemes and employee's motivation to exhibit green behaviors is stimulated (Nadia Aslam Janjua et al., 2024). However, the implication of GTL cannot be overemphasized in the context of the UAE hotel industry where environmental factors are core issues. This study outlines how employee behaviors can be managed by leaders to achieve the organizational sustainability agenda. GTL enhances organizational members' orientation and attachment to the environment. This concurs well with the literature on transformational leadership, where the latter entails a transformation of followers to go beyond their self-interest. As a result of setting and promoting a vision of sustainability, GTL shapes the beliefs and behavior of employees by helping them to choose environmental management strategies that promote sustainability (Omarova & Jo, 2022). In the industry of the hospitality, this can be seen in matters to do with energy conservation, optimum utilization, and being environmentally friendly through policies that support the entire cause. Implications of this study suggest the need for leadership to champion and support green behaviors in workplaces, especially in the hospitality industry which is the focus of this study.

This result provides support for the hypothesis that GTL stresses the immediate and substantial influence on employees' environmental behavior intentions. This type of green leadership offers direction and prompt change while stating, role modeling, and supporting green schemes to encourage employees to exhibit green behaviors (Hameed et al., 2021). However, the implication of GTL cannot be overemphasized when used in the context of the UAE hotel industry with environmental factors as fundamental issues. This study also describes how organizational leaders can influence employee behavior to drive the sustainability agenda forward.

Sustainable green leadership, therefore, positively influences the organizational members' attitudinal response and behavioral commitment toward the environment. This tallies well with the literature on transformational leadership, where the latter involves a change of the followers to be motivated to go beyond their self-interest (Rizvi & Garg, 2020). Consequently, the vision that GTL sets and promotes creates important positive beliefs and behavior amongst the employees by predicting the environmental management strategies that the employees will select to support sustainable development. In the industry of the hospitality, this can be observed in as much as matters touching on energy conversation, efficient use of energy, and being conscious of the environment through policies that bolster the entire course. The consequences of this study

will go further to indicate the need for leadership support or endorsement for green behaviors in workplaces with special reference made to the field of the hospitality industry.

The mediating role of GE for the relationship between GTL and GBI further emphasizes the significance of empowerment as a mechanism that translates GTL into tangible outcomes (Atahau et al., 2021). GE helps mediate the relationship between leadership behaviors and the intentions that employees have towards practicing green behaviors. This study implies that green transformational leaders modify employees' GBI in two ways; direct motivation and employees' decision making and actions towards environmental change. This study reveals that GE plays the crucial role in showing how leadership impacts sustainability results. This study comes up with a finding that when employees are empowered they are likely to accept organizational sustainability goals and therefore embrace environmentally sustainable behavior. This result is quite significant for organizations operating in the hospitality industry as engagement of employees is critical in greening initiatives (Mohammad Ashraful et al., 2021). Thus, by empowering employees GTL develops conditions which are not only the employees are not just the passive recipients of leadership messages but also the active participants of the sustainability system. Of course, the mediating role of empowerment is essential in reestablishing leadership as a facilitating factor when thinking about culture for sustainability.

The moderating role of GIM for the relationship between GTL and GBI, and GTL and empowerment also brings into focus the part of intrinsic motivation in improving GTL. Intrinsic motivation makes the employees develop sustainable behaviors because their intentions reflect their concern towards environmental degradation (Liu & Liu, 2022). Intrinsic motivation is an internal encouragement of an individual towards the principle of sustainability that novelist to take an action because of the desire to embrace sustainable principles. It is for these reasons that employees who are self-motivated to behave sustainably can easily be swayed by GTL and able to change their attitude towards green behavior. Based on this research study, it can therefore be advocated that, GTL is more impactful where the employees have self-interest in practicing environmental conservation. Sustainability-driven motivation can be best harnessed in this regard by ensuring that employees' personal values are appealed to, and giving them the chance to make positive green changes in the workplace (Nadia Aslam Janjua et al., 2024). It also means that even though leadership efforts may help foster green behaviors, certain levels of intrinsic motivation can actually counteract such desired positive changes. To reiterate, GTL can mobilize employee, but intrinsic motivation helps to identify what extent employees will likely react to leadership initiatives. If employees are already interested in environmental issues, then GTL will be more influential in affecting their GBI and level of empowerment. Hence, the leadership styles in sustainability strategies should address the current level of intrinsic motivation.

Implications

This study last receives some important evidence in regards to the GTL major role in facilitating sustainability practices in the hospitality industry, especially the highly mobile, environmentally sensitive context of 4-and-5 stars hotels in Dubai. This research expounds on how GTL could help develop GBI and GE. These results will, further, inform top management in hotels regarding implications with respect to operational excellence and environmental responsibility.

The most important point for senior leaders in the hospitality sector to understand is that GTL has a direct impact on employees' intent and action toward sustainability. By demonstrating green practices, pushing for change, and providing clarity, leaders can create an organizational environment that values and actively mobilizes sustainable behaviors. For example, GTL

practices may motivate employees to practice energy conservation, optimization of resources, and environmentally friendly ways of operation in their daily lives. Such a leadership approach perfectly resonates with some of the core values of high-end hotels, which are increasingly leaning toward catering to such environmentally conscious guests that travel sustainably.

This research further states the significance of employees' empowerment as one means that translates leadership intentions into results. Empowerment gives employees ownership and accountability, enabling them to decide and act independently while endorsing the sustainability objectives of the organization. For top management, creating conditions would mean assuring employees' perception of their support for the contribution made to green initiatives. Employees being active agents rather than passive followers of directives regarding sustainability tend to have a better engagement and commitment to the environment than those who view the act as a mandate. This translates to a vivacious context in Dubai's hospitality market, where sustainability becomes a serious point of difference to attract a more discerning class of guests.

In addition, an exciting aspect of the study is the moderating role of GIM in enhancing the effectiveness of GTL. Employees who possess a real intrinsic desire for saving the environment tend to be more receptive to green leadership tactics. This constitutes an input for hotel managers to orient their staff towards strong intrinsic motivation in such aspects. Moreover, management can help such motivation by matching organizational goals with personal values of employees and creating opportunities for them to engage in meaningful environmental activities. Last but not least, the intrinsic motivation strengthens the influence of leadership and engrains sustainable behavior within the workforce.

The introduction of GTL into leadership strategies transforms organizational culture, as this study indicates. Integrating sustainability into the top levels of leadership has proven fruitful in causing change in attitudes and behavior, thereby drawing commitment among teams for environmental stewardship. The adoption is quite essential in the hospitality setting that increasingly awakens guest expectations for manifest evidence of real, authentic sustainability practices. With GTL as a priority, a leader has positioned his or her hotel to become a pioneer in the industry for selfish gain among its customers concerning loyalty, as well as reputation within the organization.

Conclusion

In this study, we have discussed how there is an emphasis of organizations on implementing GTL as a way of enhancing sustainability in the UAE hotel business through its impact on GBI, organizational culture, employee engagement, and business performance. The results support the hypothesis that GTL has a positive impact as a tool that can be used by hotel managers in the endeavor to enrich their organisations' environmental management practices. In expanding our knowledge of the constitutive process through which leadership behaviors influence sustainability outcomes, this research centers GE as a mediating factor that helps us understand the relationship with intrinsic motivation as a moderating factor. Overall, they substantiate the relevance of GTL and avert their particular inadequacies; simultaneously, the results offer practical recommendations for enhancing sustainability initiatives in the lodging industry.

This gave credibility to the own argument that GTL has a positive relationship with employees' GBI. GTL increases the likelihood of employees' demonstration of environmentally responsible behaviour and thus promotes consistent personal practices that support sustainability standards of organizations. This supports the topic as it underscores the importance of leadership in the

overall process of calling for effective participation and practice that the hospitality industry needs in environmental management especially in the UAE which is already placing importance on the environment. GTL does this by developing a strong and motivating culture to focus on sustainability, promoting innovation, and giving people a reason to care.

However, the research further established that GE substantially contributes to impacted the concept of GTL to GBI. Achieving organizational goals and ensuring that all employees act in a manner that supports environmental objectives are more likely when employees have been empowered, and provide them with the tools and authority to put into action sustainable developmental programs. This work underlines the significance of developing an environment that will inspire employees to be actively involved in a company's sustainability processes. Those companies, organizations, and industries that engage and encourage their managers foster a sense of responsibility in their employees as they support sustainable initiatives and practices.

Another reason taken to support the GTL and sustainability outcomes is genuine enthusiasm within intrinsic motivation. Subsequently, it can also be seen that employees motivated by environmental related value are likely to show positive response to GTL, which in turn validate the positive findings on green leadership. This implies that besides adopting transformational leadership, hotel managers ought to match organisational sustainability with their subordinates, self – perceived practices.

However, the study is also aware of the limitations of GTL including resistance to change, lack of resource, and parochial short-term financial goals The study thereby acknowledges that there are always challenges to effective GTL which are as follows; To address these issues, sustainability has to be institutionally embedded, and the management at all organization levels has to drive green actions. Furthermore, the study shows that there is limited knowledge of the sustainable benefits of GTL on environmental performance improvements including energy conservations and management of wastes in the long-run.

While this study provides valuable insights into the role of GTL in promoting sustainability within the UAE hotel industry, several limitations must be acknowledged. First, the establishment of the research targets mainly the hotels in UAE hence limiting the findings to this region or industry only. This study aims to identify if pertained and emerging cultural, economic, and regulatory features of the UAE arena can act as enablers or barriers to GTL in ways different from other country contexts (Awan et al., 2022). Future research could extend the survey to more hotels across different countries or industries to also confirm the established results.

A limitation of the study is that the data collected in the study are derived from the beliefs of the employees and organizational leaders. Choice experiments, as well as surveys and questionnaires, are widely employed in the studies of the organization; however, they bear some response biases, for example, socially desirable response bias when subjects over-report their sustainability practices. It may be something as simple as gathering more indexed energy consumption, waste disposal records, or sustainability reports to offer real-life verification of the GTL relations with organizational performance measures (Atahau et al., 2021).

Furthermore, the study is cross-sectional so it is not suitable in establishing cause-and-effect relationships. Cross-sectional research which compares the effects of GTL at a given time provides more evidence on how green leadership impacts sustainability more in the future. Last but not least, future research could compare the effects of other leadership styles or organizational factors that, interact with GTL for more effective and efficient improvements for

sustainability in the hospitality sector.

References

Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviors?The role of employee engagement and personality attributes. Journal of Environmental Planning and Management, 64(7), 1204– 1226.

Amabile, T.M., Hill, K.G., Hennessey, B.A., Tighe, E.M. (1994). The work preference inventory: assessing intrinsic and extrinsic motivational orientations. J. Pers.

Soc. Psychol. 66, 950-967.

Afsar, B., Badir, Y.F. and Kiani, U.S. (2016). Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion. Journal of Environmental Psychology, 45, pp.79-88.

Afsar, B., Maqsoom, A., Shahjehan, A., Afridi, M.A., Nawaz, A. and Liu, J. (2020). "Responsible leadership and employee's pro-environmental behavior: The role of organizational commitment, green shared vision, and internal environmental locus of control." Corporate Social Responsibility and Environmental Management, 27(1), pp.297-312.

Amrutha, V.N. and Geetha, S.N. (2020). "A systematic review on green human resource management: Implications for social sustainability." Journal of Cleaner Production, 247, p.119131.

Aslam, N., Shi, D. and Sahibzada, U.F. (2024) 'The quest for sustainability – green transformational leadership towards green performance: a time-lagged study – symmetric and asymmetric analysis', Journal of Organizational Change Management, 37(1), pp. 1-25.

Atahau, A. D. R., Sakti, I. M., Huruta, A. D., & Kim, M.-S. (2021). Gender and renewable energy integration: The mediating role of green-microfinance. Journal of Cleaner Production, 318, 128536.

https://doi.org/10.1016/j.jclepro.2021.128536

Awan, F. H., Dunnan, L., Jamil, K., & Gul, R. F. (2022). Stimulating environmental performance via green human resource management, green transformational leadership, and green innovation: a mediation-moderation model. Environmental Science and Pollution Research. https://doi.org/10.1007/s11356-022-22424-y

Cahyadi, E.R., Suryani, T. and Suryani, T. (2022) 'Green transformational leadership and employee green behavior: the mediating role of green organizational culture', Journal of Cleaner Production, 345, p. 131120.

Campbell, D., & Stanley. J. (1963). Experimental and quasi-experimental designs for research. Chicago: Rand McNally College Publishing

Cavandish Maxwell. (2024). Report on Dubai's Hospitality Sector – Market Performance. https://cavendishmaxwell.com/insights/reports-and- whitepapers/dubais-hospitality-sector-market-performance-in-h1-2024

Chen, Y.S. and Chang, C.H. (2013) 'Enhance green purchase intentions: the roles of green perceived value, green perceived risk, and green trust', Management Decision, 51(1), pp. 63-82.

Chen, Y.S. and Chang, C.H. (2013). "The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity." Journal of Business Ethics, 116(1), pp.107-119.

Chou, C.J. (2014). "Hotels' environmental policies and employee personal environmental beliefs: Interactions and outcomes." Tourism Management, 40, pp.436-446.

Conner, M., 2020. Theory of planned behavior. Handbook of Sport Psychology, pp.1-18.

Çop, S., Özçelik, A.O. and Özçelik, A.O. (2021) 'Green transformational leadership and green

creativity: mediating role of green organizational identity and moderating role of environmental sensitivity', Business Strategy and the Environment, 30(8), pp. 3281-3295.

Darvishmotevali, M., & Altinay, L. (2022). Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. Tourism Management, 88, 104.

Deci, E.L., 1972. Intrinsic motivation, extrinsic reinforcement, and inequity. J. Pers. Soc. Psychol. 22, 113-120. https://doi.org/10.1037/h0032355.

Deng, Y., Cherian, J., Ahmad, N., Scholz, M., & Samad, S. (2022). Conceptualizing the Role of Target-Specific Environmental Transformational Leadership between Corporate Social Responsibility and Pro-Environmental Behaviors of Hospital Employees. International Journal of Environmental Research and Public Health, 19(6), 3565. https://doi.org/10.3390/ijerph19063565

Ghasabeh, M.S., Soosay, C. and Reaiche, C., 2015. The emerging role of transformational leadership. The Journal of Developing Areas, 49(6), pp.459- 467.

Graves, L.M., Sarkis, J. and Zhu, Q. (2013). "How transformational leadership and employee motivation combine to predict employee pro-environmental behaviors in China." Journal of Environmental Psychology, 35, pp.81-91.

Hameed, Z., Naeem, R. M., Hassan, M., Naeem, M., Nazim, M., & Maqbool, A. (2021). How GHRM is related to green creativity? A moderated mediation model of green transformational leadership and green perceived organizational support. International Journal of Manpower, ahead-of-print(ahead-of-print). https://doi.org/10.1108/ijm-05-2020-0244

Hameed, Z., Khan, I. U., Islam, T., Sheikh, Z., & Naeem, R. M. (2020). Do green HRM practices influence employees' environmental performance?. International Journal of Manpower, 41(7), 1061-1079.

Khalid, B., Shahzad, K. and Baig, M.U.A. (2024) 'Analyzing employees' green behavioral intention in the hospitality industry: a multilevel model', Environment, Development and Sustainability, 26(1), pp. 1-20.

Kim, A., Kim, Y., Han, K., Jackson, S.E. and Ployhart, R.E. (2017). "Multilevel influences on voluntary workplace green behavior: Individual differences, leader behavior, and coworker advocacy." Journal of Management, 43(5), pp.1335- 1358.

Kim, H.L. and Hyun, S.S. (2021) 'The anchoring effect of aviation green tax for sustainable tourism, based on the nudge theory', Journal of Sustainable Tourism, 29(7), pp. 1153-1172.

Korejan, M.M. and Shahbazi, H., 2016. An analysis of the transformational leadership theory. Journal of Fundamental and Applied Sciences, 8(3), pp.452-461.

Li, W., Bhutto, T. A., Xuhui, W., Maitlo, Q., Zafar, A. U., & Bhutto, N. A. (2020). Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. Journal of Cleaner Production, 255, 120–129. https://doi.org/10.1016/j.jclepro.2020.120229

Liu, J., & Liu, J. (2022). The greater the incentives, the better the effect? Interactive moderating effects on the relationship between green motivation and green creativity. International Journal of Contemporary Hospitality Management. https://doi.org/10.1108/ijchm-03-2022-0340

Lu, J., & Wang, J. (2020). Corporate Governance, Law, Culture, Environmental Performance and CSR Disclosure: A Global Perspective. Journal of International Financial Markets, Institutions and Money, 70(1), 101264. https://doi.org/10.1016/j.intfin.2020.101264

Luu, T.T. (2019). "Green human resource practices and organizational citizenship behavior for

the environment: The roles of collective green crafting and environmentally specific servant leadership." Journal of Sustainable Tourism, 27(8), pp.1167-1196.

Mittal, S. and Dhar, R.L. (2016) 'Effect of green transformational leadership on green creativity: a study of tourist hotels', Tourism Management, 57, pp. 118-127.

Mohammad Ashraful, A., Niu, X., & Rounok, N. (2021). Effect of green human resource management (GHRM) overall on organization's environmental performance. International Journal of Research in Business and Social Science, 10(4), 99–116.

Nadia Aslam Janjua, SHI, D., & Umar Farooq Sahibzada. (2024). Harnessing green innovation via green transformational leadership in Italian luxury hotels: Key strategic takeaways. International Journal of Hospitality Management, 120, 103739. https://doi.org/10.1016/j.ijhm.2024.103739

Norton, T.A., Parker, S.L., Zacher, H. and Ashkanasy, N.M. (2015). "Employee green behavior: A theoretical framework, multilevel review, and future research agenda." Organization & Environment, 28(1), pp.103-125.

Norton, T. A., Zacher, H., Parker, S. L., & Ashkanasy, N. (2017). Bridging the gap between green behavioral intentions and employee green behavior: The role of green psychological climate. Journal of Organizational Behavior, 38(7), 996– 1015.

Omarova, L., & Jo, S.-J. (2022). Employee Pro-Environmental Behavior: The Impact of Environmental Transformational Leadership and GHRM. Sustainability, 14(4), 2046. https://doi.org/10.3390/su14042046

Peng, H., Chen, H. and Chen, H. (2021) 'Green transformational leadership and employees' green organizational citizenship behavior in the hotel industry in China', Journal of Hospitality and Tourism Management, 46, pp. 148-157.

Pham, N. T., Hoang, H. T., & Phan, Q. P. T. (2020). Green human resource management: a comprehensive review and future research agenda. International Journal of Manpower, 41(7), 845-878.

Pham, N.T., Tučková, Z. and Jabbour, C.J.C. (2019) 'Greening the hospitality industry: how do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study', Tourism Management, 72, pp. 386-399.

Rizvi, Y. S., & Garg, R. (2020). The simultaneous effect of green ability-motivation-opportunity and transformational leadership in environment management: the mediating role of green culture. Benchmarking: An International Journal, 28(3), 830-856

Robertson, J.L. and Barling, J. (2013) 'Greening organizations through leaders' influence on employees' pro-environmental behaviors', Journal of Organizational Behavior, 34(2), pp. 176-194.

Robertson, J.L. and Carleton, E. (2018). "Uncovering how and when environmental leadership affects employees' voluntary pro-environmental behavior." Journal of Leadership & Organizational Studies, 25(2), pp.197-210.

Saeed, B.B., Afsar, B., Hafeez, S., Khan, I., Tahir, M. and Afridi, M.A. (2019). "Promoting employee's proenvironmental behavior through green human resource management practices." Corporate Social Responsibility and Environmental Management, 26(2), pp.424-438.

Saleem, F. (2021) 'Antecedents of the green behavioral intentions of hotel guests: a developing country perspective', Sustainability, 13(8), p. 4427.

Sarkis, J., Gonzalez-Torre, P. and Adenso-Diaz, B. (2010) 'Stakeholder pressure and the adoption of environmental practices: the mediating effect of training', Journal of Operations Management, 28(2), pp. 163-176.

Singh, T. and Sachdeva, C. (2023) 'Green transformational leadership and pro- environmental behaviour: unravelling the underlying mechanism in the context of hotel industry', International

Journal of Organizational Analysis, 31(1), pp. 1- 15.

Sobaih, A. E. E., Gharbi, H., Hasanein, A. M., & Elnasr, A. E. A. (2022). The Mediating Effects of Green Innovation and Corporate Social Responsibility on the Link between Transformational Leadership and Performance: An Examination Using SEM Analysis. Mathematics, 10(15), 2685. https://doi.org/10.3390/math10152685

Tuan, L.T. (2019). "Catalyzing employee OCBE in tour companies: The role of environmentally specific charismatic leadership and organizational justice for pro-environmental behaviors. Journal of Hospitality & Tourism Research, 43(5), pp.682-711.

Zhou, G., Zhang, J. and Zhang, J. (2018). Green transformational leadership and employees' green creativity: the mediating role of green intrinsic motivation', Journal of Cleaner Production, 188, pp. 396-407.

Zientara, P. and Zamojska, A. (2018). "Green organizational climates and employee pro- environmental behaviour in the hotel industry." Journal of Sustainable Tourism, 26(7), pp.1142-1159.