

ANALYZING THE EMPLOYEE PERFORMANCE THROUGH GREEN HR PRACTICES: MEDIATING ROLE OF EMPLOYEE ENGAGEMENT AND MODERATED BY SPIRITUAL LEADERSHIP

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Analyzing the Employee Performance through Green HR Practices: Mediating Role of Employee Engagement and Moderated by Spiritual Leadership

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ABSTRACT

When employees are engaged at work, It is important in helping businesses identify fresh, creative answers to their long-term problems, Because of this, scholars have focused a great deal of attention on employee performance, particularly in examining the factors that contribute to it. AMO theory serves as the basis for each of this study's objectives. With employee engagement acting as a mediator, the study first investigates the direct and indirect relationships between employee performance and Green HR practices (GHRP). The study was completed by 370 employees from Pakistan's IT industries in Rawalpindi and Islamabad. The structural modeling and measurement model (PLS-SEM) is used to statistically assess the quantitative data that was gathered via online and self-administered surveys. The findings indicate an encouraging relationship between employee performance and GHRPs. The findings also support the mediating role of staff engagement and the moderating role of spiritual leadership does not support. GHRPs are a procedure that improves performance outcomes in relation to real-world applications and outlines areas of opportunity for further study.

Key-Words: Green HR practices, Employee engagement, Employee performance, Spiritual leadership

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CHAPTER 1

INTRODUCTION

The study of green HR practices is a crucial part of methods for implementing them (AlZgool et al., 2021). Recent concepts in green HR practices focus on motivating employees, recruitment, and recognition through ideas and strategies supporting employees to accomplish the company goals (Ahmad et al., 2021). Recent concepts in green HR practices focus on motivating employees, recruitment, and recognition through ideas and strategies (Iftikar et al., 2022). To further enhance Pakistan, green behavior among employees may be promoted in banks, colleges, and other establishments. These days, every company prioritizes green HR practices, and green activities are a novel approach of motivating staff to concentrate on enhancing their performance (Saeed et al., 2019). Software development and IT-enabled services for data centers, technical service/call centers, and telecom services make up the majority of the Pakistani information technology industry. In order to counteract this trend, organizations have started a variety of initiatives to help consumers and workers in BPO's call center which is work under information technology industry also adopt greener practices. The call centers companies has also changed to better recognize the benefits of adopting green practices and their effects on larger information systems (Ojo & Raman, 2019). Recent concepts in green HR practices focus on motivating employees, recruitment, and recognition through ideas and strategies (Moraes et al., 2019).

Three components markup GHR practices: green employment, training, and performance evaluation. Green hiring is a crucial component that emphasizes the value of building relationships amongst employees. (Aboramadan et al, 2022). "Green employee recruitment" refers to the process by which companies establish a link between the performance values and concerns of their employees and their dedication to their objectives. By using green strategies like eco-friendly job descriptions, interview protocols, and resumes that highlight eco-friendly aspects in job postings and candidate interviews, green companies may gain a competitive edge. Ecological values and green consciousness should be discussed during interviews, and job candidates should raise awareness of these topics through conferences, seminars, and team-building exercises (Jerónimo et al, 2020).

The second component of green training is continuous learning, which enables staff members assist new hires, update their knowledge, and take care of the environment in order to help the company reach its green goals. It is essential for developing skills and accomplishing sustainability visions (Joshi et al, 2020). Complete information on a company's green policies, practices, initiatives, and mission statement should be included in green training programs. From side to side conferences, seminars, and team-building exercises, they should also increase awareness of green problems. In addition to learning The programs must encourage employees to engage in green practices including resource reduction, reutilizing, and reuse, as well as Environmental competencies such as energy saving and waste management (Imran et al, 2021). The green performance evaluation describes practical strategies for implementing innovative measures and empowering firms to align their operations with their environmental objectives. In GHR, sustainability is a worldwide issue that forces businesses to figure out a balance between environmental compatibility and financial viability while dealing with pressure from shareholders, its competitors, government agencies, and the population overall (Mousa et al, 2020). According to Zhang et al, (2024) significant obstacles stand in the way of ecological growth in the developing world, especially when it comes to green performance evaluation, which takes into account not only financial and statistical data but also distinctive conditions and over-all prosperity. According to the research, spiritual leadership is essential in promoting green HR practices, which have been shown to increase employee engagement and performance. Leaders that are spiritually minded and supportive can help put green initiatives into action. (Rizvi et al, 2021). The study examined hotel HR procedures during COVID-19 and discovered that these procedures had a beneficial effect on staff and the hotel environment, resulting in better service, more profits, and lower employee turnover (Dorta-Afonso et al, 2023). Globalization has intensified competition for human resources, leading to increased demand for competent and knowledgeable workforce. Companies must improve their HR management strategies to compete with local and international companies, putting pressure on them to recruit, develop, and retain quality human resources (Anwar et al, 2021).

According to Amin et al, (2020) GHR include recruiting, training, development, documentation, and assessment Given the growing interest in the issue of green HR, especially in the context of technology-based organizations, this study anticipated that green HR practices had a major impact on employee performance.(Dumont et al., 2017).

Green human resource practices, or GHRPs, are being used by organizations to improve environmental sustainability and protection. In order to determine how Green HR practices might operate as a mediator in improving job performance, the study investigates the impact they have on worker engagement (Rizvi et al, 2021). According to Chowdhury et al, (2023) organizations are increasingly recognizing the need for sustainable practices to reduce environmental impact, operational costs, and ensure long-term service viability. Green human resource practices (GHRP's) are now a thought-out strategy for improving organizational performance. Through GHRPs, top management and policymakers are promoting green unique principles to increase performance. They also promote employees' attitudes and strive to improve performance by implementing some moral values through green policies (Shahzad et al, 2024). The fast worldwide expansion of the IT industry raises environmental issues because of its high energy consumption and support for electronic devices, but it also presents chances for environmentally friendly sustainability through green practices (Hooi et al, 2022). This study examines how employee religiosity affects engagement and job performance in Indonesia, where the majority of workers are Muslims. It highlights the importance of commitment and enthusiasm in driving engagement and higher job performance. Existing literature has also highlighted the influence of religiosity on employee attitude and behavior. The research is groundbreaking in future work-religion studies and serves as a practical reference for managing employees. Understanding the relationship between religion and job performance is crucial for effective employee management (Brien et al, 2019). A research looks at how Green HR practices in Pakistan's technology encourage green motivation, acknowledging the significant influence that technology has on global greenhouse gas emissions (Wang et al, 2023) the degree to which employees are motivated, involved, and dedicated to their work is referred to as employee engagement, company, and organizational goals. It includes vigor, dedication, and absorption as indicators (Sukoco et al, 2021). SDG Goal 9 is to provide innovative solutions, encourage sustainable industrialization, and construct robust infrastructure. For innovative solutions, encourage sustainable industrialization, and construct robust infrastructure. Concern for resources and the environment spurs and propels innovation. The notion that resources shouldn't be depleted more quickly than they can be restored and that waste production shouldn't surpass the ecosystem's carrying capacity is being adopted by businesses, which highlights the necessity of circular innovation strategies in line with the values of tech firms.

1.1 The Rationale of Study

The study's objectives is to improve the organization awareness on green HRP by investigating how green HR practices affect worker performance. Green practices include empowerment, green performance evaluation. On the other hand, since "green training" provides IT workers with the necessary gears to integrate Implementing eco-design techniques, clean technology, and green management into their job, as well as offering incentives and compensation, are all essential in recruiting new hires (Pinzone et al., 2019). Providing both The development of human resources includes both formal and informal education to improve employees' abilities, skills, and attitudes. Programs objective to increase work ethic, provide incentives, and offer training, promotions, and transfers. Leadership training is crucial for future leaders (Aboramadan et al, 2022).

The study shows that practice wide-ranging green HR procedures can lead to favorable employee outcomes that are connected to green performance. In order to evaluate it as a mediator, the study examines how Green HR practices affect employee engagement. If employees are completely focused on their work, their performance improves Leadership actions that promote workers' spiritual ideals and well-being are referred to as leadership behaviors (Islam et al, 2021). The effect of green HR practices on employee engagement may be boosted by spiritual leadership, suggesting that leaders who are encouraging and spiritually minded might assist staff in embracing green practices. Since leadership may increase engagement, spiritual leadership be tested in this study a connection amongst employee engagement as moderator and green HR practices (Aboramadan, 2022). Many researchers says that while green participation offers chances for eco-friendly management practices, which boosts employees' overall performance, green hiring, training, performance management, and remuneration place extra focus on improving employees' green capabilities.(Saeed et al, 2021).

The rapid worldwide expansion causes environmental issues, Because of its excessive use of energy and dependence on electronic gadget, but it also presents chances for sustaining the environment using eco-friendly methods (Sánchez-Sellero et al, 2022). Employee behavior is unbiased by leadership through performance-related, motivating constructs including work engagement and attitudes like dedication, well-being, and job satisfaction (Ahmad et al, 2021). The acceptance of Information Technology (IT) depends on users' assessment of its practicality and usability. Employees recognize as a modern human need and ability of the company to adapt to changing business conditions. Information

technology supports tasks, and an average value of 4.0 indicates that it improves employee performance (Haerani et al, 2020). Job satisfaction significantly impacts employee performance, as dissatisfaction with work leads to absenteeism rates. This dissatisfaction negatively impacts business operations. Work discipline is crucial in organizations as it conveys an employee's credibility, ensuring they deliver the best possible work outcomes for the organization's success. High work discipline ensures employees' credibility in delivering the best possible work outcomes (Festiningtyas et al, 2020). This study investigates how organizational commitment, employee engagement, and spiritual leadership affect worker performance, pointing up a weakness in earlier studies on these elements (Rahmadalena et al, 2020). This research explores the impact of spiritual leadership, employee engagement, and organizational commitment on employee performance, pointing up a weakness in earlier studies on these elements. The Regional Agency should ensure efficient use of information technology by providing training and skills to employees, fostering a work climate that supports performance, and encouraging employee involvement (Suleman et al, 2022). There are research gaps that might be filled by future studies since organizational commitment does not enhance employee performance or reduce the link between spiritual leadership and employee engagement (Yusliza et al, 2021). This study indicates that spiritual leadership has a substantial impact on job engagement. By using a primary motivational framework that enhances the spiritual well-being of subordinates by including vision, hope, faith, and selfless love (Cao et al, 2020).

1.2 Problem Statement

Green HR methods may solve a significant issue with employee performance and benefit Pakistan's IT industry. HR skills increase employee engagement and save operational expenses (Yong et al., 2019). Employee performance is a challenge for firms, and employee performance is an issue in the BPO's call center which is regulatory body of information technology industry. In Pakistan's fast growing technology changes, environmentally friendly practices improve performance and increase productivity for businesses. Another significant issue is the adoption of "green practices," which refers to how staff members engage in the sustainability process and encourage others to embrace eco-friendly initiatives like pollution control. No guidance or training was given by staff members. Still, there isn't enough involvement. Another major concern in this case is that the implementation of green HR practices may result in a change in employee engagement.

Green engagement is the term used to describe how employees participate in the sustainability process which motivates people to support environmentally friendly endeavors like pollution prevention and waste management. Serious problems are presently plaguing Pakistani manufacturing, which is affecting staff performance (Ojo et al., 2022). Observing the elements that influence a worker's performance is the first step. HR strategies boost staff involvement, and thus strengthens the bond with a spiritual leader, which in turn improves worker performance (Dumont et al., 2017).

Green HR procedures Employee engagement is a significant problem in this study, and GHRP's has an effect on it. Employee performance is the issue facing the IT sector as it is linked to employee engagement (Chandani, 2016). Implementing environmentally friendly methods may raise sustainability objectives, enhance performance, and boost productivity for firms in Pakistan's rapidly expanding IT sector (Agostino et al, 2021).

1.3 Research Objectives

Following are the study's goals, which are based on the above-discussed issue:

1. To determine how employee performance and green HR practices are related?
2. To find out the mediating role of employee engagement amongst Green HR Practices and employee's performance?
3. To determine how spiritual leadership influences employee engagement and green HR practices?

1.4 Research Questions

The study's reach questions are as follows:

1. How do Green HR practices affect how well employees perform?
2. Is employee performance impacted by green HR policies and does engagement function as a mediator?
3. Can the impact of Green HR policies on employee engagement be explained by spiritual leadership?

1.5 Conceptual Model

The goal of the study is to look at the model in order to determine whether or not the performance of employees is impacted by green practices in a particular setting. Since green HR practices would improve employee performance, this observation should be further developed and evaluated. Additionally, spiritual leadership support the association

among employee engagement and green human resource management and play a moderating role. Green HR practices should also increase employee engagement, which in return improve employee performance. Prior study has been done on the banking industry and manufacturing industry in Pakistan (Li et al, 2023). There is need to study at how green training and green rewards and compensation affect employee performance (Moradeke et al, 2021). The moderating role of spiritual leadership on the association between green training and development or Green reward and compensation and employee engagement was one of the researchers' recommendations for future approaches for the investigation (Aboramadan et al, 2022).

This study's main goal is to evaluate how green HR practices affect worker performance. HR procedures like mediating and moderating responsibilities in this connection not only enhance worker performance but also general commitment and satisfaction. Green HR practices are anticipated to increase employee engagement, which in turn results in improved performance. This is the effect of GHR practices on employee performance in a particular situation. Moreover, spiritual leadership should mediate the connection from employee engagement to green HR practices. The study's objective is to assess how green HR practices effect on worker engagement and performance in a particular role. With an emphasis on training and development for employees to meet corporate goals, the study assesses how green HR practices affect worker performance and engagement.

1.6 Theoretical Underpinning

The AMO should be utilized in order to describe the theoretical model (Ability-Motivation-Opportunities) theory which was developed by (Appelbaum et al., 2000) stated that employee effectiveness is based on three essential elements: individual skills, incentive, and involvement possibilities. Workers require a few specialized skills to execute certain tasks, rewards from managers and supervisors to finish particular tasks, and chances to broaden their skill sets and participate in different application and selection procedures to enhance performance. The AMO concept states that, HR procedures have a important impact on workers' attitudes, engagement levels, and overall performance. The AMO form describes human performance and addresses issues (Rayner & Morgan, 2018). Motivation is a kind of incentive and recognition that may increase employee engagement and performance, whereas ability mentions to a person's knowledge, skills, and competencies that play a significant role in performance. Opportunity refers to the organizational and

environmental elements that affected the performance. Organizations with green capabilities should enhance green performance by encouraging workers' creativity and innovation. Additionally, green training may help employees become more green business person, which can lead to better green actions and creative ideas.

1.7 Significance of Study

Our primary goal is to clarify how green HR practices assist workers in enhancing their performance in the field of information technology. This study determination show how employee performance is affected by green HR practices. Many literary contributions are made by this study. In relation to creating GHRPs based on employee performance. The study demonstrates how employee performance is impacted by green HR strategies. The importance of employee's actions has been recognized by scholars due to the development of several studies the pro-environmental actions of workers have been examined in relation to the employee performance of the firms. Many topics are still poorly known and unexplored despite earlier research. Regarding this, Dumont et al. (2017) proposed that one intriguing subject to be covered is how green HRM might improve employee's performance. In order to improve the country's performance, businesses, service sectors, and the hotel industry must take into account employees' pro-environmental actions in connection with their green HR practice. This study found that workers' green behavior at work is correlated with green HR strategies in businesses. Promoting environmentally friendly behavior at work is greatly aided by green HR practices (Islam et al., 2021). Through the recruitment, selection, training, and reward processes, human resource practices (HRPs) can enhance organizational performance. In order to further improve employee performance, this study looks at how green HR practices impact engagement (Ojo & Raman, 2019).

GHRPs improve motivation, engagement, and satisfaction, all of which have an impact on worker performance. Organization should implement. Researchers have shown that when employees feel their business should encourage them, they determination be more motivated and committed to their job. Green training and development, green incentive, and green remuneration are examples of methods that can help improve performance outcomes. When the productivity level should high its automatically leads towards the employee performance high {Khurshid et al., 2016). GHRPs improve motivation, engagement, and satisfaction, all of which have an impact on worker performance. Organizations should use strategies that can enhance performance outcomes,

such as green training and development or green incentive and compensation. Building on earlier studies on Green Training, Development, and Compensation, the study seeks to determine how Green HRM practices affect Pakistan's IT industry (Moradeke et al, 2021). By using traditional recruiting practices, Green Recruitment and Selection (GRS) affects economic development and recession by selecting candidates who care about the environment (Islam et al, 2021). A green culture that connects human resources practices with environmentally conscious responsibilities has emerged as a result of growing awareness of green sustainability, and it is increasingly impacting modern company tactics (Roscoe et al, 2019). The study identifies a research vacuum in the IT industry and emphasizes the significance of spiritual leadership in raising employee engagement. From self-management to external control, spiritual leaders are crucial in today's quickly evolving workplace. They inspire both themselves and their leaders by being conscious of morals, ethics, and attitudes (Riana et al, 2022). The body of research on leadership and job engagement is still growing; studies look at how certain leadership ideas increase employee engagement, which is essential to individual as well as team achievement in organizations (Bayighomog et al, 2022). Researchers have looked into a number of constructive leadership philosophies, such as charismatic leadership (Babcock-Roberson et al, 2010), ethical leadership authentic leadership (Chughtaie et al, 2015). Both transformational and inclusive leadership have been essential in increasing employee engagement.

HR specialists may save time and space by substituting digital files for recruitment resources, reorganizing administrative activities, providing data-based information, and improving facilities. Because of their capacity to quickly adjust to changes in technology and the cutthroat global market, human resources are essential to the survival and growth of ecological businesses (PUTRA et al, 2020). This study examines how green HR policies affect organizational and worker performance, with a particular emphasis on worker green attitudes, satisfaction, behaviors, and output. It seeks to offer evidence-based insights for successful Green HR practices, promote an environmentally conscious and conscientious corporate culture, and assist executives in implementing tactics (Majid et al, 2023).

The effect of Green Human Resource on employee performance has increasingly been studied in present times above a basic principle of business literature, as green HR assists as a vital tool, primarily for companies seeking steadily growing economies, sustainable operations, and social responsibility (Yin and Q, 2023). This study develops the AMO theory, a subject of considerable research in industrialized nations, by determining the

mediating role of work engagement on Green HRPs (Yuan et al, 2024). In order to serve as a reference model for spiritual leadership development, this research intends to improve spiritual leadership models, employee engagement, and staff performance in the working out company (Kessi et al, 2022). This study assesses how Green HR affects worker performance in the banking sector in poor nations using AMO. Marketing, operations management, accounting, and management are all impacted by the going green agenda, but HRM is especially affected since it is regarded as an essential organizational resource (Shoaib et al, 2021).

GHRP's is an important human resources study issue that many academics are interested in GHRP's line up environmental-focused idea concentrating on Green Human Resource Management (GHRM) to advance sustainability in companies in line with the company's business strategy and objectives (Kurniawati et al, 2023). The use of green human resource management (GHRM) in the IT industry has not received much attention according to the literature review. Sustainability indicators are positively impacted by GHR features including performance management, training, compensation, and recruiting; however, their effective implementation is highly dependent on employee performance (Yousf et al, 2024). By hiring, educating, evaluating, and rewarding employees, GHR practices help them develop green skills, which improves HR competency, behavior, attitude, and proficiency (Darvishmotevali et al, 2022).

CHAPTER 2

LITERATURE REVIEW

2.1 Green HR practices

The book by Wehrmeyer, "Greening People: Human Resources and Environmental Management," was the first to Human resource management and environmental management should be combined, and it created the idea of "green human resource management." Green HR practices deliberately develop operational plans to support the organization's overall performance (Dumont et al., 2017). And to indirectly encourage sustainable use of organizational assets towards achievement of an essential organizational goal. HR strategies used are green uses of HR. It involves incorporating subjects for enhancing corporate ecological planning through the incorporation of concerns into HR procedures, policies, and methods (Shafaei et al., 2020). In order to improve employee knowledge of the value of resource management, the GTD (Green Training and Development) conception was created. GTD, which is regarded as an essential element of human resource management, includes green training, such as training that takes place off the job (OFT) and on the job (OJT), as well as staff development. Such efforts aim to encourage positive environmentally friendly it focuses on workplace practices and promotes employees' awareness, attitudes, knowledge and social responsibility values of the workplace. This process is complete with training and development of employees (Rajabpour et al., 2022). Green training has been linked to advantages in the past since it helps employees identify and address issues (Renwick et al., 2016). On the one hand, it is an active policy that informs managers and employees about the potential environmental impact of various workplace regulations, practices, and activities. Additionally, it increases their capacity to accomplish goals and holds them accountable for achieving them (Pinzone et al., 2019).

According to (Chandani et al., 2016) While workers are extra committed and involved at work, They experience a sense of value and appreciation when they receive incentives. Individual and collective achievement have been acknowledged and appreciated through rewards and compensation. Organizations develop a culture of appreciation by admiring and rewarding top performers, and inspiring others Motivation Rewards, such as cash bonuses, commendation, or non-cash incentives, can inspire employees to go overhead and

beyond the call of duty, Employee motivation is increased when rewards are tied to specific performance objectives. The importance of human resources in delivering long-term business feedback is acknowledged by green compensation (Jabbour & Kantarjian, 2016). With its policies, practices, and strategies that promote green behavior among employees and create an eco-friendly, resource-efficient, and socially concerned workplace by developing awareness of environmental issues, GHR is essential for company goals and strategic vision (Kabil et al, 2024).

Green recruitment and selection, to put it another way, is a method of analysis and recruitment. In an effort to align company values and objectives with potential employees' values and skills, GHRP (green human resource management) is a crucial component. Additionally, Green Recruitment and Selection is aware that workers are crucial conduits for advancing company objectives (Tang et al., 2018). Subramanian et al., (2016) stated that the term of "green recruiting and selection" highlights how important it is to find an organization's moral values with the core principles and abilities of potential employees. Employers may select and hire candidates who demonstrate their commitment to hard work. The underlying concept of GPMA (Green Performance Management & Appraisal) is the concept that businesses have a mission to manage the negative consequences while achieving their business objectives. Through the implementation of green objectives and practices into performance management systems, organizations can effectively evaluate their progress, highlight areas for enhancement, and align their objectives with sustainable development concepts as well (Saeed et al., 2019). The Green HR Approach is a crucial strategy for organizations to improve environmental performance and sustainable development. It involves modifying HR culture, structure, strategies, and policies to protect the environment. It is being rapidly adopted by organizations to minimize environmental impacts and maintain the ecological environment (Herawati et al, 2020).

The term "Green Performance Management & Appraisal" (GPMA) describes the process of evaluating the performance and sustainability objectives of an organization. It includes evaluating and tracking the company's efforts to implement ethical norms, It also assist to encourage long-term growth and lessen its carbon imprint. Incorporating environmental challenges and green policies into social performance management and assessment systems is the foundation of these initiatives (Pallavi & Bhanu, 2016). Researchers have shown that the need for green HR practices has been increasing in developing nations, both at the corporate and individual levels. Promoting green behavior,

encouraging employee performance, and supporting organizations in achieving their performance goals are all made possible by green HR strategies (Yong et al, 2020). The green human resources concept is broadly of the manufacturing sector of Malaysia and the industries of Nashik, India, encouraging green HR practices (Ghouri et al, 2020). Green performance assessment, based on green standards, enhances employee adoption by increasing perceived value and promoting adherence to green practices, thus demonstrating the merit of green performance evaluations (Samina et al, 2019). HRP's is a systematic approach to human resource deployment and activities to achieve organizational goals. It involves activities that influence employee behavior to meet strategic business needs. Performance is linked to return, with higher returns enhancing effectiveness. Job performance refers to employees fulfilling their commitments within the organization, ensuring good performance aligns with the organization's goals (Saleh et al, 2020).

Additionally, for the most sustainable performance, companies can employ digital platforms and social media for recruiting, selection, and the implementation of green HR practices at various levels. Green HR promotes positive employee performance through green engagement and training, which supports sustainability, according to connections and literature reviews (Mousa et al, 2020). Green Human Resource Management (GHRM) is a socially responsible and sustainable HR system that integrates green practices into functions like hiring, development, performance management, and compensation management, aiming to enhance organizational sustainability and implement strategic objectives through a triple bottom line focus (Yong et al, 2020). By adopting eco-friendly methods for hiring, training, and performance reviews, enacting green recruiting rules, and implementing HR practices with sustainable goals, green HR aims to boost green performance (Tanveer et al, 2024). This study explores the benefits of adopting green HRM practices in organizations. It highlights the reduction of service costs, the creation of a health-conscious culture, and the environmental benefits of recycling waste. It also emphasizes the importance of a sustainable environment for both the organization and society, ensuring its sustainability. Future research on green HR practices' impact on environmental performance is needed, as knowledge on their effects is limited. Studies suggest they promote green behavior in the workplace (Ali et al, 2022). Green recruitment involves selecting employees with knowledge, skills, and methodologies compatible with an organization's environmental management systems. This strategy emphasizes the importance of the environment and attracts enthusiastic, environmentally-friendly

employees. This approach allows businesses to quickly recruit professionals familiar with sustainable processes and a rational working environment (Iftikar et al, 2022). Green training and development enhance employees' awareness of ecological management, conservation measures, and ability to address environmental challenges, such as waste management within a company (Ojo et al, 2019). Green HR suggests employee incentives and rewards can boost environmental initiatives in organizations, as demonstrated study, resulting in increased involvement in environmental management programs (Islam et al, 2021). This research focuses on fostering inclusive workplaces by promoting employee engagement, aiming to increase creativity, innovation, and employee satisfaction, contributing to organizational success in the creative industry (Imam et al, 2022).

2.2 Employee's Engagement

The employees that are physically, emotionally, and intellectually committed to their job are said to be engaged. Employee engagement is a motivational condition that has been linked to positive and desirable organizational results (Karatepe et al, 2022). It is also described as the amount of effort a worker devotes to his green job-related duties, his commitment to perform efforts at a green level, and his overall involvement in green work. These include being authentic in one's work, engaging with oneself, and putting forth one's energy, passion, and drive in one's job (Rodwell et al., 2017).

Engaging team members directly can help promote green best practices. Devoted workers are more likely to learn sustainable practices and support green initiatives when they are connected to the company's green goals. Essentially, their enthusiasm for and dedication to green techniques might influence and motivate others inside the organization (Luu, 2019). Employee engagement enhances organizational achievements, safety, reliability, and efficiency, which calls for a review of best practices and new initiatives to promote sustainability (Festiningtyas et al, 2020). Engaging employees in attaining operational objectives and improving psychological and emotional well-being has become more important than only operational efficiency and safety concerns. EE acts as a mediator, motivating success. Effective organizational culture positively influences EP, EE, and EP, and EE has a positive influence on both (Shantz et al, 2013). Employee engagement is the term used to describe a worker's dedication and participation in the company and its values, fostering confidence and commitment. This leads to increased development opportunities, increased productivity, and ultimately, success in organizational performance (Margaretha et al, 2021). In order to encourage managers to take on a more active role in environmental

management, green performance indicators are essential components of performance management systems. However, negative measures of employees' green performance outcomes may encourage more engagement in environmental actions, impacting compensation and rewards processes (Alayan et al, 2022). Employee involvement in an organization fosters creativity, idea presentation, and decision-making, while also expanding knowledge and promoting effective decision-making within the organization. Employee participation is crucial for organizations to achieve commitment to values and performance, and to achieve strategic goals, as it prevents negative use or differentiation (Iftikar et al, 2022).

For a business to be productive, employee engagement and performance are crucial. More empowered workers are more attached to their work, showed positive commitment, and are more unlikely to leave their jobs, which may enhance team performance and engagement in uninteresting activities. Employees' opinions of the purpose, competence, and self-sufficiency of their work have an advantageous impact on where they work (Kruja et al, 2016 and Sharma et al, 2018). Employee engagement is a passion for work, involving positive feelings and preparation to perform at the best of one's ability. Workers that have a positive attitude toward the company are said to be in this psychological state and perform at a level exceeding job standards, fostering trust, clear duties, and sensitivity to responsibility (Wen et al, 2023). Work engagement, introduced by Kahn (1990), refers to an employee's mastery of their job position, involving physical, cognitive, and emotional expression during performance. It encompasses physical energy, faith in the organization, its leaders, and the working environment and emotional feelings towards the company. High work engagement is crucial in business management for employees' involvement and enthusiasm for long-term company goals (Heslin et al, 2020).

This thesis focuses on employee engagement (EE) and how it affects corporate outcomes. High levels of engagement contribute to positive behaviors, work performance, and commitment, which in turn lead to career path, organizational performance, motivation, creativity, morale, and responsibility. According to a definition, employee engagement is the dedication, inspiration, and contribution that workers provide to the company to their work and the organization. It focuses on perceived value, respect, and individual points of view. It enhances organizational performance and reduces turnover (Jeremiah et al, 2023). Employee engagement is mostly influenced by commitment, which drives employees to perform their best, preventing feelings of disinterest, decreased output, high turnover rates,

and undesirable company achievement (Atiku et al, 2024). Work engagement positively impacts employees' passion, commitment, and engagement, which results in a feeling of loyalty to the business. Engaged workers are dedicated, feel emotionally, intellectually, and physically bonded, and favorably impact the company to their work. Green HR adoption is crucial for successful implementation, as employee Engagement is a favorable mental state that is defined by dedication and focus (Lim et al, 2022). The research indicates that motivational variables significantly impact employee performance, as they act as incentives to perform actions. Job satisfaction is influenced by how individuals feel about their work. The work motivated by salary was the highest Employee performance directly impacts an organization's success, influenced by various HR practices. HRP's measures individual performance and motivates workers, creating competition for better results. Other factors also contribute to organizational success (Saleh et al, 2020). Effective Employee performance (EP) is crucial for talented workers as it generates reciprocity and increases their interest in their jobs. This positive interaction fosters improved performance and optimistic attitudes, making it a valuable investment for organizations. Thus, effective EP is a bet on talent (Imran et al, 2020).

According to the research findings, EE significantly affects employee satisfaction in the banking and IT sectors. Studies conducted in Thailand and Hong Kong have also found a positive correlation between EE and employee satisfaction when EE employees put effort into their green job-related responsibilities and are involved in putting forth their best effort (Saleem et al, 2020). HR practices and employee engagement are positively correlated, according to the results, with employee involvement, performance reviews, and awards all contributing to higher levels of engagement (Jose et al, 2024). Ugarte et al, (2021) According to this theory, HR procedures increase employee engagement by speeding up their perception of advantages; when these expectations are not met, engagement levels decrease. This study explores how employee involvement and communication might promote inclusiveness in the workplace, particularly in the creative industry. It examines strategies used by organizations to create an inclusive work place (North et al, 2023). Workplace aspects like employer branding and talent retention are mediated by employee engagement because people are more committed to their company and work when they share its standards, values, and norms (Samo et al, 2020). Yousf et al. (2024) suggests that employee engagement mediates the connection between the work environment and dedication to the employer, highlighting the importance of engagement

in fostering work-related factors. Studies show that personal resources, or psychological capital, such as Resilience, hope, optimism, and self-efficacy can all be important factors in determining employee engagement, providing a competitive advantage for organizations (Johansen et al, 2019).

Employee engagement, which motivates workers to give their all in contrast to uninterested sentiments, a decline in productivity, a high turnover rate, and a negative impact on business performance, is greatly influenced by commitment (AlZgool et al, 2021). Employees that are committed are emotionally secure, proud of their roles in the success of the company, highly engaged, driven, and frequently look for new challenges. Additionally, they represent the business and defend it when it is challenged (Atiku et al, 2024). Motivation is essential for employee to engage as it provides a reasoning of determination and consequence, giving workers the impression that they make a significant contribution to the objectives of the company (Ojo et al, 2022). In order to encourage workers to accomplish the organization's objectives, it is crucial to communicate the organization's vision and goals to them in an easy to understand way (Ewim et al, 2023).

Over the past several years, employee engagement has undoubtedly changed, emerging from the shadows of HR departments to the forefront of senior management conversations. Since employee engagement is founded on three factors—vigor, devotion, and absorption—an business cannot operate without it (Tensay et al, 2020). Employee engagement, which includes emotional, cognitive, and behavioral participation, is the drive, involvement, and dedication of an employee to their work and organization. Active workers are more productive, creative, loyal, and retainable because they feel invested in the company's success and linked to its vision, values, and objectives (Febrian et al, 2024). Employee engagement is measured by a number of measures, including work satisfaction, employee development program participation, absenteeism, and turnover rate. The proper, well-equipped design fosters engaged workers, who are a huge benefit to the company since they contribute to its reputation and value by bringing their forward-thinking attitude to work and fully supporting its objectives. High levels of involvement indicate that workers are interested in learning, low levels of engagement indicate that workers lack motivation, and high levels of contentment indicate that workers are content with their jobs when considering factors like work culture and career chances (Dewi et al, 2021). Employee involvement, habits, and results related to green work are improved by green human resource management (GHRM), which raises corporate performance through the ability-

motivation-opportunity framework, with senior management support playing a crucial role (Aboramadan et al, 2022). Engaged employees align balancing their own objectives with the mission of the company, boosting output and fostering a positive attitude. They are emotionally connected to the organization's objectives and work with a progressive attitude, building the organization's reputation and value. Mentoring not only enhances employee performance but also increases cultural awareness, aesthetic appreciation, and the potential for meaningful life. It boosts morale, motivates employees to achieve organizational goals, and allows organizations to understand their personal and work needs. Research suggests examining differences in mentorship and relationships (Festiningtyas et al, 2020). Employee engagement is a positive strategy to prevent burnout and disengagement by fostering positive emotions and promoting ethical behavior in the workplace. Organizations create environments for high engagement (Imran et al, 2020). Mentoring boosts employee performance, cultural awareness, morale, and understanding of personal and work needs, while also enhancing morale and achieving organizational goals (Pinzone et al, 2019). Based on their degrees of involvement, employees are three groups—engaged, not engaged, and aggressively disengaged. While disengaged workers are emotionally invested but lack passion, engaged workers are enthusiastic about their task and contribute to the organization succeed (Gallup et al, 2020).

2.3 Spiritual Leadership

Three pillars form the foundation of Fry's spiritual leadership model: organizational results, followers' spiritual survival requirements, attitudes, and actions of the leader. Three spiritual leadership traits— Altruistic love, faith, and vision—they encourage business dedication and output, and employee spiritual survival (Chen et al, 2013). Harmony, trust, and humility are fostered by altruistic love, which also creates a spiritual atmosphere that supports company vision and personnel development (Stam et al, 2014). By encouraging an effortless connection of their spiritual identity with their job responsibilities, spiritual leadership helps employees explore an additional connection among their work and life (Fairholm et al, 2015). A leader's ideals, attitudes, and behaviors may inspire both people and communities. This is the essence of spiritual leadership. These include vision, hope/faith, and selfless love; these are the spiritual aspects of a leader. Spiritually oriented leadership may assist create a spiritual workplace and encourage employees to follow their example and take activities that improve employee performance (Afsar et al., 2016).

Additionally, spiritual leadership offers a special tactic for preserving business resources and lowering subordinates' undesirable performance (Wang et al., 2019). Place of work spirituality is a set of structural ideals that takes into account how employees' transcendence, connection, completion, and satisfaction are encouraged through their work process (Bayighomog et al, 2019). Whatever spiritual leaders may do to inspire their supporters to act in a more environmentally responsible manner, friends, there is no question that these things need to be occurring far more quickly than they are. Environmentally conscious leaders may encourage their employees to follow their lead together Both inside and outside the company (Saleem et al., 2020). The idea of Ethics and morality are highly valued in spiritual leadership, encouraging actions and ideals that support ethical behavior. Research on spiritual leadership demonstrates that encouraging spiritual health at work enhances the performance of both individuals and organizations (Karadag et al, 2020).

The fundamental principles, leadership attributes, and behaviors that constitute a successful spiritual leader have been recognized by organizational leadership. Without having any official authority, spiritual leaders should be transparent, courageous, and successful in order to influence people who follow their footsteps (Iftikar et al, 2022). The relationship amongst spiritual leadership and employee engagement is investigated, particularly how it might improve employee engagement that extends beyond workers' conventional job functions and connects the business (Bayighomog et al, 2022). Spiritual leadership inspires individuals and promotes learning, which is a common example in organizational transformation and growth. Getting workers to collaborate toward shared objectives is what it implies. Businesses need to emphasize spiritual leadership in order to promote motivation, dedication, and worker well-being without requiring major compromises (Anser et al, 2021).

Research indicates that it is closely related to. When spiritual leadership and green HR practices are implemented, employees' behaviors can be inspired in a spiritual setting, especially when such spiritual attributes are present. Encouraging supporters to visit spiritual leaders might inspire them to support eco-friendly practices and initiatives inside the company (Ahmad et al, 2021). Religion and spirituality can positively impact job satisfaction, job involvement, and employee mental health. Studies show that employees' religious values align with their job meaning, reducing work-stress, and maintaining positive attitudes towards work. This can lead to improved job involvement and well-being

(AlZgool et al, 2021). The study demonstrated a high association between organizational commitment and spiritual leadership assessments, mostly when there are emotional and ethical commitments involved (Hasibuan et al, 2022). This article assesses earlier studies on spiritual leadership, offering a thorough comprehension of their conclusions while pointing out areas in need of development and new concepts for further study (Piwowar-Sulej et al, 2023).

Organizational and personal results are positively impacted by fostering employees' spiritual well-being, according to research on spiritual leadership. According to studies, it has a directly affecting employee performance, and spiritual leadership involves promoting internal spiritual well-being via conduct, beliefs, and attitudes (Qudus et al, 2022). Spirituality is a personal relationship with a transcendent entity beyond physical, psychological, and social dimensions, often referred to as "Divine being," "Ultimate reality," or "God." It differs from religiosity, which is based on internal experiences, and does not have specific rituals or validation (Ahmad et al., 2021). Supriyanto et al (2020) By attending to both leaders' and followers' fundamental requirements, spiritual leadership theory enhances organization, devotion, and productivity. It places a strong emphasis on internal drive, vision, hope, and unselfish love. Research suggests that religiosity significantly influences employees. However, studies show that intrinsic religious-orientation leads to less job satisfaction, while extrinsic religious-orientation leads to higher stress levels. Work performance may be greatly impacted by motivation, but there is little search on how employee performance is affected by religion. When SL theory, which has a foundation in Western culture, is examined inside a Confucian framework, it becomes clear that leaders' degrees of spirituality have a big impact on the objectives of their organizations (Vu et al, 2023).

2.4 Employee's Performance

Performance focuses on an employee's actions or behavior rather than the products or contributions he produces as a result of his labor (Aguinis, 2019). An employee's actions at work are a reflection of their job performance or real performance, which is a measure of their actual accomplishments or work performance. Performance is the degree of superiority acquired by a worker in doing his duties in compliance with the obligations entrusted to him (Shen et al., 2018). Policies are part of the interactions and rewards of employees systems are important in the human resources domain; these rules specify how companies handle their workers and the ways in which they are paid and encouraged to

perform (Nguyen et al., 2021). Employee associations policies are concerned with Building a positive and productive workplace with excellent management-staff communication and problem-solving skills is part of this (Pallavi & Bhanu, 2016).

Jermstittiparsert et al, (2019) Studies have indicated a robust association between monetary and non-monetary gains, worker productivity and business profitability because job satisfaction among workers with the work environment enhances work quality and performance. The focus of earlier research investigations was before (Luu et al, 2018 and Tisu et al, 2020). The results show that employee performance and HRP's are positively correlated. Performance is the measure of an individual's ability to do a job in accordance with a specified standard, objective, or criterion El-Kassar et al, (2019) highlighted how important green HR practices are for improving employee performance, job skills, and knowledge. There is also a favorable correlation between green workforces and employee performance. Employee performance involves executing responsibilities, meeting deadlines, and demonstrating competency. The elements comprise three aspects: contextual performance, adaptive performance, and task performance. The main objective of task performance is basic job responsibilities, while adaptive performance measures an employee's ability to adapt to changes in their role (Margaretha et al, 2021). The efficacy and efficiency with which a person carries out their designated duties is known as employee performance, encompassing their effort and effort, and is crucial for a work unit to achieve its goals, objectives, vision, and mission (Pacheco et al, 2023).

Employees evaluate performance, which is the result of their job and is based on factors like expertise, experience, seriousness, and time, to ascertain how much they have contributed to the company through services and output results (Suprayitno, 2022). Performance in enhancing accountability and decision-making is determined by work and behavior. A systematic approach to evaluating an employee's performance in relation to work that supports Performance is influenced by strategic objectives, consumer satisfaction, and the economics is called performance evaluation (Schleu et al, 2021). Performance evaluation evaluates previous performance, collects information about the company's and each employee's capabilities, sets goals for the future, evaluates work done objectively, looks for remuneration, and establishes wage criteria (Ghouri et al, 2020). The commitment and interest staff members have in the company and its values is referred to as employee engagement. It has a strong effect on performance and has a favorable

correlation with it. At every level, increased involvement produces a variety of performance effects (Iftikar et al, 2022).

Employee performance is improved when the workplace encourages a favorable culture at work. Employees feel more at ease and can work more efficiently in a comfortable environment (Suprayitno et al, 2022). Employee performance goals based on organizational principles were fulfilled with predictable performance plans. Activities are measurable at the organizational and personnel levels, and performance reviews are conducted annually and biannually (Katili et al, 2021). The success of a business is greatly impacted by employee performance, and accomplishing organizational goals requires effective human resource management, which includes attendance (Fazrin et al, 2021). Performance bonuses from HR management are crucial for encouraging employees to be devoted and compelled to serve. Businesses that can strategically influence investment and permits can benefit their workforce (Ali et al, 2023). Performance is crucial for individuals and organizations, encompassing effectiveness and efficiency. It involves continuous assessment of work by supervisors and employees based on key performance metrics such as quantity, timeliness, quality, and affordability. Employee performance involves completing tasks according to established standards while making effective use of resources in a dynamic setting (Hwang et al, 2022). Green HR practices promote environmentally friendly behavior, with scholars highlighting the positive relationship between green practices like employment, recruitment, education, and rewards, enabling organizations to achieve sustainability and competitive advantages. However, resources remain limited (Acquah et al, 2021). Managers must prioritize employee performance to build organizational foundation and meet quality expectations, evaluating it critically to ensure employee success within policy and time constraints (Venkatesh et al, 2022).

Employee performance refers to how well workers complete and carry out their duties, and their contribution to raising incentives and improving public efficiency is essential in resolving social and economic problems (Aina-Obe et al, 2022). Elbaz et al (2020), this suggests that if you have regulations in place, train staff, or encourage eco-friendly conduct, you may improve employee performance and create a sustainable culture. According to research, workers who comprehend and support their company's sustainability objectives are more driven, which boosts output, attendance, and job quality (Hossain et al, 2021).

When workers perform effectively, the organization's chances of success are significantly increased because group performance improves, overall outcomes become more evident, and each person's involvement in achieving goals is quantified (Sari et al, 2020; Widodo et al, 2022). Employee performance is reflects an employee's effectiveness and efficiency in following corporate regulations and procedures and accomplishing organizational goals. It differs throughout organizations according on their traits and nature (Yusliza et al, 2021). According to research on employee performance assessment, a number of factors, such as meeting organizational objectives, the caliber of the job produced, and the deadline, are all related to employee performance (Riyanto et al, 2021; Widodo et al, 2022; Yan et al, 2020). Since employee performance reflects the behavior of its members and ensures the attainment of the desired objectives, it is essential to an organization's aims. Performance assessment is the procedure for assessing a worker's output in relation to predetermined criteria and then informing them of the results (Salehan et al, 2022).

2.5 Research/ Literature Gap

Prior study has be done on the banking industry and manufacturing industry in Pakistan (Li et al, 2023). There is need to study at how green training and green rewards and compensation affect employee performance (Moradeke et al, 2021). The moderating role of spiritual leadership on the association between green training and development or Green reward and compensation and employee engagement was one of the researchers' recommendations for future approaches for the investigation (Chowdhury et al. 2023). Furthermore, it was proposed that future research on the relationship between green HR practices and the context of green engagement and the perceived organizational support for sustainability be conducted through green employees (Dumont et al., 2017). Based on the research on employee performance (Shen et al., 2018). It is recommended that the green framework incorporate the moderating role of leadership style by (Altinay et al., 2019).

2.6 Theory Underpinning and Hypotheses Development

Appelbaum et al, (2000) According to Ability-Motivation-Opportunity (AMO) Theory, Enhancing individual abilities to enhance organizational performance outcomes, such as improved performance through green activities, is the goal of GHRPs. The ability can be linked to a leader's capacity to promote a spiritual atmosphere, according to theory (AMO). Spiritual leadership may inspire others because it provides a sense of meaning, satisfaction, and purpose that exceeds financial success. By using self-analysis or awareness as a

moderator, spiritual leaders may assist their staff in developing a relationship with their inner selves and enhancing their spiritual health. Based on AMO theory, each elements can contribute to enhancing green performance, for example training and development of employees lead to their self-efficacy to use their specific skills i.e., green ability. These abilities can be used in creative and innovative ways to improve employee engagement. These green skills may also result from the organization's green training. Improved employee abilities can also lead to an increase participation in the development of more creative solutions to green issues. Employee motivation also leads to an improvement in employees, or the development of practices that enhance employee performance. Employee participation in greening initiatives for firms is further encouraged via green performance management, employee rewards, and compensation. Opportunities include internal organizational structures and facilities that encourage or lead to employee's performance. The findings of a study indicated that the organizations' staff received eco-friendly training. As a result, they were more motivated and inspired to participate in environmental projects. However, the results also indicated that the organization did not have enough possibilities to address environmental issues. The management team's collaboration may address this lack of employee involvement by empowering staff members and giving them opportunity to address environmental problems (Iftikar et al, 2022).

According to the AMO hypothesis, both opportunity and motivation must work in tandem with ability rather than separately having an additive impact. In order to enhance our initial knowledge of skill, motivation, and empowerment-enhancing actions, we further searched the AMO, which is frequently referred to differently in literature. Originally applied to individual-level results, the AMO concept is now employed in HRM systems to explain aggregate-level outcomes, such as organizational performance. It helps discover high-performing labor processes and output, enhancing employees' AMO and performance an improvement in workers' performance (Lepak et al, 2006).

Assessing how successfully executives apply green HR strategies is the goal of this study such as employee satisfaction and performance, rather than HR practices per se. It is recommended that the AMO theory be used to recruit and retain green workers, encourage them to perform and engage, and reward green behavior and employee opportunities (Singh et al, 2020). Employee engagement is driven by empowered workers, and this is the first study to examine if employee engagement mediates an underlying link. Current workplace HR procedures heavily depend on ability, motivation, and opportunity; performance was

directly impacted by ability, but this influence was either amplified or lessened by motivation and opportunity. The study's conclusions lend credence to the AMO theory as employee engagement is significantly impacted by spiritual leadership (Iftikar et al, 2022).

The foundation of the AMO theory should be a formula that shows how ability influences performance in a positive and independent way, while motivation and opportunity may influence performance either favorably or unfavorably. This sums up why researchers thought that training, selection, ability, and motivation all affected success in this instance. With countless examples of managers and leaders in this field the term "ability" describes the skills required for the effective application of green HR practices in the workplace (Hailey et al, 2005 and Maxwell et al, 2006). The ability, motivation, and opportunity (AMO) hypothesis is improved by green HR practices. This may be accomplished by using green hiring and training practices, adopting remuneration Frameworks that recognize environmentally friendly conduct and provide chances for Employees must participate in environmental initiatives. Green HR is associated with employee engagement, comprising optimism, tenacity, commitment, and goal-orientees (Ababneh et al, 2019). Ability, comprising innate and acquired skills, significantly influences employee behavior and task completion. Integrative abilities enable efficient task execution, while acquired skills distinguish work performance and behavior (Boxall et al, 2022). Competent workers require motivation for optimal performance, and while financial compensation is crucial for knowledge workers, creating an equitable policy for all employees can be challenging (Guest et al, 2017). The AMO theory suggests that employees who are provided with chances to participate and carry out their responsibilities achieve better organizational results through engagement and job design (Guerci et al, 2017).

Task willingness is influenced by expectations, values, personality attributes, motivation, and work satisfaction Opportunities for activities like working circumstances, tool availability, leader conduct and established protocols, and time allocation are all taken into consideration. According to the authors, opportunity, aptitude, and drive are necessary for performance under an interaction model (Marin-Garcia et al, 2016). Green HR enhances employee engagement by influencing factors like positive emotions, commitment, and task performance. Implemented well, green HR practices encourage employees to conform to policies and take initiative and cultivate a deep awareness of environmental challenges (Baykal et al, 2022)

Using the following hypothesis, the gap in the literature be filled;

2.6.1 Green HR Practice's and Employee's Performance

Green HRM techniques are strategies and instruments that helps a green workforce striving to meet the organization's green goals at work. Green HR procedures may boost worker performance and demonstrate a company's dedication. There is a greater likelihood that workers identify with the organization's goal and values when they believe their company is actively working to create a greener future. Increased performance is associated with higher levels of motivation, work satisfaction, and performance (Renwick et al., 2016). There are several ways they may improve worker performance. Innovation and creativity are promoted, staff engagement, contentment, and drive are raised, the company's brand and image are strengthened, and employee health and well-being are supported (Dumont et al., 2017). Implementing concepts of sustainability into HR policies and procedures can help organizations improve employee performance while creating a greener workplace (Shafaei et al., 2020). Viswesvaran et al, (2000) define employee job performance as scalable activities, behaviors, and results contributing to an organization's goals. It influences organizational and individual results, and leadership and motivation significantly impact employee happiness and performance. Job performance impacts termination, financial rewards, and promotions. Leadership and motivation significantly impact employee happiness. Organizations may follow compliance approaches, requiring routine tasks and hazard control. However, innovative environmental stewardship approaches, proactively detecting hazards, and accommodating contemporary environmental issues are essential for employee performance (Ramanayake et al, 2022). HR departments aim to enhance employees' capabilities, performance, and well-being to maintain competitive advantage. Investment in HR systems aligns with strategic goals and positive impact on performance. To become more sustainable, HR systems must adopt a green-based approach to sustainability (Tanova et al, 2022). Employee performance is influenced by their ability to fulfill organizational duties, reflecting the organization's standard. Unhappiness can impair performance Long-term performance is improved by green training, incentives, and company culture that strengthen employees' environmental commitment (Yafi et al, 2021). Employee needs are growing, and businesses must prioritize meeting these needs for proper work rest, food, housing, and education. A supportive work environment, fostering positive connections, and discipline and motivation at work are crucial for employee and corporate performance. Effective human resource management,

focusing on individual roles and responsibilities, is essential for a company's success (Karatepe et al, 2022). High motivation among employees leads to increased work productivity and organizational goals achievement. Managers can understand motivation's role to boost subordinates' productivity and performance. It is evident that workers perform better when they are inspired to be more productive (Rivaldo et al, 2020).

Green HR practices aim to highlight the role that management plays in employees' conflicted engagement in environmental activities, skill development, and the creation of useful institutions. The term "green HR practices" refers to HR concepts that place a strong emphasis on management's accountability for improving employees' environmental work, skill development, and practice and structure stability (Zhang et al, 2024). Green performance is defined as the performance of an employee who incorporates GHR practices (Iftikar et al, 2022). Performance is the methods by which an individual may do a task effectively and efficiently in order to fulfill the criteria and goals established. It reflects employees' actions and their value to the organization. Performance management involves activities to enhance company performance, including individual employee and work group performance (Khong et al, 2023). The theory suggests that employee performance is linked to aptitude, drive, and performance opportunities. Organizations thrive when Workers are inspired, possess the requisite knowledge and abilities, and have the chance to put them to use. This applies to ecological human resource management, where employees possess necessary skills and knowledge (Pandey et al, 2024). HR is made up of workforce planning, organizing, directing, regulating, staffing, paying, developing, integrating, and maintaining to support employees and create a productive work environment. These functions ensure the organization has the right number and type of employees (Silva et al, 2021). The majority of firms implement green HR strategies in order to address environmental problems. One of the five strategies is green recruiting, which aims to find environmentally conscious workers who share the employer's values and help the company achieve its objectives (Baah et al, 2021). Performance is the actual achievement achieved by an employee in fulfilling their duties, based on predetermined standards and criteria. It is the result of quality and quantity of work done in accordance with their responsibilities. Performance is a translation of performance, encompassing the work of a worker, management process, or organization, requiring concrete evidence and measurement (Oktavianti, 2020). An organization's performance is positively impacted by green hiring and training (EP). Green performance management encourages workers to support and

concentrate on employers and employees jointly establishing green goals (Yong et al, 2019). Work engagement in organizations is primarily driven by psychological ownership, as per social identity theory. This attachment to possessions positively impacts engagement, promoting sustainability and employee retention, thus enhancing employee performance (Baykal et al, 2022).

According to the literature study, the performance is more significantly impacted when green activities are coupled (Mousa et al, 2020). With the use of GHRP's policies, agencies may proactively foster effective environmental and overall performance by incorporating practices into HR strategies that support the development of good attitudes, behaviors, and performance outcomes (Farrukh et al, 2022). Prior research on how Green HR policies affect employee. Additionally, identify the green behaviors, attitudes, and satisfaction that are important components of organizational performance as well as environmental performance and customer satisfaction, has shown encouraging findings (AlKetbi et al, 2024). Organizations can foster a culture of sustainability by encouraging eco-friendly conduct, offering instruction, and creating regulations that benefit both the organization and its employees (Al-Alawneh et al, 2024). According to research, workers who comprehend and support their company's sustainability objectives are more driven, which boosts output, attendance, and job quality (Iftikar et al, 2022). Organizations that prioritize employee well-being, work-life balance, support programs, and education can reduce turnover rates and boost productivity through green practices (Ojo et al, 2022). Employee performance is influenced by their ability to fulfill organizational duties, reflecting the organization's standard. Unhappiness can impair performance. Performance is the quality and quantity of work employees perform, and high job satisfaction leads to loyalty and increased performance. Employees are crucial for company progress, innovation, and products. A quality company fosters a good work life, producing qualified and competent employees (AlZgool et al, 2021). Long-term performance is improved by green training, incentives, and company culture that strengthen employees' environmental commitment (Rijal et al, 2023). Job performance measures work accuracy, speed, and employee effectiveness, influencing promotions, cash prizes, tasks, and terminations. Leadership and motivation significantly impact employee happiness and performance (Ramanayake et al, 2022).

The fact that Green HR practices, which are informed by the ability- motivation- opportunity (AMO) theory, foster employee training and performance-based rewards therefore supports the premise based on the data presented in the study.

H1: Employee performance is significantly impacted by green training and development.

H2: Employee performance is significantly impacted by green rewards and compensation.

2.6.2 Green HR Practice's and Employee's Engagement

The relationship between employee engagement and green training and development (T&D) is described using GWE as a platform. For example, HR procedures include the employee engagement process, in which the company should motivate its staff to consistently participate in their job (Chandani et al., 2016). The author claims that, when taking into account green training and development, employment may be viewed as a positive motivator and, as such, favorably connected with employees' job happiness (Obuobisa Darko, 2020). Green work engagement is a result of supervisors and effective human resource management techniques, such as green rewards and green training, which inspire employees and improve their ability to engage in constructive green activities and generate new green ideas (Aboramadan, 2022). Since they represent the cornerstone of an organization's value and necessary for accomplishing objectives, employee engagement is critical for organizational success, especially in the information technology sector (Atiku et al, 2024). Research on the impact of GHR practices on work engagement in developing countries' manufacturing industries is limited, despite studies indicating their existence (Susanto et al, 2023). Recent studies discovered a favorable correlation between GHR practices and Green Green Recommendations and work engagement, with studies suggesting that a positive perception of GHR practices boosts work engagement, despite the limited research on green engagement (Karatepe et al, 2022). AMO theory suggests that employees form a dedicated connection with employers when both sides follow the rules regarding trade and exchange, leading to increased work engagement (Ari et al, 2020).

EE considerably increases employee engagement, which eventually has a beneficial business influence on an organization's performance, productivity, customer outcomes, and employee retention (Alserhan et al, 2024). By offering training, career development, and remuneration, HR practices may improve employee engagement and encourage reciprocal behaviors (Saragih et al, 2020). According to the study, which investigates the connection between green HR practices and employee engagement promoting environmentally

friendly activities raises employee engagement (Darban et al, 2022). The increases in ecological behavior and staff participation that Green HRPs encourage. There is, however, a dearth of empirical research on its consequences, particularly in the industrial sectors of developing nations (Yusliza et al, 2021). Through environmentally friendly HR procedures including hiring, training, and staff development, green HRM reduces environmental impact while promoting sustainable performance improvement in employee work and encouraging green, creative behavior at the individual and corporate levels (Ojo et al, 2022).

Previous research indicates that green performance practices and employee engagement are positively correlated; however, there is a notable study vacuum about whether this link continues after COVID-19 (Islam et al, 2021). According to this study, which employs the Ability-Motivation Opportunity (AMO) hypothesis, GHRPs can have a favorable impact on employee engagement by increasing positive emotions, absorption, perseverance, job performance, and goal orientation (Iftikar et al, 2022). The ability, motivation, and opportunity components of the AMO theory offer a conceptual foundation for comprehending how Green HR practices improve engagement. Businesses should reorient their strategy and employee values to embrace a green culture. Employee dedication to environmental sustainability and sustainable behaviors are encouraged by Green Human Resources (GHR). Rewarding and compensating are key HRM strategies, building a link between employee benefits and the business (Herawati et al, 2020).

The concept of green HR is new, and there are no standard methods for evaluating the success of strategies related to sustainable conflict. The most efficient rely on the industry and the organization's size (Z Hameed et al, 2020). The influence of Green practices on employee engagement (EE) and employee performance (EP) in firms is examined in this section, despite the abundance of research on the subject (Mehrajunnisa et al, 2022). The influence of green HR policies on EE and EP is evaluated using three different methodologies: quantitative, qualitative, and theoretical. Quantitative studies employ statistical analysis, whereas qualitative methods are employed in qualitative research. Since training and development improve competence and are internal components of the engagement process that attend to employees' needs, they have a substantial influence on employee engagement. (Zhu et al, 2021). A model that combines organizational, job-related, motivational, and personal elements is put out to show how HR strategies might increase employee engagement at work (M Aboramadan et al, 2021). By utilizing workers'

work interaction points, minimizing environmental effect during hiring, training, performance reviews, and improvement of employees, and encouraging green, creative behavior at the individual and organizational levels, green human resource management (HRM) fosters sustainable performance improvement (Dira et al, 2024).

Changing firm strategy, beliefs, attitudes, and behaviors toward the pillars of environmental sustainability is the main goal of green HR practices, which are practices created to support sustainable business initiatives (Jerónimo et al, 2020). Hakem et al, (2021) claimed that employee dedication to environmental sustainability concerns and sustainable environmental activities are encouraged by green human resources management, or GHRM. Compensation and rewards are essential HR procedures for rewarding staff for excellent work and building a connection between the firm and employee benefits (Rashid et al, 2022). Research by Abdullahi et al, (2023) this implies that resource acquisition or conservation is how GHRPs control EE, though the exact mechanism is still up for discussion. By teaching staff members about environmental sustainability, lowering their carbon footprint, and increasing organizational efficiency, green human resources (HR) encourages sustainable behaviors. In order to improve employees' skills and talents, lower employee turnover, and boost business productivity through a variety of options, training and career development are essential (Yong et al, 2020). A company's green goals are therefore achieved through hiring, training, remuneration, development, and upgrading its human resources to produce a green workforce (Suleman et al, 2022).

H3: Employee engagement is significantly impacted by green training and development.

H4: Employee engagement is significantly impacted by green rewards and compensation.

2.6.3 Employee's Engagement and Employee's Performance

Employee engagement may help firms and employees alike, and it has an impact on workers' performance, EE has to do with how motivated, committed, and valued how workers feel about their jobs and employers. They are working harder and are more productive to achieve their objectives and help the company succeed. Workers who are actively involved in their work experience greater levels of fulfillment and contentment as well as a sense of meaning and purpose (Obuobisa Darko, 2020). GHRP is the integration of environmentally friendly practices into HR policies and strategies to enhance the organization's overall efficiency and green performance so that performance may be

improved by incorporating practices into HR strategies for encouraging good attitudes and behaviors (Munawar et al, 2022).

Workers who feel that their companies encourage performance that is personally meaningful to them are more likely to find their work enjoyable. Positive opinions then help to raise the amount of work engagement that can occur when the components coincide, meaning that businesses and employees strive for the same goals or ideals. Due to the fact that a company's creativity is crucial when it comes to humanitarian goals and objectives for staff implementation. (AM et al, 2022). E-HR automates daily HR tasks, freeing HR staff from manual labor, enabling AI chats to handle interviews, manage HR tasks, and provide ongoing support (Iftikar et al, 2022). Employees' declaration of engagement during the mandated remote working period demonstrated that they were actively participating in the task. The workers, however, believed that their performance suffered when they were working remotely. Therefore, it needs to be put into practice by establishing the timetable at work and by teleworking. Because of this, individuals have easy access to coworkers and superiors and may help create a more positive view of their own performance (Giauque et al, 2022). A study reveals that self-efficacy doesn't significantly impact employee performance or engagement in freight forwarding companies. Factors like working conditions, culture, support, and career development opportunities play a more significant role. The study suggests self-efficacy isn't significant in other industries (Washington et al, 2023). Employee engagement and involvement are crucial aspects of corporate relations, focusing on employees' need for learning opportunities and commitment to the organization's values, motivating colleagues towards success (Govender et al, 2020). A key component of organizational success is employee engagement, which includes zeal, dedication, and emotional investment. Beyond job happiness, it includes how workers view their roles, contributions, and alignment with the goals and values of the company (Gallup, 2023).

The philosophy of employee engagement, which focused on the growing demand for learning opportunities inside firms, was introduced to employee corporate relations (Ojo et al, 2022). Participation from employees is critical to the success of the business since it demonstrates dedication to its values, duties, and motivation among coworkers (Ahmad et al, 2021). Organizations may follow a compliance approach, expecting employees to perform routine tasks like hazard control, power consumption, and material disposal. However, unpredicted incidents may require innovative environmental stewardship, such

as proactively detecting hazards, designing green initiatives, and addressing contemporary environmental issues in job performance. Research focuses on the relationship between employee engagement and performance, highlighting the significant role of human resources in determining organizational management and performance (Veerasamy et al, 2024). Employees' disengagement from company regulations and lack of support for the company's development program negatively impacts operational activities and performance. Respondents believe employee engagement affects performance. This low operational performance in freight forwarding companies is influenced by factors that have led to a decline in employee performance (Govender et al, 2020). Employee performance is influenced by their ability to fulfill organizational duties, reflecting the organization's standard. Green training, rewards, and organizational culture enhance environmental commitment, improving long-term performance (Pandey et al, 2025). The Ability-Motivation-Opportunity (AMO) framework reveals Green HR impact on repercussions for attitudes and actions, such as green hiring, training, performance evaluation, and incentives job description, organizational culture, union role, organizational learning, and green health and safety (Khan et al, 2022). Work and behavior determine performance, improving decision-making and responsibility. Performance is influenced by work that is in line with strategic goals, customer happiness, and the economy (Schleu et al, 2021). Performance assessment is a regular process for reviewing and evaluating employee performance, aiming to improve compensation distribution, career progression, and employee motivation. It is a key organizational incentive system, involving measurable and objective data collection by the superior and involving work plan, implementation, supervision, and coaching (Wang et al, 2022).

Gallup Institute's "employee engagement" refers to an employee's positive status in their work environment or company. It varies across organizations and can be the antithesis of job fatigue. Engagement leads to higher organizational performance. Employee involvement is influenced by self-association with job roles, persistence, and deepening in work activities, supported by psychological experiences that encourage individual attitudes, behavior, and engagement (Margaretha et al, 2021). The relationship between spiritual leadership and business success has been studied extensively. A meta-analysis found that employee engagement mediates the relationship between transformational leadership and performance indicators. Engaged employees contribute to increased productivity, customer satisfaction, and profitability, highlighting the importance of

engagement as a driver of business success (Islam et al, 2021). Research shows that Employee Engagement significantly impacts performance and reduces employee turnover rates. High engagement levels increase team synergy and lead to increased performance. High engagement results in performance that meets employee standards, while low engagement results in performance below established standards. This link between Employee Engagement and performance is widely accepted among senior executives and HR practitioners (Islam et al, 2021).

H5: Performance is significantly impacted by employee engagement.

2.6.4 Mediating Role of Employee's Engagement

In order to boost employee involvement with green HR practices, examine the elements that influence employees' engagement in the workplace (Kerdpitak & Jermstittiparsert, 2020). Green employee engagement initiatives, green performance evaluation, green training and development initiatives, green hiring and selection procedures, green incentives and awards and green employee involvement may all be effective means of promoting green behaviors. Workers discover that the company supports and fosters their involvement (Renwick et al., 2016). By focusing on individual productivity and efficiency, reciprocal care between organizations and employees improves job satisfaction, motivation, and organizational success (Lahmar et al, 2023). By creating a feeling of purpose, spiritual leaders encourage and inspire their workforce, which boosts engagement, dedication, and voluntary effort and improves performance results (Manel et al, 2023).

Employee engagement at work encompasses attitudes and behaviors like loyalty, it is acknowledged that employee engagement is a crucial element in enhancing participation and highly active involvement in the development of a functioning organization. Employee engagement is acknowledged as a crucial component to enhance involvement and a highly active contribution to the growth of an operational business (Kerdpitak & Jermstittiparsert, 2020). Employees that are actively involved in service leadership are more accountable, committed, and offer superior customer service. This link between employee engagement and service quality emphasizes how crucial it is to develop a committed and motivated team (Shin et al, 2020). Companies aim to enhance their competitiveness by ensuring employee satisfaction and productivity. However, this is less relevant when employees feel satisfied with work demands and not motivated for organizational performance. According to several research now under publication, employee engagement (EE) has a good impact

on employee performance (EP), and employee engagement has a favorable impact on EP (Nguyen et al., 2021).

Improving an organization's overall performance is an EE's primary objective. EE study shows its value in HRM by establishing its connection to organizational performance (OP), employee outcomes, and production (Tensay et al, 2020). The dedication and emotional investment that workers have in a company, as well as their genuine dedication to their work and capacity to help it succeed, is known as employee engagement (Nayak et al, 2020). Maintaining employee loyalty, finishing work on schedule and with quality, enhancing their reputation inside the company, and embracing a feeling of organizational involvement are all models of employee engagement. Asghar et al, (2020) and Obschonka et al, (2023).

The term "emotional attachment to work" refers to a person's positive outlook, commitment, loyalty, and sense of pride in the organization. Employee engagement, which is measured by zeal, devotion, dedication, and organizational pride, is essential for corporate success. High levels of involvement result in increased productivity, more effort, and task completion (Algarni et al, 2023). An innovative approach that incorporates environmentally friendly practices into HRM plans and initiatives is called "green HRM." (Pham et al, 2020). Employee involvement has a big impact on an organization's long-term success. This includes dedication, strength, and attention. Currently, the majority of firms use HR practices to include their staff (Gómez-Salgado et al, 2021). The term "employee engagement" describes a person's participation, contentment, and excitement for their job, which includes personal presence, active performance, and a connection to both their work and others (Albrecht et al, 2020).

Employee engagement is a crucial mediator that influences performance results by serving as a motivating factor, according to studies (Aboramadan et al, 2022). Employee engagement is crucial for an organization's long-term success, as it involves active, loyal, and psychologically robust employees who enjoy their work. Employee performance is influenced by various factors such as work environment, corporate culture, job placement, welfare of employees, disciplinary training, emotional intelligence, job satisfaction, competency, and leadership style (Rijal et al, 2023). Engaged and motivated employees are more likely to engage in environmentally friendly behaviors, leading to improved

performance and higher-quality social interactions, according to social exchange theory, creating a mutually beneficial situation for both parties (Khan et al, 2022).

H6: Green training and development and employee performance are mediated by employee engagement.

H7: Green reward and compensation and employee performance are mediated by employee engagement.

2.6.5 Moderating Role of Spiritual Leadership

The relationship between leadership style and green workplace behavior among employees has been thoroughly examined, according a prior study (Zada et al., 2022). For instance, it has been discovered that spiritual leadership abilities foster a spiritual workplace that motivates employees to take part in environmentally conscious activities (Afsar et al., 2016). Spiritual leaders are renowned for their capacity to forecast their staff members' green engagement. According to other observations, task-specific leadership has an impact on environmentally conscious behavior. Spiritual leaders who are able to effectively manage moral people can motivate their staff to adopt eco-friendly workplace procedures (Li et al., 2023). Leadership involves influencing activities to lead an organization towards achieving goals. Effective leadership styles can motivate staff, enhance performance, and boost motivation amidst obstacles like uncertainty, linguistic difficulties, cultural differences, and technology disruption (Guterres et al, 2020). Spiritual leadership involves leaders integrating social-spiritual values and rational criteria in decision-making, fostering transcendent vision, hope, and altruism through a transcendent vision (AlZgool et al, 2021). HR is crucial for leaders to implement organizational structures, support managers, and align leadership and HR practices to help employees follow their vision, manage resources effectively, and communicate a clear message (Hameed et al, 2020). Leadership significantly impacts employee engagement, with transactional leadership positively correlated with employee engagement and motivation, while passive-avoidant leadership negatively affects attachment due to its tendency to respond to situations without intervening until the problem is resolved (Wiradendi Wolor et al, 2020).

Fry, (2003) Love, faith, and vision are the three elements of spiritual leadership that are explored. Thus, it may be said that spiritual leadership promotes constructive employee engagement at work. This article examines the connection between spiritual leadership and employee engagement in Pakistan's IT industry, emphasizing the significance of spiritual

leadership for productivity, customer satisfaction, and organizational success (Peters et al, 2019). Spiritual leadership fosters meaningful work environments by promoting a sense of purpose and direction among employees, connecting their work to the organization's broader goals. Spiritual leaders' genuine care and support foster a nurturing environment, fostering professional growth and personal fulfillment among employees (Fry et al, 2017). The importance of a clear vision and selfless compassion in spiritual leadership, advocating for leaders and staff to embrace these principles in order to strive toward a shared goal. By encouraging spiritual well-being and a feeling of purpose within the company, spiritual leaders inspire hope and motivate staff to have a good influence. According to the study, having a healthy spiritual life improves both individual and organizational outcomes, including dedication and output (Ali et al, 2023). Additionally, according to the social learning theory, individuals learn up new actions by observing and imitating others. According to this idea, social learning is a cognitive procedure that, even in the absence of direct support, can be performed by observations or instructions. Based on the social learning theory, we propose that employees who embrace their organizations GHRP's initiatives and disseminate green knowledge also have an impact on leaders in BPO's call center employees, serve as an inspiration to others employees, and assist their staff members in adopting similar practices so that they can join the group of employees who follow green practices in their workplace. As a result, employees' learning is impacted by their dedication to the engaging towards towards their performance. Previous research has documented how SL indirectly influences employee's engagement through GHRP's. However, we think that by sharing workers' green expertise, this indirect link may be enhanced. It is suggested that employees who embrace this culture can be further motivated to improve their SL and green practices in the information technology industry (Ansari et al, 2021).

In order to thrive and compete in a difficult business climate, corporations are placing a greater emphasis on spiritual leadership, encouraging selfless love, hope, faith, and corporate vision (Samul et al, 2019). According to the idea of spiritual leadership, a spiritual leader may make a workplace more productive, creative, and conducive to learning. Employee engagement at work is increased, professional duties are completed, and new ideas are acquired by spiritual leaders (Supriyanto et al, 2020). The study places a strong emphasis on how spiritual leadership may improve their level of engagement at work. Additionally, spiritual leadership has been studied as a moderator, addressing erratic

interactions in earlier research (Fry et al, 2009). Leadership affects how employees behave by affecting their perceptions of the workplace, including feelings of happiness, commitment, and wellbeing. Spiritual leadership founded on altruistic love, faith, hope, vision, and workplace spirituality emphasizes behaviors motivated by work meaning, unlike traditional membership exchange theories and economic exchange models. It captures deeper human experience dimensions in today's workplace (Saeed et al, 2019). Spiritual leadership involves beliefs, dispositions, and actions that inspire people to pursue spirituality. Studies in Work engagement is greatly impacted by spiritual leadership, as demonstrated by Yogyakarta's Islamic hospitality sector (Baykal et al, 2022). Furthermore, the social learning theory states that people pick up new behaviors by watching and copying others. This theory holds that social learning is a cognitive process that may be carried out through instructions or observations even in the absence of direct guidance. According to the social learning theory, we suggest that workers who support their company's GHRP initiatives and spread green knowledge also influence BPO call center leaders, act as role models for other workers, and help their staff members adopt similar practices so they can join the group of workers who follow green practices at work.

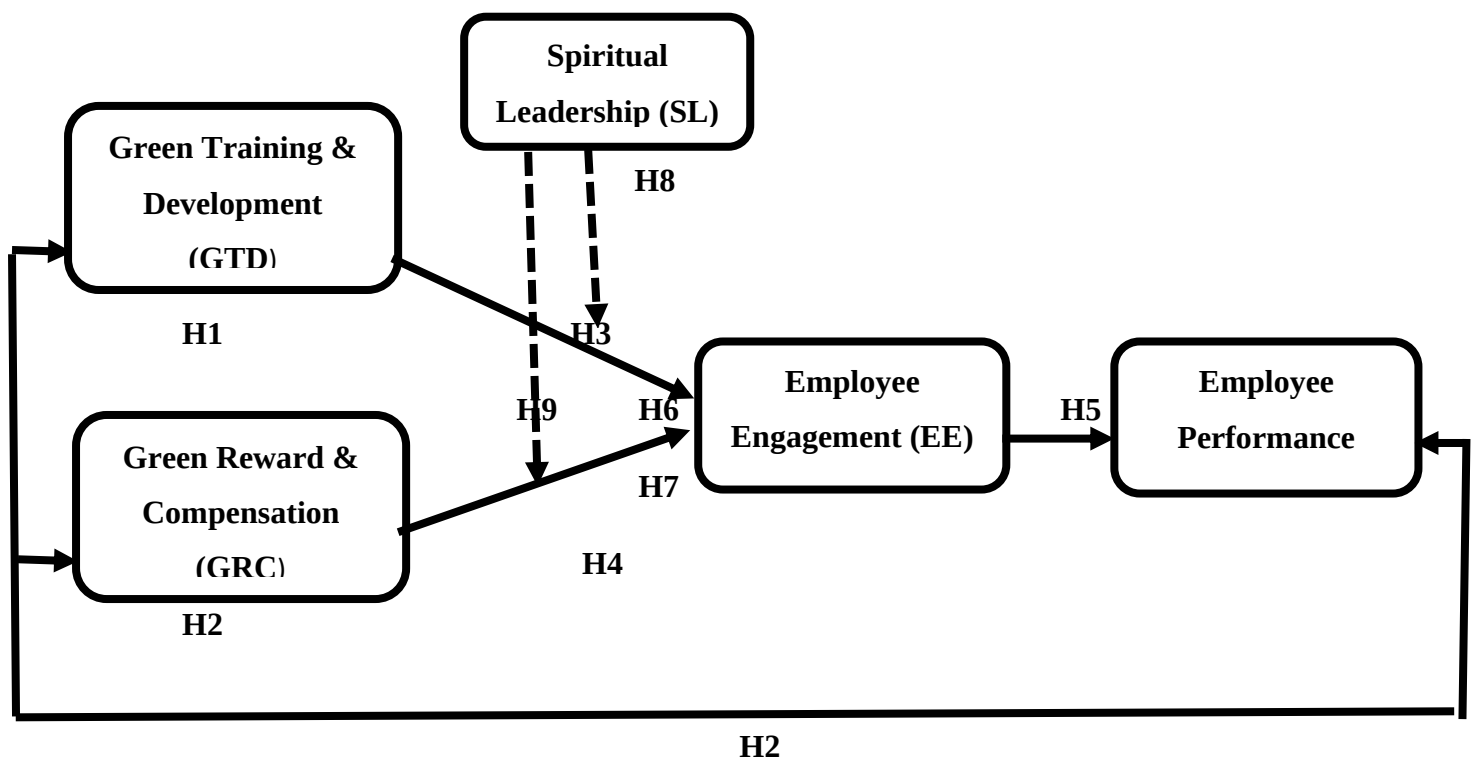
Building self-worth, inspiring personnel to fulfill the purpose, and supporting an organization's long-term objectives all depend on a spiritual leader's vision, values, and hope/faith (Oh et al, 2020). An individual is considered to be self-sufficient in his decision-making when he engages in actions that are consistent with his own preferences and free. Transformational, ethical, and participatory leadership styles provide workers greater autonomy (Ali et al, 2023). Though more study is required to evaluate these linkages, especially Innovation and information exchange are moderated in the by workplace spirituality (Yap Peng Lok et al, 2019). Spiritual leaders' genuine care and support create a nurturing environment, promoting professional growth and personal fulfillment among employees, contributing to a sense of purpose and purpose in their work (Zhang et al, 2021). Although new models of spiritual leadership are being created, the study points to a possible connection between spiritual leadership and employee engagement. By encouraging a common vision, value congruence, and greater organizational commitment and productivity among leaders and followers, spiritual leadership fosters spiritual well-being, purpose, and belonging (KA et al, 2021). The goal of spiritual leadership is to ensure that the organization's goals are in line with the demands of its workers by attending to their basic needs (Messabia et al, 2022). Spiritual leadership is a value-based approach that

motivates followers and leaders towards a meaningful future through their values, attitude, and behaviors, fostering a sense of spiritual well-being (Tabor et al, 2020).

H8: The positive effect of green training & development on employee engagement will be enhanced under strong spiritual leadership and reduce under poor spiritual leadership.

H9: The positive effect of green reward & compensation on employee engagement will be enhanced under strong spiritual leadership and reduce under poor spiritual leadership.

2.7 Proposed Theoretical Framework



Fig; 1

2.8 Hypotheses Summary

H1	Green training & development is significantly impact on employee's performance.
H2	Green rewards & compensation is significantly impact on employee's performance.
H3	Green training & development is significantly impact on employee's engagement.
H4	Green rewards & compensation is significantly impact on employee's engagement.
H5	Employee's engagement have a significant impact on employee's performance.
H6	Employee's engagement have a mediating impact between green training & development and employee's performance.
H7	The relationship between employee performance and green rewards and compensation is mediated by employee engagement.
H8	The positive effect of green training & development on employee engagement will be enhanced under strong spiritual leadership and reduce under poor spiritual leadership.
H9	The positive effect of green reward & compensation on employee engagement will be enhanced under strong spiritual leadership and reduce under poor spiritual leadership.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

This study uses a quantitative approach to investigate how employee engagement is affected in the f Pakistani primary regulatory companies such as BPO's call centers in order to determine the significance of social concerns. Thematic analysis is a qualitative research method that focuses on many facets of the study topic in order to identify, examine, and synthesize themes in data. In order to obtain comprehensive accounts of the participants' experiences with employee engagement and performance, we employed a smaller sample size.

3.2 Population & Sample Size

The target population of this study is Call centers employees. Since there are three lac people living there and 1700 employees in Rawalpindi and Islamabad, data have been gathered. An estimate of the sample size was made using Krejcie and Morgan's formula (Krejcie & Morgan, 1970). For the study, at the 95% confidence level of the observed value, a sample size of 314–384 is adequate. Furthermore, according to Sekaran and Bougie (2016), according to Hair et al. (2017) the number of variables to be examined and the sample size from previous studies may be used to calculate the sample size. However, the sample size of 370 is enough, and the smart PLS (SEM) approach should be used for analysis in this study.

3.3 Sampling Technique

The study gathers data from respondents using the quantitative approach through the use of the non-probability sampling technique's convenience sampling technique. Convenience sampling is frequently employed in qualitative research in the social sciences and education because it is practical to use pre-existing groups, such students. Your research may benefit from convenience sampling if: You wish to get insight into people's beliefs and perspectives. You wish to conduct a test pilot for your questionnaire; you want to come up with theories that can be thoroughly investigated in subsequent studies (Anderson and Gerbing, 1988; Sekaran, 2009; Creswell, 2013). We collected data in Pakistan's BPO'S call centers which is sub body of information technology industry using a cross-sectional study

approach in an uncontrived atmosphere. For scheduling and management approval to gather data from individuals, consequently, a single unit of analysis serves as a basis for our investigation.

3.4 Data Collection

A link to a questionnaire was shared with personnel in the BPO's call center, and questionnaires were distributed to them in person in order to gather data. Interviews with participants about employee performance, green HR practices, and employee engagement in their companies have been recorded and the responses were taken down for further investigation. In order to organize and code data, carry out certain tasks, and give visual analytical representation, this study made use of both Internet-based tools for text and media data analysis as well as computer-assisted qualitative data analysis software. In order to find individuals with the necessary expertise, experience, or viewpoint in the field of information technology, a sampling approach was employed for the study.

3.5 Control Variables

According to the prior research, demographic factors such as age, educational attainment, marital status, employment history, and institution (Abrahamse & Steg, 2009). To achieve its objectives, the study employed Cronbach's Alpha and confirmatory factor analysis to evaluate the validity and reliability of the questionnaires.

Variable and Measurement Scale Description

In this study, the constructs have been evaluated using five-point Lickert scales, with 1 denoting "strongly disagree" and 5 denoting "strongly agree." A detailed description of all the scales used in the research is included in the appendix.

3.5.1 Green HR practices

The eight-item scale was adopted from (Dumont et al., 2017) and (Tang et al., 2018). The sample scale items were "My company provides employees with green training to develop employees' knowledge and skills required for green management (green training and development)", and "My company relates employees' workplace green behaviors to rewards and compensation (green compensation and reward ()". It was determined that the total scale's Cronbach's alpha value was 0.969.

3.5.2 Employee Engagement

The nine-item scale was adopted from (Schaufeli & Bakker, 2003). The range of Cronbach's alpha for the different nations is between .72 and .90. An example of an item: At my job, I feel strong and vigorous, When I get up in the morning, I feel like going to work.

3.5.3 Spiritual Leadership

The 17-item scale was adopted from (Fry et al., 2005). Sample items: “I have faith in my supervisor’s vision for its employees” (vision), “I persevere and exert extra effort to help my supervisor because I have faith in what he/she does” (hope/faith), and “My supervisor is honest and without false pride” (altruistic love).

3.5.4 Employee Performance

The ten-item scale was adopted from (Primi et al., 2016). Sample item: I perform hard tasks properly, I try to update my technical knowledge to do my job, I do my job according to what the organization expects from me.

3.6 Data Analysis

This study examine employee performance, spiritual leadership, employee engagement, and green HR practices. Regression analysis, correlation analysis, and descriptive analysis of the data using SPSS software. The smart PLS software validate the study of mediation and moderation.

CHAPTER 4

DATA ANALYSIS

The PLS-SEM analysis's findings and details are presented in this chapter. Structural model analysis and measurement were used to the data collected to create these outcomes. The determining model demonstrates the validity of the data acquired and its excellent quality. The correlations suggested by our research model are evaluated for significance by the structural model.

4.1 Demographics of responants

Table 4.1 Demographics

Demographic characteristics		Frequency	%
Gender	Male	313	84.6
	Female	57	15.4
Age	18 and above	10	2.7
	18-22 years	180	48.6
	23-27 years	180	48.6
Education	Bachelors	29	7.8
	Masters	80	21.6
	Mphil/MS	261	70.5
Experience	Less than 5 year	106	28.6
	10-15years	213	57.6
	15-20 years	51	13.8
Marital status	Single	200	54.1
	Married	170	45.9

4.2 Measurement Model

The measuring model was assessed in order to determine the validity and reliability of the constructs. The quality of the concepts is evaluated by the measurement model's results. Once quality is assessed using factor loadings, validity and reliability are added. As everyone knows, formative constructions are those in which the measurements cause the latent construct, whereas reflecting constructs are those in which the measured variable is produced by the underlying construct. Latent variables are the cause of the measurements used in this investigation. It is a reflecting measuring model as a result. A major component is allocated to each item in the correlation matrix based on how well it interacts with factor loadings. The range of these integer values is -1 to +1.

First, the model's values are higher than the permitted minimum of 0.50 for each item's factor loadings (Sarstedt, 2016). Although factor loading larger than 0.7 is recommended, the effects of deleting the item on convergent validity and composite reliability be examined rather than having indications automatically eliminated. When eliminating objects with outside loadings ranging from 0.40 to 0.70 increases the average variance extracted (AVE) or composite reliability over the recommended threshold, they are often taken into consideration. Composite reliability, Cronbach's alpha, and rho-a were evaluated using statistics, and both were higher than the suggested threshold of 0.700 (Sarstedt, 2021).

4.2.1 Loadings of CR and AVE of all Constructs

Construct	Item's	loading's	AVE	CR
GTD	GTD1	0.90	0.87	0.95
	GTD2	0.95		
	GTD3	0.95		
	GTD 4	0.93		
GRC	GRC1	0.80	0.74	0.88
	GRC2	0.88		
	GRC3	0.85		
	GRC4	0.90		
EE	EE1	0.06	0.21	0.42
	EE2	0.62		

SL	EE3	0.69	0.22	0.79
	EE4	0.25		
	EE5	0.16		
	EE6	0.55		
	EE7	0.44		
	SLV1	0.48		
	SLV2	0.40		
	SLV3	0.31		
	SLV4	0.28		
	SLV5	0.28		
	SLH1	0.60		
	SLH2	0.51		
	SLH3	0.58		
	SLH4	0.27		
	SLH5	0.39		
	SLA1	0.59		
	SLA2	0.56		
	SLA3	0.51		
	SLA4	0.61		
	SLA5	0.38		
	SLA6	0.57		
	SLA7	0.47		
EP	EP1	0.82	0.81	0.97
	EP2	0.86		
	EP3	0.89		
	EP4	0.93		
	EP5	0.89		
	EP6	0.94		
	EP7	0.92		
	EP8	0.92		

EP9	0.92
EP10	0.87

Note. GTD: Green training & development, GRC: Green reward & compensation, EE: Employee Engagement, SL: Spiritual leadership, EP: Employee Performance

4.2.2 The Average Variance Extraction (AVE)

The AVE must higher than 0.5 if such is the case. AVE for our goods is displayed in Table 4.2.1 once all items from the products mentioned above have been removed. All of these figures also exceed the suggested threshold (Sarstedt, 2016).

4.2.3 Reliability Analysis

Mark (1996) stated that the measurement's level of consistency and stability is known as dependability. While the findings of a second dimension be identical? It is necessary for dependability. Reliability is the degree of stability and uniformity of a measurement device. The same findings be obtained if an instrument is used again. Two key elements of dependability are Cronbach alpha and composite reliability. With Cronbach's alpha between 0.728 and 0.899 and composite reliability statistics between 0.816 and 0.923, the pointers' reliability is more than double that of a reliability criterion of 0.70. Cronbach's alpha and composite reliability analysis has been completed and is shown in Table 4.2.1.

4.2.4 Construct Validity

The presence of both discriminant and convergent validity indicates construct validity.

4.2.5 Convergent Validity

Convergent validity is used when measuring the same idea over several attempts. It is a legitimate measure of the item when two or more things are high. AVE statistics yield data for convergent validity. The suggested value is .05 which shows in Table 4.2.1.

4.2.6 Discriminant Validity

To demonstrate that distinct assessments of distinct ideas shouldn't be too connected, psychologists employ the idea of discriminant validity. Secure discriminant validity is demonstrated by a higher square root of AVE than any other connection. Table 4.2.1 displays the discriminant validity standards for every item.

4.2.7 Discriminant validity Heterotrait monotrait ratio (HTMT) Matrix

Results from the HTMT are shown with the discriminant values. If the discriminating validity score is less than 0.8, it indicates that the discriminant validity of the construct may be confirmed. A significant discriminant validity is therefore demonstrated by our data. As viewed below. It clarifies whether or not the variables in our study deviate from one

another. Hair et al, (2011) stated that even though several of the items still have loadings below .70, they have been kept for more study since removing them might seriously impair the constructs' content validity and reliability. The HTMT ratio for the constructions is displayed in Table 4.3 All of the values are evidently significant, and discriminant validity has been demonstrated.

4.2.7.1 HTMT Values

		EP	GRC	GTD	SL
EE	0.468				
EP	0.320	0.900			
GRC	0.316	0.312	0.864		
GTD	0.348	0.283	0.748	0.935	
SL	0.737	0.364	0.301	0.417	0.475

Note. GTD: Green Training & Development, GRC: Green reward & Compensation, EE: Employee Engagement, SL: Spiritual leadership, EP: Employee Performance

4.2.8 Cross Loadings

A given object must have large loadings associated with its individual build relatively any new construct. When the real circumstance arises, discriminant validity problems arise. Details on cross loadings are shown in the following tables.

	EE	EP	GRC	GTD	SL
EE2	0.62	0.12	0.17	0.17	0.51
EE3	0.69	0.21	0.15	0.20	0.58
EP4	0.28	0.93	0.27	0.26	0.34
EP6	0.3	0.94	0.31	0.32	0.37
GRC2	0.27	0.23	0.88	0.62	0.24
GRC4	0.28	0.23	0.90	0.56	0.23
GTD3	0.31	0.28	0.71	0.95	0.39
GTD4	0.29	0.27	0.72	0.93	0.36
SL1	0.35	0.25	0.21	0.29	0.59
SL4	0.27	0.18	0.17	0.27	0.61

Note: GTD: green training & development. GRC: green reward & compensation, EE: Employee engagement, SL: Spiritual leadership, EP: Employee performance

4.3 Structural Model

The structural model should be assessed in order to determine the statistical significance of the link between the components. To test the hypothesis, the t-value is determined using the bootstrapping method. Bootstrapping is the most recent method for determining the importance of the path coefficient using t-value estimations.

4.3.1 Beta Coefficients, Mean. STDEV, T Values

		Beta Coefficient (β)	Sample Mean (M)	Standard Deviation(STDEV)	T Statistics	P Values
EE -> EP		0.240	0.249	0.059	4.065	0.000
GRC -> EE		0.118	0.118	0.067	1.752	0.040
GRC -> EP		0.199	0.209	0.097	2.046	0.020
GTD -> EE		-0.021	-0.027	0.072	0.287	0.387
GTD -> EP		0.718	0.738	0.044	16.32	0.000
SL x GTD -> EE		-0.034	-0.027	0.036	0.928	0.177
SL x GRC -> EE		0.023	0.019	0.045	0.506	0.307
GTD -> EE -> EP		0.136	0.148	0.030	4.575	0.000
GRC -> EE -> EP		0.124	0.137	0.030	4.209	0.000

Note. GTD: Green Training & Development, GRC: Green reward & Compensation, EE: Employee Engagement, SL: Spiritual leadership, EP: Employee Performance

H1: There is a positive correlation between employee performance and green training and development.

There is a strong correlation between employee success and the amount of green training and development a firm provides. The aforementioned evidence makes it clear that EP has had a significant impact on GTD. The figure 4.2.2, which may be seen below, has them.

<i>B</i>	T-statistics	P-value
0.718	16.32	0.000

H2: Employee performance and green rewards and compensation have a strong positive correlation.

It comes to the conclusion that employee performance, receiving fair compensation, and receiving green rewards are strongly correlated. According to the table's results, GRC has a significant impact on EP Below, you can view figure.

<i>B</i>	T-statistics	P-value
0.198	1.951	0.026

H3 Green training & development and Employee engagement has negatively correlated

The findings in the above table demonstrate that GRC performs somewhat better than EE in terms of effect, as evidenced by the mentioned numbers. There is no discernible relationship between employee engagement and green training and development, as seen in Figure below.

<i>B</i>	T-statistics	P-value
-0.021	0.287	0.387

H4 There is a positive relationship between employee engagement and green rewards and compensation.

Green rewards and incentives are directly tied to employee performance. According to the table, there is a considerable connection between GRC and EE. These figures are related to figure, which is seen below.

<i>B</i>	T-statistics	P-value
0.118	1.752	0.040

H5 There is a positive link between employee engagement and performance.

According to the values, EE has a major influence on EP. It evaluates the degree of correlation between employee performance and engagement. The figure is seen below.

<i>B</i>	T-statistics	P-value
0.240	4.065	0.000

4.3.2 Mediation Analysis

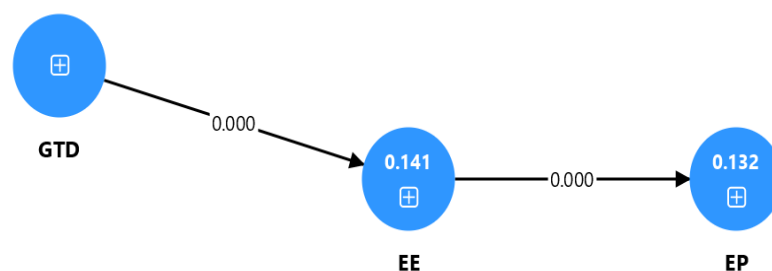


Fig 3

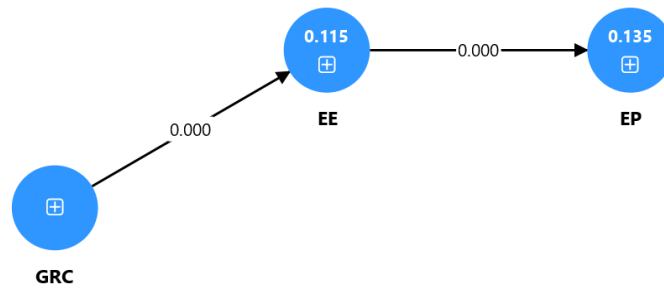


Fig 4

Mediation analysis was performed to assess the mediating role of EE on the linkage between GHRP and EP. The results reveals that the total effect of GHRP on EE was significant ($\beta = 0.126$, $t = 4.575$, $p = 0.000$). The indirect effect of GHRP on EP through EE was found significant ($\beta = 0.124$, $t = 4.206$, $p = 0.000$). This shows that the relationship between GHRM and EP is partially mediated by EE.

H5 The positive effect of green reward & compensation on employee engagement will be enhanced under strong spiritual leadership and reduce under poor spiritual leadership

As shown in the outcomes of moderation analysis is insignificant.

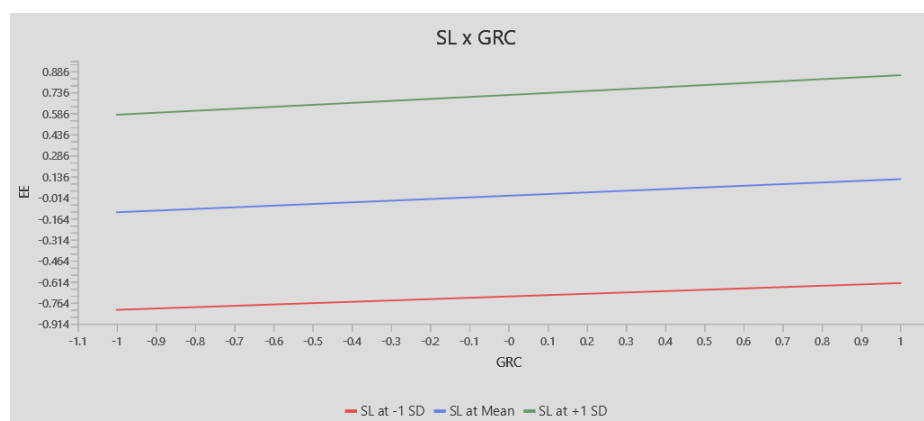


Fig 5

4.3.3 Slope Analysis

The green line represents a high level of spiritual leadership, while the red line represents a low one. It is clear that employee performance and green rewards and remuneration are correlated with strong spiritual leader ideals. At low numbers, there is no significant association between GRC and EP. However, as the accompanying table shows.

H6 The positive effect of green training & development on employee engagement will be enhanced under strong spiritual leadership and reduce under poor spiritual leadership

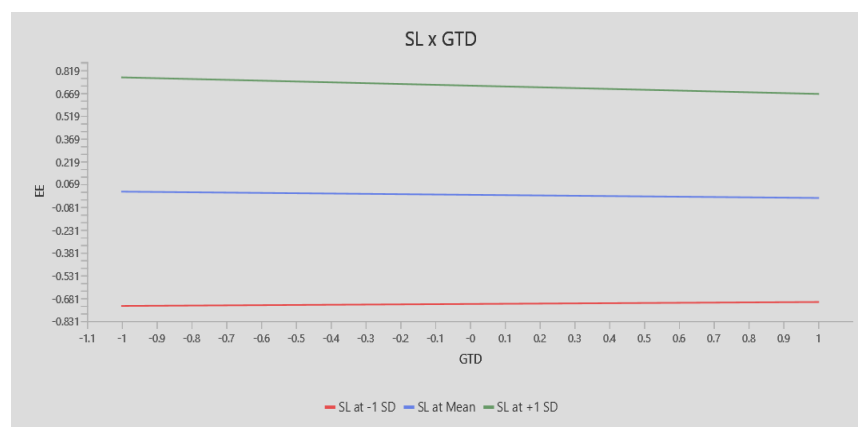


Fig 6

4.3.4 Slope Analysis

The relational connections are depicted by the red and green lines; the green stroke indicates a high degree of spiritual leadership, though the red stripe indicates a low level. It is evident that GTD and EP are associated at high spiritual leader values. They do not demonstrate a strong association between GTD and EP at the low levels.

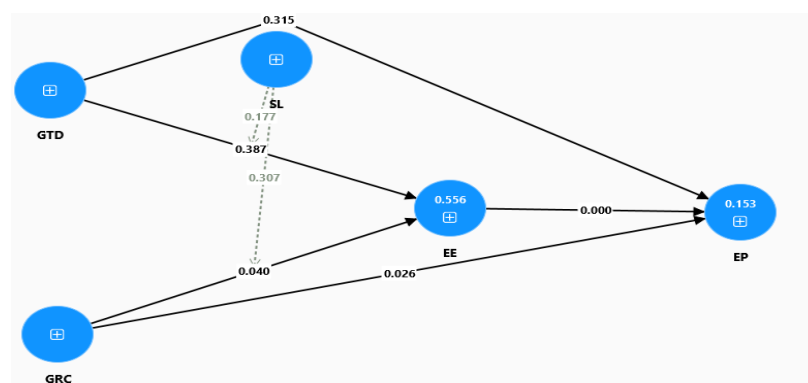


Fig 7

Green training and development (GTD) and green reward and compensation (GRC) are linked in the above graphic when moderator spiritual leadership (SL) is present.

4.3.5 Before Moderation

	Original Sample (O)	Sample Mean (M)	Standard Deviation(STDEV)	T statistics	P Values
GRC -> EE	0.155	0.157	0.097	1.597	0.055
GTD -> EE	0.279	0.286	0.089	3.125	0.001

Note: EE: Employee engagement, GTD: green training & development, GRC: green reward & compensation.

Table 4.3.6 After moderation

	Original Sample(O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
SL x GTD -> EE	-0.034	-0.027	0.036	0.928	0.177
SL x GRC -> EE	0.023	0.019	0.045	0.506	0.307

Note: EE: Employee engagement, GTD: green training & development, GRC: green reward & compensation

The after mentioned outcomes show that SL has a major effect on the link between GRT, GRC and EE.

CHAPTER 5

DISCUSSION

The purpose of the current study was to determine the impact of green human resources on employee performance in Pakistan's technology sector. Our study's results are not the same as those of previous studies. Analysts in the technology industry were chosen as research participants in order to determine the connection between worker engagement and output. The objective of this research's to investigate the direct and indirect effects of employee engagement on Green HR practices through employee performance. The study also looks at how the impact on employee engagement is moderated by spiritual leadership strength, as determined by the GHRP. The claim that the data in these datasets demonstrates how GHRP raises worker productivity. A key factor in the relationship between an employee's performance and general HR procedures is employee participation. The results are consistent with previous research. Energy-efficient facilities, remote meetings, and telecommuting are just a few examples of green HR practices in the BPO's call centers employees that may drastically lower the sector's carbon footprint and support long-term sustainability objectives.

Examined how the connections between GHRP and EE and between EPs affected each other. Programmers' performance rapidly improved as a result of their increased enthusiasm in their profession. However, when work engagement increases after it has reached the critical threshold, job performance declines. Additionally, the study suggests that lower GHRP strength perceptions are associated with worse employee engagement outcomes (Prasad et al, 2022). The findings of this study are consistent with other research suggesting that spiritual leadership may have an impact on the connection between GHRP and employee engagement. These results are consistent with past studies that found spiritual leadership to have a moderating effect on the connection between GHRP and employee engagement. Workers' efforts to environmentally friendly projects, including developing software programs that use less energy and putting data center optimization techniques into practice, are accepted (Ababneh et al, 2021). Green HRP positively impacts IT employee performance by promoting environmentally responsible practices, enhancing operational efficiency (Naseer et al, 2023).

5.1 Hypothesis 1

Examine whether green training and development improves your employees' productivity. Employee performance is clearly improved by green training and development, according to the statistics ($B=0.718$, $T=16.320$, $P=0.000$). Thus, the primary hypothesis is supported by the researchers.

5.1.1 Discussion

Green training and development are positively correlated with employee performance (EP). (GTD) is demonstrated by the findings First research objective should be match to the analysis results in which green training give employee performance a boosting effect. Accordingly, earlier researchers Hu et al., (2019) discover the similar related situation in China's IT industry. Additionally, compared to other emerging nations, the adoption of green HR practices be distinct discover the similar relationship situation in China's IT industry. Furthermore, compared to other developing nations, this country should adopt green HR practices differently (Sharma et al., 2019). The study's findings show that green training and development has a major influence on staff performance, supporting the theory (Daily et al, 2012). The study suggests that since green actions should support both company and country transformation, companies should ensure that employees are aware of green practices and provide useful training. The green development of the IT sector supports both organization improvement and higher competitiveness globally (Alraja et al, 2022).

5.2 Hypothesis 2

H2; Green rewards and compensation have a substantial and favorable influence on employee performance, according to the data ($B=0.198$, $T=1.951$, $P=0.026$). The statement indicates that H2 is supported.

5.2.1 Discussion

The study's second findings should support the original concept. Thus, the findings indicate that employee performance (EP) and green reward & compensation (GRC) are related. Additionally, earlier research produced some pertinent findings. Giving employees incentives can significantly boost an organization's performance (Jabbour et al, 2016). In line with previous research findings, the study demonstrates a strong correlation between green reward & compensation (GRC) and employee performance (EP). The study also found that providing green incentives increases employee commitment, so it is crucial for businesses to reward sustainability (Masri et al, 2017). Researchers propose that although green involvement offers chances for ecological organization activities, which improves

employees' overall performance, green recruiting, training, performance management, and remuneration focus on strengthening employees' green abilities (Rizvi et al, 2021).

5.3 Hypothesis 3

H3 Determine if employee engagement is little impacted by green training and development ($B=-0.021$, $T=0.287$, $P=0.387$). H3 was thus not supported.

5.3.1 Discussion

Since of this, previous research confirms these findings since GTD has no effect on employee engagement (EP). Consequently, the research may apply GTD to boost employee motivation, which in turn boosts corporate productivity. The results seem to indicate that green training and development is insufficient to boost employee engagement; thus, the objective not aligned to hypothesis because more attention should be paid to education and training. They can assist prepare new eco-friendly employees by allowing current employees to develop a variety of work experiences (Aboramadan, 2022). In addition to following laws and regulations, green HRM promotes employee participation in volunteer green projects. Businesses gain from this strategy by lowering expenses, recruiting and keeping green workers, and enhancing operational efficiency. Additionally, it increases one's advantages in work (Arasli et al, 2020). To improve environmental management and encourage green behavior among employees, organizations must apply Green HRP's activities. Employees that feel their training is inadequate perform worse and are unable to accomplish their goals, which is detrimental to the company. Since green training frequently doesn't address their main responsibilities or objectives, employees frequently feel it is pointless and has little impact on their level of involvement. A person may be too preoccupied with study and project work, leaving little time or energy for being environmentally conscious. Green training's impact on employee dedication can be difficult to quantify, making it difficult to determine its effectiveness or areas for development. If feedback and green training are not provided to employees, they may lose motivation and become less engaged in their work.

5.4 Hypothesis 4

H4; The findings showed that employee engagement is significantly impacted by green rewards and remuneration ($B= 0.118$, $T=1.752$, $P= 0.040$). Shown support for H4.

5.4.1 Discussion

According to findings research objective should match with hypothesis that employee engagement is significantly affect with reward and compensation policy which is given by

the company. Researchers discovered that green awards increase employee loyalty, which was corroborated by previous research. According to the report, managers have to give extra incentives and bonuses to staff members who adopt green practices (Islam et al, 2021). According to the study, green rewards have a big impact on worker engagement. Dumont et al, (2017) GRC has been shown to have a favorable impact on employee engagement. Green Work engagement, green HR practices, and green incentives were revealed to be significantly positively correlated by the study. Green incentives have a good impact on employees (Ari et al, 2020).

5.5 Hypothesis 5

H5; Determine whether employee performance is significantly and favorably impacted by employee engagement. The results employee engagement has a significant and positive impact on employee performance ($B= 0.240$, $T=4.065$, $P= 0.000$). Therefore, H5 was supported.

5.5.1 Discussion

One of the key factors that directly affects employee performance is employee engagement. The results indicate that employee work engagement is significantly impacted. Employees' performance in Pakistan is significantly impacted by their level of engagement at work. Research indicates that when employees are responsible and actively involved, the team accomplishes its goals and employees become more productive (Paliga et al, 2022). Tisu , (2020) said that workers who are engaged find their occupations appealing, engaging, and relevant. They also show enthusiasm and joy when their companies support their personal performance, which shows that work engagement has a satisfactory effect on worker performance. The findings of earlier research in this area show that opinions on the relationship between employee participation and performance are divided. Staff engagement has a significant impact on staff production, according to evidence (Rashid et al, 2022). Second, there is no obvious impact of employee participation on performance (Lim et al, 2021). The main objective is to enhance the mediating role which is directly link towards employee performance hence the findings results are match with our objective that employee performance is significantly impacted with employee engagement.

5.6 Hypothesis 6

H6; the relationship between employee engagement and green training and development will be moderated by spiritual leadership. The findings showed that spiritual leadership and

green training and development had a negligible and detrimental effect on employee engagement. ($T=0.928$, $P=0.177$, $B=-0.034$). H6 was thus not supported.

5.6.1 Discussion

The study investigates how employee engagement is not affected by spiritual leadership and green HR practices. Our objective is not match with this hypothesis because some employee think that their leader is not fully communicate with them they did not motivate the employee if they achieve their goals that's why their results is not supported with objective. Furthermore, social learning theory holds that social learning is a cognitive process that may be carried out through instructions or observations even in the absence of direct guidance. According to the social learning theory, we suggest that workers who support their company's GHRP initiatives and spread green knowledge also influence BPO call center leaders, act as role models for other workers, and help their staff members adopt similar practices so they can join the group of workers who follow green practices at work. The influence of spiritual leadership on staff engagement and green training and development is negligible. Leadership involves emotional connections, authenticity, and spiritual values, with research indicating this. However, leadership is not always perfect and can have negative impacts, prompting scholars to examine potential contingencies and potential negative impacts (Fry et al, 2011). Over the past two decades, scholars have explored spiritual leadership, but there are still gaps in understanding. Current research lacks clear examination of key leader characteristics and situational factors, such as interconnectedness, religious faith, and leader personality, which are crucial for spiritual leadership (Sweeney et al, 2012). Green HR strategies and spiritual leadership are required to promote eco-friendly behavior Via encouraging green HR procedures and spiritual leadership. Additionally, the study looked at the impact of spiritual leadership on Pakistan's IT industry. Furthermore, despite the challenges of cross-referencing data, green HR practices support sustainability and corporate social responsibility. It suggests that implementing training programs and green policies help Pakistani IT companies perform better (Khan et al, 2019). . According to this study, there are existing correlations between spiritual leadership and green training, and by combining sustainable and spiritual themes via individuals leading others, even stronger ties may develop. People must work harder in a global setting due to globalization and new technologies, and they must rely more on leaders' affection, effective communication, and team spirit to foster collaboration (Maidl et al, 2022). The presence of a spiritual leader plays a significant role in ensuring that HR

supports workers by fostering appropriate corporate values. Measuring these values should come before implementing the program. Developing our spirituality via learning and growth frequently enables us to operate in a sustainable manner. Employee involvement has increased, and they are now contributing to the identification and resolution of sustainability concerns. The chosen studies were tagged and categorized, and the research provides agenda-setting recommendations. It is a piece of writing about managing coworkers and spiritual leadership that aims to increase organizations' environmental responsibility.

5.7 Hypothesis 7

H7; The relationship between employee engagement and green rewards and remuneration will be moderated by spiritual leadership. The findings showed that employee engagement is not significantly impacted by spiritual leadership or green rewards and incentives. ($T=0.506$, $P=0.307$, $B=0.023$). H7 was thus not supported.

5.7.1 Discussion

The study backs up the finding that spiritual leadership has little bearing on worker encouraging a work climate that allows individuals to fulfill their spiritual aspirations and encouraging participation through rewards and compensation (Sapta et al, 2021). Workplace spirituality and spiritual leadership are frequently viewed as advantageous for both firms and individuals. Both good and bad sides can exist, too, since some workers find it difficult to follow their spirituality, which can result in disinteresting encounters as well as other drawbacks including seduction, manipulation, and overthrow (Afsar et al, 2016). This study examines the connection between IT industry success and employee engagement, with a particular emphasis on spiritual leadership and green HR practices. The findings indicate that employee performance is not greatly impacted by engagement, which functions as a mediator in the link between performance and GHRP's (Chen et al, 2012). Spirituality is adopted at both individual and organizational levels through an initial stage of awakening, where individuals or organizations recognize the void due to a lack of spirituality. Stages 2 and 5 of the spiritual transformation process involve disappointment, recovery, and a deeper questioning of beliefs. Stage 4 is a negative phase, while Stage 5 is the dawn stage, where individuals adopt spirituality with a sense of interconnectedness and perfection thus, increased engagement improves work performance in the IT business, but it declines after attaining important value, according to a study that examines the link between EP and GHRPs. Altaf et al, 2011). The three existing theories on spiritual

leadership have two gaps. The first is a disregard for the attributes of a spiritual leader and the outside forces that support effective spiritual leadership. The second gap relates to boundary conditions and whether spirituality can become a bane or a benefit, as seen in hypocritical and sinister leaders (Bauman et al, 2013).

5.8 Hypothesis 8

H8; The relationship between employee performance and green training and development will be mediated by employee engagement. The findings showed that employee engagement is significantly impacted by employee performance or green training and development. ($T=4.575$, $P=0.000$, $B=0.13$). H8 was thus supported.

5.8.1 Discussion

The results show that employee performance (EP) and green training and development are favorably connected through the mediating influence of employee engagement. In order to determine if green training improves employee performance, the first study goal should align with the analysis findings. Accordingly, previous studies Hu et al. (2019) find a similar issue in the technology business in Pakistan. The implementation of green HR practices also be different in call centers than in other developing countries.

5.8 Hypothesis 9

H9; The link between green reward & compensation and employee performance will be mediated by employee engagement. The results demonstrated that green training and development or staff performance has a major influence on employee engagement. ($B=0.124$, $P=0.000$, $T=4.209$). As a result, H9 was supported.

5.9.1 Discussion

The findings indicate a positive relationship between green reward and compensation and employee performance (EP), with employee engagement acting as a mediating factor. The initial research aim should be in line with the analytical results to determine if green compensation give to employee in regard their achieves its enhances employee performance. Accordingly, earlier research identifies a comparable problem in Pakistan's technology industry. Call centers also adopt green HR practices differently than other businesses.

5.10 Theoretical Contributions

The most current research advances theory in a number of ways. The study found that GHRP causes employees to perform better. Accordingly, this study supports the previous

study's conclusions that GHRP influences employee performance and suggests that similar findings be retested in different contexts in future research (Bednall, 2014).

Second, the AMO hypothesis proposes that employee engagement acts as a mediator between the direct and indirect effects of GHRP on employee performance. The current study demonstrated that spiritual leadership is an important underlying mechanism in the relationship between GHRPs and employee engagement, which supports a specific feature of the AMO hypothesis. This is the first research of its kind to investigate whether an underlying link is mediated by employee engagement (Bowen, 2004). GHRP gives workers a sense of empowerment, which motivates them to put in greater effort at work. Additionally, by demonstrating how spiritual leadership modifies the association between GHRPs and worker engagement, our study advanced knowledge in that area. The study addresses a significant research gap on certain HR practices and evaluates the impact of GHRP on employee performance by concentrating on employee engagement. The purpose of this study is to examine how employee engagement affects Green HR practices both directly and indirectly through employee performance. Additionally, the study examines how spiritual leadership strength, as measured by the GHRP, moderates the effect on employee engagement. The assertion that these dataset's data show how GHRP increases employee productivity. Employee engagement is a crucial component in the connection between an employee's performance and standard HR practices. The findings align with earlier studies. Among the green HR practices used by BPO call center personnel include green construction, virtual meetings, and telecommuting. These practices have the potential to significantly reduce the sector's carbon footprint and promote long-term sustainability goals.

Additionally, we discovered that the relationship between GHRP and employee engagement was moderated by spiritual leadership strength. To the best of our knowledge, no study has explicitly examined the moderating effect of spiritual leadership. In this way, we were able to show how GHRP views reinforce the relationship between employee engagement and performance. Finally, earlier studies (Messersmith, 2011). HRM has been found to be strongly associated with a number of factors of workers' attitudes and actions at work. In order to assess the outcomes of certain activities, such as the impact of creative behavior, many of these studies used a variety of HRM activities. By examining the function of employee engagement—which had not been previously examined—the current study investigated how GHRP influences employee performance.

In line with the goal of the study, the AMO theory offers insightful information on how GHR practices might enhance academic staff dedication and behavior in the IT industry (Ali et al, 2022). According to the Ability, Motivation, Opportunities (AMO) hypothesis, human resources ought to concentrate on employee abilities, rewards, and chances to improve productivity and corporate social responsibility (Yu et al, 2020).

GHRP's and employee performance should be linked in different ways. First, using the lens of GHRP's and employee engagement, our work examines the mediating function of EE as an underlying mechanism of the theory of attitude. Second, our research supports the idea that EE acts as a mediating factor between EP and GHRPs. Third, by utilizing social learning theory, our study adds SL as a moderating variable in the indirect association between GHRM and employee engagement via GTD and GRC. The study's theoretical underpinnings, assumptions, research methodology, and findings are covered. We conclude our study by going over the findings, ramifications, restrictions, and potential avenues for further investigation.

5.11 practical Implications

For managers, executives, and staff members who deal with IT, the research's conclusions have some real-world applications. Improving the involvement of employees entails recognizing the significance of employee engagement. The present study is being conducted in the context of information technology, where employees use technology to boost engagement and perform better. G-HR procedures are essential for encouraging sustainability and creating a work environment that embraces and incorporates eco-friendly activities, which improves ecological performance and employee happiness (Kalogiannidis et al, 2021). According to the literature, employee engagement and performance are positively correlated with green HR practices, and spiritual leadership. However, these results should be included in future research. G-HR procedures encourage eco-friendly mindsets, which improves corporate ecological performance and employee happiness.

Our study offers ideas to researchers looking into spiritual leadership by covering the existing body of knowledge and allowing a better view of the past, present and future of this concept. First, being involved with employees allows GHRP to have an effect on their performance both directly and indirectly. Since GHRPs motivate employees to participate, organizations must design their GHRPs to produce positive results. Organizational changes are the responsibility of the manager and leader. It points out that sharing information openly requires keeping feedback going all the time. Having a positive approach to staff

performance helps people feel comfortable saying what they think. The study found aspects that can impact how workers perform jobs (Iftikar et al, 2022). This study demonstrates that a work environment that aligns with employee engagement leads to improved well-being, increased productivity, and benefits the organization. Research suggests leadership and spiritual workforce environments impact employee performance.

Second, it's critical that the company assigns the worker a variety of jobs. This implies implementing the new methods, strategies, and technologies. Employee technology performance ultimately increase as a consequence of innovation producing new ideas and insights, like green technology, which improves performance. Since feedback and discussion may have a good effect on employees' reactions, an open communication strategy is advised to boost employee engagement and modify GHRPs.

Thirdly, the company has to help employees take advantage of technological advancements. Training and continuing education should be promoted by sector policies. The staff give them rewards. The performance of employees also be affected. Lastly, the policies of organization hierarchy remain same at all levels, especially in HR sector. Green HR practices promote sustainability in the workforce. This study synthesizes empirical research to align employee development, engagement, and performance improvement in organizations. It proposes an upward gain spiral model, incorporating resource caravan and exploring theoretical implications. Future research evaluate the effectiveness of each construct.

Green practices may boost employee performance and support sustainable growth with the help of this study's useful insights. The significance of incorporating green HRM practices into corporate strategies—like eco-friendly hiring procedures and environmental training initiatives—is emphasized. By implementing GHR principles, which necessitate significant employee empowerment, the study indicates that GHRPs in emerging economies can improve their effectiveness. Employee engagement programs are proven to improve motivation and performance, leading to increased attendance, productivity, and job satisfaction. These initiatives provide possibilities for professional growth, accomplishment recognition, and employee feedback, strengthening the relationship between employees and the company. By designing and implementing programs tailored to employee needs, these programs offer opportunities for employee feedback, professional development, and achievement recognition. Effective engagement programs not only

inspire workers but also increase their dedication to the organization's objectives, which eventually helps it succeed in the long run.

5.12 Limitations and Future Research

The recent study suggested a number of limitations for further investigation. First, a cross-sectional design was employed. In the future, data analysis require a longitudinal design. Second, the current work examines a unidimensional entity. Future studies can make advantage of the evaluation of the many GHRP aspects. Additionally, additional GHR components are used in the study to connect the association in subsequent research. The study recommends that future research take into account perceived organizational support for sustainability, green employee engagement, the moderating role of leadership style, and the green HR practices recommended in the literature on employee performance (Li et al, 2023). The study highlights social responsibility for future research because there aren't many studies on the subject, and it finds ways to improve employee performance in the health industry through green innovation and risk management techniques.

Future studies might concentrate on the three topics listed below: First, investigate in a group context the relationship between job performance and work engagement. Second, longitudinal research can confirm the causal link between an increase in employee performance and the growth of psychological capital. Finally, the influence process theoretical model may be examined using qualitative research. Future research should examine how the GHRP operates and what it does in developed and developing nations, how green citizens behave, and how for-profit and non-profit organizations operate. This literature review examines the impact of Green Human Resource Management (G-HRM) practices on employee green attitudes, satisfaction, behavior, and organizational green performance, aiming to guide leaders in adopting strategies that align with unique organizational challenges and opportunities (Majid et al, 2023).

Organizational results and work unit spirituality were influenced by the study's mapping of leaders' inner-life practices, vision, values, and spiritual behaviors. Nevertheless, it lacked empirical backing, indicating that this should be the main focus of future studies. Although the research covered a lot of ground, it only used data from one database—Scopus—which may have had pertinent articles. Additionally, the study exclusively included research publications written in English, which promotes the publication of peer-reviewed works written in other languages (Lata et al, 2021). Employee involvement was examined as a mediator in the study's analysis of the connection between performance and Green

Employee engagement. To find out more about the underlying mechanisms, future studies might look at other mechanisms like employee motivation, innovation, or green organizational culture (Islam et al, 2021).

5.13 Concluding Remarks

The results of this study demonstrated that GHRP improves employee performance. Regarding the connection between GHRPs and worker performance, worker engagement acts as a mediator. Additionally, we discovered that the effects of GHRP on spiritual leadership and staff engagement are moderated by GHRP perceptions. When workers feel they are performing at a high level, they are more willing to embrace new techniques, methods, and talents at work. The growing concern for sustainability and greening workplaces has led to the emergence of new research fields like Green Human Resource Management (GHRM), green supply chain, and green marketing. GHRM is a crucial management practice that aids organizations in reducing their carbon footprints and promoting business sustainability. According to the study, engagement serves as a mediator between GHRP and improved employee performance. GHRP's influence on employee engagement and spiritual leadership is moderated by perceptions of the program.

By enhancing their impressions of the caliber of their work, managers may empower their employees and inspire innovative behavior. Managers and decision-makers must pay close attention to innovative employee activities since they are crucial to the growth and viability of the company, particularly in higher education institutions. This research highlights the significance of embracing spiritual leadership in the workplace, which consists of beliefs, dispositions, and actions that motivate others to pursue greater objectives. This may be accomplished by managers by fostering a happy work environment, assigning duties that are consistent with principles, encouraging work-life balance, and letting staff members follow their passions. Data from IT businesses may have reduced the study's generalizability; better results would require future replication in different industry and cultural contexts. However, more study is needed to verify these relationships, especially in the industrial and services sectors. Knowledge sharing and creativity are mediated by workplace spirituality and intrinsic drive. Employee performance is examined in relation to green hiring, performance, and training. Providing creative ideas, promoting sustainable industrialization, and building strong infrastructure are the three objectives of Goal 9. For creative answers, promote sustainable industry, and build strong infrastructure. Concern for the environment and resources encourages and

drives innovation. Businesses are embracing the idea that resources shouldn't be used up faster than they can be replenished and that trash output shouldn't exceed the ecosystem's carrying capacity. This underscores the need for circular innovation strategies that align with the ideals of digital companies.

By emphasizing environmentally friendly initiatives, offering training, and rewarding green behavior, green HR practices may increase employee engagement, contentment, and devotion while also promoting a green culture inside the company. The paper proposes that green HR approaches, such as green hiring and training, may encourage employee green behavior and company social obligations by using the ability motivation opportunity theory. The study suggests that spiritual leadership in public sector organizations may not be as effective as it appears. It suggests that leaders should consider both their spiritual and actual needs, as spiritual needs encourage emotional interaction and creativity. Effective spiritual leadership can lead to personal and organizational benefits, such as job satisfaction, mental health, career motivation, and increased work engagement. This research could help organizations improve employee performance and contribute positively to the community. The environment and businesses both gain from green HR practices, which strike a balance between profit and the environment. They increase worker involvement and provide benefits for long-term sustainability. These practices are globally relevant and can create positive outcomes, paving the way for future research.

The study finds that putting Green HR strategies into practice greatly increases employee engagement (EE) and has a favorable effect on employee performance, with EE level being a key factor. A viewpoint frequently missed in previous research, the study emphasizes the need of active employee participation in guaranteeing sustainable progress through eco-friendly HR practices. Future studies should examine other mediators and tools in a variety of organizational contexts to further understand and strengthen the relationship between engaged workers and an organization's efforts. Green training, performance, and recruiting are significantly correlated with green HR strategies, which also balance profit and planet, increase employee engagement, and support sustainability. Because GHR is a new and untested idea, resistance and time restrictions may have hampered research participation. Our research concluded that GHR plays a critical role in an organization's sustainability, and the relevance of GHR in promoting desirable employee performance through GTD and GRC is demonstrated by the acceptance of study hypotheses. The indirect effect of GHR on employee performance through EE is mitigated

by green knowledge exchange. For this reason, EE, EP, and GHRP are crucial for workers and businesses. Furthermore, our study's shortcomings and ramifications offer a chance for more research in the same area.

References

- Aboramadan, M. (2022). The effect of green HRM on employee green behaviors in higher education: the mediating mechanism of green work engagement. *International Journal of Organizational Analysis*, 30(1), 7-23.
- Aboramadan, M., Dahleez, K., & Hamad, M. H. (2021). Servant leadership and academics outcomes in higher education: the role of job satisfaction. *International Journal of Organizational Analysis*, 29(3), 562-584.
- Abrahamse, W., & Steg, L. (2009). How So Socio-Demographic and Psychological Factors Relate to Households' Direct and Indirect Use of Energy and Savings? *Journal of Economic Psychology*, 30, 711-720.
- Ababneh, O. M., LeFevre, M., & Bentley, T. (2019). Employee engagement: Development of a new measure. *International Journal of Human Resources Development and Management*, 19(2), 105-134.
- 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.
- Afsar, B., Badir, Y., & Kiani, U. S. (2016). Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion. *Journal of Environmental Psychology*, 45, 79-88.
- Atiku, S. O., & Van Wyk, E. (2024). Leadership practices and work engagement in higher education: The mediating role of job demands-resources. *SAGE Open*, 14(1), 21582440241233378.

- Aina-Obe, S. B. (2022). Zakat and Social Responsibilities; An Integration for Public Administration Mechanism. *Journal of Management and Business Sciences*, 1(1), 126-136.
- AM, M. A., Helmi, S., Kassymova, G. K., Retnawati, H., Hadi, S., & Istiyono, E. (2022). Effect of job satisfaction on service quality mediated by lecturer performance at state universities. In *Materials of International Practical Internet Conference "Challenges of Science"* (pp. 62-71).
- Appelbaum, E. (2000). Manufacturing advantage: Why high-performance work systems pay off. *Economic Policy Institute*.
- Alraja, M. N., Imran, R., Khashab, B. M., & Shah, M. (2022). Technological innovation, sustainable green practices and SMEs sustainable performance in times of crisis (COVID-19 pandemic). *Information Systems Frontiers*, 24(4), 1081-1105.
- Algarni, M. A., & Alemeri, M. (2023). The role of employee engagement, job satisfaction and organizational commitment on happiness at work at a Saudi organization. *International Journal of Business and Management*, 18(2), 27.
- Aguinis, H. (2019). *Performance management for dummies*. John Wiley & Sons.
- Ahmad, S., Islam, T., Sadiq, M., & Kaleem, A. (2021). Promoting green behavior through ethical leadership: a model of green human resource management and environmental knowledge. *Leadership & Organization Development Journal*.
- Altinay, L., Dai, Y.-D., Chang, J., Lee, C.-H., Zhuang, W.-L., & Liu, Y.-C. (2019). How to facilitate hotel employees' work engagement: The roles of leader-member exchange, role overload and job security. *International Journal of Contemporary Hospitality Management*, 31(3), 1525-1542.

- Arasli, H., Nergiz, A., Yesiltas, M., & Gunay, T. (2020). Human resource management practices and service provider commitment of green hotel service providers: Mediating role of resilience and work engagement. *Sustainability*, 12(21), 9187.
- Alserhan, H., Omar, B., Falaki, N., Alkayed, I. Y., Aladwan, S. I., & Al-Hawary, S. I. S. (2024). Remote work arrangement: An investigation on the influence of team's innovative performance in multinational NGOs in Jordan. *International Journal of Data & Network Science*, 8(2).
- Ababneh, O. M., LeFevre, M., & Bentley, T. (2019). Employee engagement: Development of a new measure. *International Journal of Human Resources Development and Management*, 19(2), 105-134.
- Acquah, I. S. K., Agyabeng-Mensah, Y., & Afum, E. (2021). Examining the link among green human resource management practices, green supply chain management practices and performance. *Benchmarking: An International Journal*, 28(1), 267-290.
- Al-Alawneh, R., Othman, M., & Zaid, A. A. (2024). Green HRM impact on environmental performance in higher education with mediating roles of management support and green culture. *International Journal of Organizational Analysis*, 32(6), 1141-1164.
- Alayan, R., Rotich, B., & Lakner, Z. (2022). A comprehensive framework for forest restoration after forest fires in theory and practice: a systematic review. *Forests*, 13(9), 1354.
- Albrecht, S. L., & Marty, A. (2020). Personality, self-efficacy and job resources and their associations with employee engagement, affective commitment and turnover intentions. *The international journal of human resource management*, 31(5), 657-681.

- Ali, M., Puah, C. H., Ali, A., Raza, S. A., & Ayob, N. (2022). Green intellectual capital, green HRM and green social identity toward sustainable environment: a new integrated framework for Islamic banks. *International Journal of Manpower*, 43(3), 614-638.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Altaf, A., & Awan, M. A. (2011). Moderating affect of workplace spirituality on the relationship of job overload and job satisfaction. *Journal of business ethics*, 104, 93-99.
- Anwar, G., & Abdullah, N. N. (2021). The impact of Human resource management practice on Organizational performance. *International journal of Engineering, Business and Management (IJEEM)*, 5.
- Ari, E., Karatepe, O. M., Rezapouraghdam, H., & Avci, T. (2020). A conceptual model for green human resource management: Indicators, differential pathways, and multiple pro-environmental outcomes. *Sustainability*, 12(17), 7089.
- Alayan, R., Rotich, B., & Lakner, Z. (2022). A comprehensive framework for forest restoration after forest fires in theory and practice: a systematic review. *Forests*, 13(9), 1354.
- AlZgool, M., Ahmed, U., Shah, S., Alkadash, T., & AlMaamary, Q. (2021). Going green during COVID-19: Examining the links between green HRM, green supply chain and firm performance in food Industry of Bahrain: The moderating role of lockdown due to COVID-19. *Uncertain Supply Chain Management*, 9(1), 79-88.

- Anser, M. K., Shafique, S., Usman, M., Akhtar, N., & Ali, M. (2021). Spiritual leadership and organizational citizenship behavior for the environment: an intervening and interactional analysis. *Journal of Environmental Planning and Management*, 64(8), 1496-1514.
- Asghar, M., Gull, N., Tayyab, M., Zhijie, S., & Tao, X. (2020). Polychronicity at work: Work engagement as a mediator of the relationships between job outcomes. *Journal of Hospitality and Tourism Management*, 45, 470-478.
- Ari, E., Karatepe, O. M., Rezapouraghdam, H., & Avci, T. (2020). A conceptual model for green human resource management: Indicators, differential pathways, and multiple pro-environmental outcomes. *Sustainability*, 12(17), 7089.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.
- Ali, A., Wang, H., & Boekhorst, J. A. (2023). A moderated mediation examination of shared leadership and team creativity: a social information processing perspective. *Asia Pacific Journal of Management*, 40(1), 295-327.
- Agostino, M., & Ruberto, S. (2021). Environment-friendly practices: Family versus non-family firms. *Journal of Cleaner Production*, 329, 129689.
- Ali, M., Puah, C. H., Ali, A., Raza, S. A., & Ayob, N. (2022). Green intellectual capital, green HRM and green social identity toward sustainable environment: a new integrated framework for Islamic banks. *International Journal of Manpower*, 43(3), 614-638.
- Atiku, S. O., & Van Wyk, E. (2024). Leadership practices and work engagement in higher education: The mediating role of job demands-resources. *SAGE Open*, 14(1), 21582440241233378.

- Abdullahi, M. S., Raman, K., Solarin, S. A., Ahmed, U., Shehu, U. R., & Nashehu, H. U. H. (2023). Knowledge sharing behaviour on employee performance: a mediating role of employee engagement among teaching staff of Malaysian private universities. *International Journal of Business Information Systems*, 44(4), 508-535.
- Bednall, T. C., Sanders, K., & Runhaar, P. (2014). Stimulating informal learning activities through perceptions of performance appraisal quality and human resource management system strength: A two-wave study. *Academy of Management Learning & Education*, 13(1), 45-61.
- Bauman, D. C. (2013). Leadership and the three faces of integrity. *The leadership quarterly*, 24(3), 414-426.
- Baykal, E., & Bayraktar, O. (2022). Green human resources management: A novel tool to boost work engagement. *Frontiers in Psychology*, 13, 951963.
- Baykal, E., & Bayraktar, O. (2022). Green human resources management: A novel tool to boost work engagement. *Frontiers in Psychology*, 13, 951963.
- Bodhi, R., Chaturvedi, S., & Purohit, S. (2024). The influence of organizational commitment on employee green behavior: mediating role of work-related social media use. *International Journal of Manpower*.
- Boxall, P., & Purcell, J. (2022). *Strategy and human resource management*. Bloomsbury Publishing.
- Brien, A., Anthonisz, A., & Suhartanto, D. (2019). Human capital in the Dubai hotel industry: A study of four-and five-star hotels and the HR challenges they face. *Journal of Human Resources in Hospitality & Tourism*, 18(2), 240-258.

- Bayighomog, S. W., & Arasli, H. (2022). Reviving employees' essence of hospitality through spiritual wellbeing, spiritual leadership, and emotional intelligence. *Tourism Management*, 89, 104406.
- Bayighomog, S. W., & Araslı, H. (2019). Workplace spirituality–customer engagement Nexus: the mediated role of spiritual leadership on customer–oriented boundary–spanning behaviors. *The Service Industries Journal*, 39(7-8), 637-661.
- Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of psychology*, 144(3), 313-326.
- Baah, C., Opoku-Agyeman, D., Acquah, I. S. K., Agyabeng-Mensah, Y., Afum, E., Faibil, D., & Abdoulaye, F. A. M. (2021). Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs. *Sustainable Production and Consumption*, 27, 100-114.
- Chandani, A., Mehta, M., Mall, A., & Khokhar, V. (2016). Employee engagement: A review paper on factors affecting employee engagement. *Indian Journal of Science and Technology*, 9(15), 1-7.
- Chen, C. Y., Yang, C. Y., & Li, C. I. (2012). Spiritual leadership, follower mediators, and organizational outcomes: evidence from three industries across two major Chinese societies 1. *Journal of applied social psychology*, 42(4), 890-938
- Chowdhury, S. R., Mendy, J., & Rahman, M. (2023). A systematic literature review of GHRM: organizational sustainable performance reimagined using a new holistic framework. *Sustainability*, 15(9), 7513.

- Chen, C. Y., & Li, C. I. (2013). Assessing the spiritual leadership effectiveness: The contribution of follower's self-concept and preliminary tests for moderation of culture and managerial position. *The leadership quarterly*, 24(1), 240-255.
- Cao, T., Huang, X., Wang, L., Li, B., Dong, X., Lu, H., ... & Shang, S. (2020). Effects of organisational justice, work engagement and nurses' perception of care quality on turnover intention among newly licensed registered nurses: a structural equation modelling approach. *Journal of Clinical Nursing*, 29(13-14), 2626-2637.
- Chughtai, A., Byrne, M., & Flood, B. (2015). Linking ethical leadership to employee well-being: The role of trust in supervisor. *Journal of Business Ethics*, 128, 653-663.s
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human resource management*, 56(4), 613-627.
- Darvishmotevali, M., & Altinay, L. (2022). Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. *Tourism Management*, 88, 104401.
- Dira, A. F., Noor, G. P., Bangun, M. F. A., Kamal, F., & Utomo, K. P. (2024). The role of employee engagement in green HRM to create sustainable humanist performance. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi dan Bisnis*, 12(1), 527-538.
- Daily, B. F., Bishop, J. W., & Massoud, J. A. (2012). The role of training and empowerment in environmental performance: A study of the Mexican maquiladora industry. *International Journal of operations & production management*, 32(5), 631-647.

- Dorta-Afonso, D., Romero-Domínguez, L., & Benítez-Núñez, C. (2023). It's worth it! High performance work systems for employee job satisfaction: The mediational role of burnout. *International Journal of Hospitality Management*, 108, 103364.
- Dewi, N. L. P. N. S., Agustina, M. D. P., & Kusyana, D. N. B. (2021). Memaksimalkan kinerja karyawan melalui peningkatan employee engagement dan budaya organisasi. *Widya Amrita: Jurnal Manajemen, Kewirausahaan Dan Pariwisata*, 1(2), 550-560.
- Elbaz, J., & Iddik, S. (2020). Culture and green supply chain management (GSCM) A systematic literature review and a proposal of a model. *Management of Environmental Quality: An International Journal*, 31(2), 483-504.
- Ewim, D. R. E. (2023). Integrating Business principles in STEM Education: fostering entrepreneurship in students and educators in the US and Nigeria. *IJEED (International Journal of Entrepreneurship and Business Development)*, 6(4), 590-605.
- Fry, L. W., Vitucci, S., & Cedillo, M. (2005). Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline. *The leadership quarterly*, 16(5), 835-862.
- Fry, L. W., Hannah, S. T., Noel, M., & Walumbwa, F. O. (2011). RETRACTED: Impact of spiritual leadership on unit performance.
- Fry, L. W., & Cohen, M. P. (2009). Spiritual leadership as a paradigm for organizational transformation and recovery from extended work hours cultures. *Journal of business ethics*, 84, 265-278.
- Fairholm, M. R., & Gronau, T. W. (2015). Spiritual leadership in the work of public administrators. *Journal of Management, Spirituality & Religion*, 12(4), 354-373.

- Farrukh, M., Ansari, N., Raza, A., Wu, Y., & Wang, H. (2022). Fostering employee's pro-environmental behavior through green transformational leadership, green human resource management and environmental knowledge. *Technological Forecasting and Social Change*, 179, 121643.
- Febrian, W. D., & Solihin, A. (2024). Analysis of improving organizational culture through employee engagement, talent management, training and development human resources. *Siber Journal of Advanced Multidisciplinary*, 1(4), 185-195.
- Festiningtyas, R., & Gilang, A. (2020). The influence of motivation on employee performance. *Almana: Jurnal Manajemen dan Bisnis*, 4(1), 124-128.
- Fry, L. W., Latham, J. R., Clinebell, S. K., & Krahne, K. (2017). Spiritual leadership as a model for performance excellence: a study of Baldrige award recipients. *Journal of Management, Spirituality & Religion*, 14(1), 22-47.
- Gallup, I. (2020). How to improve employee engagement in the workplace. *Gallup. Com*.
- Ghouri, A. M., Mani, V., Khan, M. R., Khan, N. R., & Srivastava, A. P. (2020). Enhancing business performance through green human resource management practices: an empirical evidence from Malaysian manufacturing industry. *International Journal of productivity and Performance management*, 69(8), 1585-1607.
- Gallup, I. (2023). State of the global workplace: 2022 report. *Gallup. com*. Retrieved February, 27, 2023.
- Giauque, D., Renard, K., Cornu, F., & Emery, Y. (2022). Engagement, exhaustion, and perceived performance of public employees before and during the COVID-19 crisis. *Public Personnel Management*, 51(3), 263-290.

- Govender, M., & Bussin, M. H. (2020). Performance management and employee engagement: A South African perspective. *SA Journal of Human Resource Management*, 18(1), 1-19.
- Guerci, M., Radaelli, G., De Battisti, F., & Siletti, E. (2017). Empirical insights on the nature of synergies among HRM policies-An analysis of an ethics-oriented HRM system. *Journal of Business Research*, 71, 66-73.
- Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human resource management journal*, 27(1), 22-38.
- Guterres, L. F. D. C., Armanu, A., & Rofiaty, R. (2020). The role of work motivation as a mediator on the influence of education-training and leadership style on employee performance. *Management Science Letters*, 10(7), 1497-1504.
- Hakem, H., & Kameli, M. (2021). A standard study of the possibility of applying green human resources management at the Algerian University using the program SPSS. *MO'assira Economic Research*, 4(2), 497-510.
- Hasibuan, J. S., & Wayhuni, S. F. (2022). Spiritual Leadership dan Emotional Intelligence Terhadap Organizational Citizenship Behavior: Peran Mediasi Workplace Spirituality dan Job Satisfaction. *Jurnal Ilmiah Manajemen Dan Bisnis*, 23(1), 93-108.
- Hossain, M. M., Islam, K. Z., Al Masud, A., Biswas, S., & Hossain, M. A. (2021). Behavioral intention and continued adoption of Facebook: An exploratory study of graduate students in Bangladesh during the Covid-19 pandemic. *Management*, 25(2), 153-186.

- Hailey, V. H., Farndale, E., & Truss, C. (2005). The HR department's role in organisational performance. *Human resource management journal*, 15(3), 49-66.
- 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.
- Hooi, L. W., Liu, M. S., & Lin, J. J. (2022). Green human resource management and green organizational citizenship behavior: do green culture and green values matter?. *International Journal of Manpower*, 43(3), 763-785.
- Hadjri, M. I., Perizade, B., Zunaidah, Z., & WK, W. F. (2020). Green Human Resource Management dan Kinerja Lingkungan: Studi Kasus pada Rumah Sakit di Kota Palembang. *Inovbiz: Jurnal Inovasi Bisnis*, 8(2), 182-192.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Haerani, S., Sumardi, Hakim, W., Hartini, & Putra, A. H. P. K. (2020). Structural Model of Developing Human Resources Performance: Empirical Study of Indonesia States Owned Enterprises. *The Journal of Asian Finance, Economics and Business*, 7(3), 211–221. <https://doi.org/10.13106/jafeb.2020.vol7.no3.211>
- 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.
- Herawati, R., & Tjahjono, H. K. (2020). The influence of instructional leadership on professional competence mediated by self-efficacy and social capital. *Jurnal Manajemen Bisnis*, 11(2), 202-213.s

- Heslin, P. A., Keating, L. A., & Ashford, S. J. (2020). How being in learning mode may enable a sustainable career across the lifespan. *Journal of Vocational Behavior*, 117, 103324.
- Hwang, W. J., & Park, E. H. (2022). Developing a structural equation model from Grandey's emotional regulation model to measure nurses' emotional labor, job satisfaction, and job performance. *Applied Nursing Research*, 64, 151557.
- Iftikar, T., Hussain, S., Malik, M. I., Hyder, S., Kaleem, M., & Saqib, A. (2022). Green human resource management and pro-environmental behaviour nexus with the lens of AMO theory. *Cogent business & management*, 9(1), 2124603.
- Islam, T., Khan, M. M., Ahmed, I., & Mahmood, K. (2021). Promoting in-role and extra-role green behavior through ethical leadership: mediating role of green HRM and moderating role of individual green values. *International Journal of Manpower*, 42(6), 1102-1123.
- Imran, R., Alraja, M. N., & Khashab, B. (2021). Sustainable performance and green innovation: Green human resources management and big data as antecedents. *IEEE Transactions on Engineering Management*, 70(12), 4191-4206.
- Islam, M. A., Jantan, A. H., Yusoff, Y. M., Chong, C. W., & Hossain, M. S. (2023). Green Human Resource Management (GHRM) practices and millennial employees' turnover intentions in tourism industry in malaysia: Moderating role of work environment. *Global Business Review*, 24(4), 642-662.
- Imam, H., Sahi, A., & Farasat, M. (2022). The roles of supervisor support, employee engagement and internal communication in performance: a social exchange perspective. *Corporate Communications: An International Journal*, 28(3), 489-505.

- Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., & Ilyas, S. (2020). Impact of perceived organizational support on work engagement: Mediating mechanism of thriving and flourishing. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 82.
- Jeremiah, A., Atiku, S. O., & Villet, H. J. (2023). Leadership effectiveness and sustainability of State-Owned Enterprises. In *Leadership and Governance for Sustainability* (pp. 55-80). IGI Global.
- Jabbour, E., & Kantarjian, H. (2016). Chronic myeloid leukemia: 2016 update on diagnosis, therapy, and monitoring. *American journal of hematology*, 91(2), 252-265.
- Jermstittiparsert, K., Siriattakul, P., & Wattanapongphasuk, S. (2019). Determining the environmental performance of Indonesian SMEs influence by green supply chain practices with moderating role of green HR practices. *International Journal of Supply Chain Management*, 8(3), 59-70.
- Jerónimo, H. M., Henriques, P. L., de Lacerda, T. C., da Silva, F. P., & Vieira, P. R. (2020). Going green and sustainable: The influence of green HR practices on the organizational rationale for sustainability. *Journal of business research*, 112, 413-421.
- Joshi, G., & Dhar, R. L. (2020). Green training in enhancing green creativity via green dynamic capabilities in the Indian handicraft sector: The moderating effect of resource commitment. *Journal of Cleaner Production*, 267, 121948.
- Johansen, M. S., & Sowa, J. E. (2019). Human resource management, employee engagement, and nonprofit hospital performance. *Nonprofit Management and Leadership*, 29(4), 549-567.

- Kerdpitak, C., & Jernsittiparsert, K. (2020). The impact of human resource management practices on competitive advantage: Mediating role of employee engagement in Thailand. *Systematic Reviews in Pharmacy*, 11(1), 443-452.
- KA, Z., & Aboobaker, N. (2021). Spiritual leadership and intention to stay: examining the mediating role of employee voice behaviour. *Journal of Management Development*, 40(5), 352-364.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Kessi, A. M. P., Suwardi, W. Z., Mukhtar, A., Asmawiyah, A., & AR, D. P. (2022). Islamic leadership, emotional intelligence, and spiritual intelligence on passion of work and performance. *Golden Ratio of Human Resource Management*, 2(1), 15-26.
- Kruja, D., Ha, H., Drishti, E., & Oelfke, T. (2016). Empowerment in the hospitality industry in the United States. *Journal of Hospitality Marketing & Management*, 25(1), 25-48.
- Karadag, A., Korkmaz, N., Aydın, A., & Akbas, H. (2020). S-. Tekin, Y. Yerli and F. S-en. *Sci. Rep*, 10, 1-17.
- Kurniawati, E. (2023). The The Development of Green Human Resources Management in Indonesia. *JMK (Jurnal Manajemen dan Kewirausahaan)*, 8(2), 146-156.
- Khan, M. I., Usman, M., Rizwan, S. A., & Hanif, A. (2019). Self-consolidating lightweight concrete incorporating limestone powder
- Kabil, M., Ali, M. A., Marzouk, A., & Dávid, L. D. (2024). Gender perspectives in tourism studies: A comparative bibliometric analysis in the MENA region. *Tourism Planning & Development*, 21(3), 276-298.

- Kalogiannidis, S. (2021). Impact of employee motivation on organizational performance. A scoping review paper for public sector. *The Strategic Journal of Business & Change Management*, 8 (3), 984, 996(3).
- Karatepe, O. M., Hsieh, H., & Aboramadan, M. (2022). The effects of green human resource management and perceived organizational support for the environment on green and non-green hotel employee outcomes. *International Journal of Hospitality Management*, 103, 103202.
- Khan, A. J., Ul Hameed, W., Iqbal, J., Shah, A. A., Tariq, M. A. U. R., & Bashir, F. (2022). Green HRM and employee efficiency: The mediating role of employee motivation in emerging small businesses. *Frontiers in Environmental Science*, 10, 1044629.
- Khong, I. (2023). The Circular Economy's Performance and the Impact of Digitalization. *International Transactions on Education Technology (ITEE)*, 2(1), 18-23.
- Li, W., Abdalla, A. A., Mohammad, T., Khassawneh, O., & Parveen, M. (2023). Towards examining the link between green HRM practices and employee green in-role behavior: Spiritual leadership as a moderator. *Psychology Research and Behavior Management*, 383-396.
- Lim, H. S., & Shin, S. Y. (2021). Effect of learning goal orientation on performance: Role of task variety as a moderator. *Journal of Business and Psychology*, 36(5), 871-881.
- Leal Filho, W., Trevisan, L. V., Rampasso, I. S., Anholon, R., Dinis, M. A. P., Brandli, L. L., ... & Mazutti, J. (2023). When the alarm bells ring: Why the UN sustainable development goals may not be achieved by 2030. *Journal of Cleaner Production*, 407, 137108.

- Lata, M., & Chaudhary, R. (2021). Workplace spirituality and experienced incivility at work: Modeling Dark Triad as a moderator. *Journal of Business Ethics*, 174(3), 645-667.
- Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A conceptual review of human resource management systems in strategic human resource management research. *Research in personnel and human resources management*, 217-271.
- Luu, T. T. (2018). Employees' green recovery performance: the roles of green HR practices and serving culture. *Journal of Sustainable Tourism*, 26(8), 1308-1324.
- Luu, T. T. (2019). Building employees' organizational citizenship behavior for the environment: The role of environmentally-specific servant leadership and a moderated mediation mechanism. *International Journal of Contemporary Hospitality Management*, 31(1), 406-426.
- Lahmar, H., Chaouki, F., & Rodhain, F. (2023). Spiritual Leadership and Organizational Commitment: A 21-year Systematic Literature Review. *Journal of Human Values*, 29(3), 177-199.
- Lim, S. E. (2022). Job crafting to innovative and extra-role behaviors: A serial mediation through fit perceptions and work engagement. *International Journal of Hospitality Management*, 106, 103288.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: exploring the link between high-performance work systems and performance. *Journal of applied psychology*, 96(6), 1105.
- Maxwell, G. A., & Watson, S. (2006). Perspectives on line managers in human resource management: Hilton International's UK hotels. *The International Journal of Human Resource Management*, 17(6), 1152-1170.

- Manel, D. R., Bani, I., & Hidayat, F. (2023). Analyzing the effect of organizational commitment, spiritual motivation and spiritual leadership on employee performance through job satisfaction. *International Journal of Finance, Economics and Business*, 2(1), 34-43.
- Majid, F., Raziq, M. M., Memon, M. A., Tariq, A., & Rice, J. L. (2023). Transformational leadership, job engagement, and championing behavior: assessing the mediating role of role clarity. *European Business Review*, 35(6), 941-963.
- Maidl, L., Seemann, A. K., Frick, E., Gündel, H., & Paal, P. (2022). Leveraging spirituality and religion in European for-profit-organizations: A systematic review. *Humanistic Management Journal*, 7(1), 23-53.
- Moradeke, F. T., Ishola, G. K., & Okikiola, O. L. (2021). Green training and development practices on environmental sustainability: evidence from WAMCO PLC. *Journal of Educational Management and Social Sciences*, 2(1), 1-19.
- Mousa, S. K., & Othman, M. (2020). The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework. *Journal of cleaner production*, 243, 118595.
- Masri, H. A., & Jaaron, A. A. (2017). Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. *Journal of cleaner production*, 143, 474-489.
- Marin-Garcia, J. A., & Tomas, J. M. (2016). Deconstructing AMO framework: A systematic review. *Intangible capital*, 12(4), 1040-1087.
- Munawar, S., Yousaf, H. Q., Ahmed, M., & Rehman, S. (2022). Effects of green human resource management on green innovation through green human capital,

- environmental knowledge, and managerial environmental concern. *Journal of Hospitality and Tourism Management*, 52, 141-150.
- Messabia, N., Fomi, P. R., & Kooli, C. (2022). Managing restaurants during the COVID-19 crisis: Innovating to survive and prosper. *Journal of Innovation & Knowledge*, 7(4), 100234.
- Majid, F., Raziq, M. M., Memon, M. A., Tariq, A., & Rice, J. L. (2023). Transformational leadership, job engagement, and championing behavior: assessing the mediating role of role clarity. *European Business Review*, 35(6), 941-963.
- Margaretha, M., Saragih, S., Zaniarti, S., & Parayow, B. (2021). Workplace spirituality, employee engagement, and professional commitment: A study of lecturers from Indonesian universities. *Problems and Perspectives in Management*, 19(2), 346.
- Nguyen, M. H., Luan, N. V., & Khoa, B. T. (2021). Employer attractiveness and employee performance: An exploratory study. *Journal of System and Management Sciences*, 11(1), 97-123.
- Nayak, B. C., Nayak, G. K., & Jena, D. (2020). Social recognition and employee engagement: The effect of social media in organizations. *International Journal of Engineering Business Management*, 12, 1847979020975109.
- Naseer, S. A., Mukhtar, S., & Gul, M. (2023). GREEN HRM & JOB PERFORMANCE: UNVEILING PATHWAY THROUGH JOB SATISFACTION. *Journal of Social Research Development*, 4(2).
- Nisar, Q. A., Haider, S., Ali, F., Gill, S. S., & Waqas, A. (2024). The role of green HRM on environmental performance of hotels: Mediating effect of green self-efficacy & employee green behaviors. *Journal of Quality Assurance in Hospitality & Tourism*, 25(1), 85-118.

- North, G. (2023). Reconceptualising ‘reasonable adjustments’ for the successful employment of autistic women. *Disability & Society*, 38(6), 944-962.
- Obuobisa-Darko, T. (2020). Ensuring employee task performance: Role of employee engagement. *Performance Improvement*, 59(8), 12-23.
- Ojo, A. O., & Raman, M. (2019). Role of green HRM practices in employees’ pro-environmental IT practices. In *New Knowledge in Information Systems and Technologies: Volume 1* (pp. 678-688). Springer International Publishing.
- Ojo, A. O., Tan, C. N. L., & Alias, M. (2022). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, 18(1), 1-18.
- Obschonka, M., Pavez, I., Kautonen, T., Kibler, E., Salmela-Aro, K., & Wincent, J. (2023). Job burnout and work engagement in entrepreneurs: How the psychological utility of entrepreneurship drives healthy engagement. *Journal of Business Venturing*, 38(2), 106272.
- Oh, J., & Wang, J. (2020). Spiritual leadership: Current status and Agenda for future research and practice. *Journal of Management, Spirituality & Religion*, 17(3), 223-248.
- Oktavianti, N. (2020). Pengaruh Motivasi dan Kepuasan Kerja terhadap Kinerja Kerja Karyawan PT. DEW Indonesia. *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 3(2), 148-155.

- Pallavi, E. V. P. A. S., & Bhanu, M. V. V. (2016). Green HRM: A way for corporate sustainability. *International Journal of Human Resource Management and Research (IJHRMR)*, 6(2), 13-20.
- PUTRA, A. H. P. K. (2020). Structural model of developing human resources performance: empirical study of Indonesia states owned enterprises.
- Pinzone, M., Guerci, M., Lettieri, E., & Huisingh, D. (2019). Effects of ‘green’ training on pro-environmental behaviors and job satisfaction: Evidence from the Italian healthcare sector. *Journal of cleaner production*, 226, 221-232.
- Paliga, M. (2022). Human–cobot interaction fluency and cobot operators’ job performance. The mediating role of work engagement: A survey. *Robotics and Autonomous Systems*, 155, 104191.
- Pham, N. T., Thanh, T. V., Tučková, Z., & Thuy, V. T. N. (2020). The role of green human resource management in driving hotel’s environmental performance: Interaction and mediation analysis. *International Journal of hospitality management*, 88, 102392.
- Piwowar-Sulej, K., & Iqbal, Q. (2023). Leadership styles and sustainable performance: A systematic literature review. *Journal of Cleaner Production*, 382, 134600.
- Peters, J. (2019). *EMPLOYEE ENGAGEMENT: Creating High Positive Energy at Work; creating High Positive Energy at Work*. Knowledge Resources.
- Prasad, R. (2022). A study on the Analyzing the Implementation of Green HRM Practices in Selected Companies in Chhattisgarh. *TECHNO REVIEW Journal of Technology and Management*, 2(3), 7-13.

- Pacheco, P. O., & Coello-Montecel, D. (2023). Does psychological empowerment mediate the relationship between digital competencies and job performance?. *Computers in Human Behavior*, 140, 107575.
- Pandey, D. L., & Risal, N. (2025). Green HRM practices and employee performance of Nepalese commercial banks: Test of AMO model. *International Journal of Innovative Research and Scientific Studies*, 8(1), 1789-1805.
- Pandey, D. L., & Risal, N. (2025). Green HRM practices and employee performance of Nepalese commercial banks: Test of AMO model. *International Journal of Innovative Research and Scientific Studies*, 8(1), 1789-1805.
- Qudus, A., Khan, S. U., Parmar, V., Naeem, M., Husnain, M., & Tabassum, M. F. (2022). Spiritual leadership impact on teacher's performance and life satisfaction through spiritual well-being. *Indian Journal of Economics and Business*, 21(2), 385-408.
- Rajabpour, E., Fathi, M. R., & Torabi, M. (2022). Analysis of factors affecting the implementation of green human resource management using a hybrid fuzzy AHP and type-2 fuzzy DEMATEL approach. *Environmental Science and Pollution Research*, 29(32), 48720-48735.
- Rahmadalena, T., & Asmanita, A. (2020). Pengaruh Employee Engagement, Karakteristik Pekerjaan Terhadap Kinerja Karyawan Pada PT. Bukit Asam, TBK Unit Dermaga Kertapati Palembang. *Jurnal Ilmiah Bina Manajemen*, 3(2), 68-76.
- Rayner, J., & Morgan, D. (2018). An empirical study of 'green' workplace behaviours: ability, motivation and opportunity. *Asia Pacific Journal of Human Resources*, 56(1), 56-78.

- Riana, G. (2022). Spiritual leadership on organizational commitment and organizational commitment on organizational performance. *International Journal of Financial Engineering*, 9(01), 2150039.
- Roscoe, S., Subramanian, N., Jabbour, C. J., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, 28(5), 737-749.
- Rizvi, Y. S., & Garg, R. (2021). 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.
- Rashid, S. A. R., & Al Qaseer, M. A. (2022). Testing The Mediating Role Of Green Psychological Empowerment Of Employees In Enhancing The Relationship Between Green Human Resource Management Practices And Organizational Sustainability. *Journal of Positive School Psychology*, 3138-3153.
- Riyanto, S., Endri, E., & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162.
- Renwick, D. W., Jabbour, C. J., Muller-Camen, M., Redman, T., & Wilkinson, A. (2016). Contemporary developments in Green (environmental) HRM scholarship. *The International Journal of Human Resource Management*, 27(2), 114-128.
- Rodwell, J., McWilliams, J., & Gulyas, A. (2017). The impact of characteristics of nurses' relationships with their supervisor, engagement and trust, on performance behaviours and intent to quit. *Journal of advanced nursing*, 73(1), 190-200.

- Saeed, B. B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M. A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424-438.
- Ramanayake, M. N., Gurugamage, S. R., Iddagoda, A., & Dissanayake, D. H. S. W. (2022). Mediating role of employee engagement on the relationship between Green HRM and employee job performance: a study of banking sector.
- Ramanayake, M. N., Gurugamage, S. R., Iddagoda, A., & Dissanayake, D. H. S. W. (2022). Mediating role of employee engagement on the relationship between Green HRM and employee job performance: a study of banking sector.
- Rijal, R. (2023). Impacts of Green HRM Practices in Employee Environmental Commitment in the Context of Nepalese Manufacturing Industry. *Interdisciplinary Journal of Innovation in Nepalese Academia*, 2(2), 189-201.
- Rijal, R. (2023). Impacts of Green HRM Practices in Employee Environmental Commitment in the Context of Nepalese Manufacturing Industry. *Interdisciplinary Journal of Innovation in Nepalese Academia*, 2(2), 189-201.
- Rivaldo, Y., & Ratnasari, S. L. (2020). Pengaruh kepemimpinan dan motivasi terhadap kepuasan kerja serta dampaknya terhadap kinerja karyawan. *Jurnal Dimensi*, 9(3), 505-515.
- Saleem, M., Qadeer, F., Mahmood, F., Ariza-Montes, A., & Han, H. (2020). Ethical leadership and employee green behavior: A multilevel moderated mediation analysis. *Sustainability*, 12(8), 3314.

- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2003). Utrecht work engagement scale-9. *Educational and Psychological Measurement*.
- Suleman, A. R., Bingab, B. B. B., Boakye, K. O., & Sam-Mensah, R. (2022). Job rotation practices and employees performance: do job satisfaction and organizational commitment matter?. *SEISENSE Business Review*, 2(1), 13-27.
- Saragih, R., & Prasetio, A. P. (2020). Effective human resources practice and employee engagement: The Mediating roles of organizational support. *Available at SSRN 3551058*.
- Shafaei, A., Nejati, M., & Yusoff, Y. M. (2020). Green human resource management: A two-study investigation of antecedents and outcomes. *International Journal of Manpower*, 41(7), 1041-1060.
- Sánchez-Sellero, P., & Bataineh, M. J. (2022). How R&D cooperation, R&D expenditures, public funds and R&D intensity affect green innovation?. *Technology Analysis & Strategic Management*, 34(9), 1095-1108.
- Shahzad, M. F., Xu, S., Lim, W. M., Yang, X., & Khan, Q. R. (2024). Artificial intelligence and social media on academic performance and mental well-being: Student perceptions of positive impact in the age of smart learning. *Heliyon*, 10(8).
- Sekaran, U. (2009). *Research Methods for Business*, 4th Edn. Hoboken, NJ: John Wiley & Sons
- Sapta, I. K. S., Rustiarini, N. W., Kusuma, I. G. A. E. T., & Astakoni, I. M. P. (2021). Spiritual leadership and organizational commitment: The mediation role of workplace spirituality. *Cogent Business & Management*, 8(1), 1966865.

- Suprayitno, D., & Hermawan, E. (2022). The Effect of Organizational Climate and Competence on The Performance of PT. Saharjo Enam Sembilan. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 19(3), 929-944.
- Samul, J. (2019). Spiritual leadership: Meaning in the sustainable workplace. *Sustainability*, 12(1), 267.
- Stam, D., Lord, R. G., Knippenberg, D. V., & Wisse, B. (2014). An image of who we might become: Vision communication, possible selves, and vision pursuit. *Organization Science*, 25(4), 1172-1194.
- Supriyanto, A. S., Ekowati, V. M., & Maghfuroh, U. (2020). Do organizational citizenship behavior and work satisfaction mediate the relationship between spiritual leadership and employee performance. *Management Science Letters*, 10(5), 1107-1114.
- Saeed, A., Rasheed, F., Waseem, M., & Tabash, M. I. (2021). Green human resource management and environmental performance: the role of green supply chain management practices. *Benchmarking: An International Journal*, 29(9), 2881-2899.
- Shoaib, M., Abbas, Z., Yousaf, M., Zámečník, R., Ahmed, J., & Saqib, S. (2021). The role of GHRM practices towards organizational commitment: A mediation analysis of green human capital. *Cogent Business & Management*, 8(1), 1870798.
- Saleem, Z., Shenbei, Z., & Hanif, A. M. (2020). Workplace violence and employee engagement: The mediating role of work environment and organizational culture. *Sage Open*, 10(2), 2158244020935885.s
- Sharma, N., & Singh, V. K. (2018). Psychological empowerment and employee engagement: Testing the mediating effects of constructive deviance in Indian IT Sector. *International Journal of Human Capital and Information Technology*

- Professionals (IJHCITP)*, 9(4), 44-55. Samo, A. H., Talreja, S., Bhatti, A. A., Asad, S. A., & Hussain, L. (2020). Branding yields better harvest: explaining the mediating role of employee engagement in employer branding and organizational outcomes. *Etikonomi: Jurnal Ekonomi*, 19(1), 77-94.
- Schleu, J. E., & Hüffmeier, J. (2021). Simply the best? A systematic literature review on the predictive validity of employee performance for leader performance. *Human Resource Management Review*, 31(2), 100777.
- Sari, A., Zamzam, F., & Syamsudin, H. (2020). Pengaruh kepemimpinan, kompensasi, dan motivasi terhadap kinerja karyawan. *Jurnal Nasional Manajemen Pemasaran & SDM*, 1(2), 1-18.
- Shantz, A., Schoenberg, J., & Chan, C. (2013). Relevance of employee engagement across cultures from the perspective of HR professional associations. In *Employee engagement in theory and practice* (pp. 253-272). Routledge.
- Shen, J., Dumont, J., & Deng, X. (2018). Retracted: Employees' perceptions of green HRM and non-green employee work outcomes: The social identity and stakeholder perspectives. *Group & Organization Management*, 43(4), 594-622. Salehan, S., Rao, D. G., Soepriyadi, I., Nuryana, A., & Laturmas, Y. (2022). Analysis of the influence organizational control system and trust on employee performance. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(3).
- Subramanian, N., Abdulrahman, M. D., Wu, L., & Nath, P. (2016). Green competence framework: Evidence from China. *The International Journal of Human Resource Management*, 27(2), 151-172.

- Singh, S. K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological forecasting and social change*, 150, 119762.
- Saleh, I., Abu Afifa, M., & Alsufy, F. (2020). Does earnings quality affect companies' performance? New evidence from the Jordanian market. *The Journal of Asian Finance, Economics and Business*, 7(11), 33-43.
- Samina, Q. S., & Hossain, M. N. (2019). Current position of banks in the practice of green banking in Bangladesh: An analysis on private sector commercial banks in Bangladesh. Samina, QS, & Hossain, MN (2019). *Current Position of Banks in the Practice of Green Banking in Bangladesh: An Analysis on Private Sector Commercial Banks in Bangladesh*. SSRN Electronic Journal.
- Schleu, J. E., & Hüffmeier, J. (2021). Simply the best? A systematic literature review on the predictive validity of employee performance for leader performance. *Human Resource Management Review*, 31(2), 100777.
- Shin, M., Back, K. J., Lee, C. K., & Lee, Y. S. (2020). Enhancing customer-brand relationship by leveraging loyalty program experiences that foster customer-brand identification. *International Journal of Contemporary Hospitality Management*, 32(12), 3991-4016.
- Silva, S. (2021). Corporate contributions to the Sustainable Development Goals: An empirical analysis informed by legitimacy theory. *Journal of Cleaner Production*, 292, 125962.

- Sukoco, I., Fu'adah, D. N., & Muttaqin, Z. (2021). Work engagement karyawan generasi milenial pada PT. X Bandung. *AdBispreneur: Jurnal Pemikiran dan Penelitian Administrasi Bisnis dan Kewirausahaan*, 5(3), 263-281.
- Susanto, A. (2023). The role of green human resources management (GHRM) on job satisfaction and green work engagement (GWE): an empirical study on manufacturing industries. *Journal of Economics, Finance and Management Studies*, 6(03), 1-18.
- Sweeney, P. J., & Fry, L. W. (2012). Character development through spiritual leadership. *Consulting psychology journal: practice and research*, 64(2), 89.
- Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2018). Green human resource management practices: scale development and validity. *Asia pacific journal of human resources*, 56(1), 31-55.
- Tanveer, M. I., Yusliza, M. Y., & Fawehinmi, O. (2024). Green HRM and hospitality industry: challenges and barriers in adopting environmentally friendly practices. *Journal of Hospitality and Tourism Insights*, 7(1), 121-141.
- Tensay, A. T., & Singh, M. (2020). The nexus between HRM, employee engagement and organizational performance of federal public service organizations in Ethiopia. *Heliyon*, 6(6).
- Tisu, L., Lupşa, D., Vîrgă, D., & Rusu, A. (2020). Personality characteristics, job performance and mental health: the mediating role of work engagement. *Personality and Individual Differences*, 153, 109644.
- Tensay, A. T., & Singh, M. (2020). The nexus between HRM, employee engagement and organizational performance of federal public service organizations in Ethiopia. *Heliyon*, 6(6).

- Tabor, W., Madison, K., Marler, L. E., & Kellermanns, F. W. (2020). The effects of spiritual leadership in family firms: A conservation of resources perspective. *Journal of Business Ethics*, 163(4), 729-743.
- Tanova, C., & Bayighomog, S. W. (2022). Green human resource management in service industries: the construct, antecedents, consequences, and outlook. *The Service Industries Journal*, 42(5-6), 412-452.
- Utami, V. P., & Zakiy, M. (2020). Linking leader member exchange and person supervisor fit with employee performance: The mediating role of employee work engagement. *Journal of Leadership in Organizations*, 2(2).
- Ugarte, S. M., & Rubery, J. (2021). Gender pay equity: Exploring the impact of formal, consistent and transparent human resource management practices and information. *Human Resource Management Journal*, 31(1), 242-258.
- Úbeda-García, M., Marco-Lajara, B., Zaragoza-Sáez, P. C., Manresa-Marhuenda, E., & Poveda-Pareja, E. (2022). Green ambidexterity and environmental performance: The role of green human resources. *Corporate Social Responsibility and Environmental Management*, 29(1), 32-45.
- Vu, M. C. (2023). Sensemaking and spirituality: the process of re-centring self-decentralisation at work. *The InTernaTional Journal of human resource management*, 34(7), 1411-1441.
- Wang, M., Guo, T., Ni, Y., Shang, S., & Tang, Z. (2019). The effect of spiritual leadership on employee effectiveness: An intrinsic motivation perspective. *Frontiers in psychology*, 9, 2627.

- Wang, Q., Khan, S. N., Sajjad, M., Sarki, I. H., & Yaseen, M. N. (2023). Mediating role of entrepreneurial work-related strains and work engagement among job demand–resource model and success. *Sustainability*, 15(5), 4454.
- Widodo, D. S., & Yandi, A. (2022). Model kinerja karyawan: kompetensi, kompensasi dan motivasi,(Literature Review MSDM). *Jurnal Ilmu Multidisplin*, 1(1), 1-14.
- Yong, J. Y., Yusliza, M. Y., Jabbour, C. J. C., & Ahmad, N. H. (2020). Exploratory cases on the interplay between green human resource management and advanced green manufacturing in light of the Ability-Motivation-Opportunity theory. *Journal of Management Development*, 39(1), 31-49.
- Yong, J. Y., Yusliza, M. Y., Ramayah, T., & Fawehinmi, O. (2019). Nexus between green intellectual capital and green human resource management. *Journal of cleaner production*, 215, 364-374.
- Yan, R., Basheer, M. F., Irfan, M., & Rana, T. N. (2020). Role of psychological factors in employee well-being and employee performance: an empirical evidence from Pakistan. *Revista Argentina de Clínica Psicológica*, 29(5), 638.
- Yousf, A., & Khurshid, S. (2024). Impact of employer branding on employee commitment: employee engagement as a mediator. *Vision*, 28(1), 35-46.
- Yap Peng Lok, S., & Chin, T. L. (2019). Linking Green HRM Practices and Employee Sustainability Engagement. *Global Business & Management Research*, 11(2).
- Yin, Q. (2023). The Impact of Green Human Resource Management on Organizational Performance. *Front. Bus. Econ. Manag*, 11, 112-115.
- Yuan, Y., Ren, S., Tang, G., Ji, H., Cooke, F. L., & Wang, Z. (2024). How green human resource management affects employee voluntary workplace green behaviour: An integrated model. *Human Resource Management Journal*, 34(1), 91-121.

- Yu, W., Chavez, R., Feng, M., Wong, C. Y., & Fynes, B. (2020). Green human resource management and environmental cooperation: An ability-motivation-opportunity and contingency perspective. *international journal of production Economics*, 219, 224-235.
- Zhang, X., Abbas, J., Shahzad, M. F., Shankar, A., Ercisli, S., & Dobhal, D. C. (2024). Association between social media use and students' academic performance through family bonding and collective learning: the moderating role of mental well-being. *Education and Information Technologies*, 1-31.
- Zada, M., Zada, S., Khan, J., Saeed, I., Zhang, Y. J., Vega-Muñoz, A., & Salazar-Sepúlveda, G. (2022). Does servant leadership control psychological distress in crisis? Moderation and mediation mechanism. *Psychology research and behavior management*, 607-622.
- Zhu, J., Tang, W., Wang, H., & Chen, Y. (2021). The influence of green human resource management on employee green behavior—a study on the mediating effect of environmental belief and green organizational identity. *Sustainability*, 13(8), 4544.

Appendix

Dear Respondent,

I am a student of MSMS at NUML, Rawalpindi. I am researching on “Analyzing the Employee Performance through Green HR Practices: Mediating Role of Employee Engagement and Moderated by Spiritual Leadership” You are requested to voluntarily participate and fill out the survey to the best of your knowledge and information. Your responses be kept confidential and resulting data be summarized on a general basis and not on an individual basis. Please read the instructions carefully and answer all the questions. There are no “tricky” questions, so please answer each item as conveniently and as honestly as possible. All the questions must be answered. Your identity remain confidential, thus more fair feedback is solicited. The responses have evaluated on Likert Scale, ranging from 1-5, and consume around ten minutes of your good self, accordingly.

I once again thank you for your assistance and cooperation.

Demographics

Please, put a tick mark in the space provided or fill in according to the specific instructions given.

Gender	Male	Female	
Age	18 and above	18 - 22 years	23- 27 years
Marital status	Single	Married	
Level of education	Bachelors	Masters	MPhil/MS
Work experience	Less than 5 years	10-15 years	15-20 years

Kindly tick the appropriate response against each item. You are requested to be honest in answering the item as per the Likert scale interval:

Item	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Green Training & Development “My company provides employees with green training to develop employees’ knowledge and skills required for green management.					
1. My company attracts green job candidates who use green criteria to select organizations.					
2. My company uses green employer branding to attract green employees.					
3. My company recruits employees who have green awareness.					
4. My company considers candidates’ green attitudes in recruitment and selection.					
Green Reward & Compensation “My company relates employees’ workplace green behaviors to rewards and compensation.					
1. My company relates employees’ workplace green behaviors to rewards and compensation.					
2. Our firm makes green benefits (transport/travel) available rather than giving out pre-paid cards to purchase green products.					
3. In our firms, there are financial or tax incentives (bicycle loans, use of less polluting cars).					
4. Our firm has recognition-based rewards in environment management for staff (public recognition, awards, paid					

vacations, time off, gift certificates).					
Employee Engagement					
1. At my work I feel bursting with energy.					
2. At my job, I feel strong and vigorous.					
3. I am enthusiastic about my job.					
4. My job inspires me.					
5. When I get up in the morning, I feel like going to work.					
6. I feel happy when I am working intensely.					
7. I am proud of the work that I do.					
8. I am immersed in my work.					
9. I get carried away when I am working.					
Spiritual Leadership					
Vision “I have faith in my supervisor’s vision for its employees”					
1. I understand and am committed to my organization’s vision.					
2. My workgroup has a vision statement that brings out the best in me.					
3. My organization’s vision inspires my best performance.					

4. I have faith in my organization's vision for its employees.					
5. My organization's vision is clear and compelling to me.					
Hope/Faith "I persevere and exert extra effort to help my supervisor because I have faith in what he/she does"					
1. I have faith in my organization and I am willing to do whatever it takes to					
ensure that it accomplishes its mission.					
2. I persevere and exert extra effort to help my organization succeed because I have faith in what it stands for.					
3. I always do my best in my work because I have faith in my organization and its leaders.					
4. I set challenging goals for my work because I have faith in my organization and want us to succeed.					
5. I demonstrate my faith in my organization and its mission by doing everything I can to help us succeed.					
Altruistic love "My supervisor is honest and without false pride"					
1. My organization really cares about its people.					
2. My organization is kind and considerate toward its workers, and when they are					

suffering, wants to do something about it.					
3. The leaders in my organization walk the walk as well as talk the talk.					
4. My organization is trustworthy and loyal to its employees.					
5. My organization does not punish honest mistakes.					
6. The leaders in my organization are honest and without false pride.					
7. The leaders in my organization dare to stand up for their people.					
Employee Performance					
1. I perform hard tasks properly.					
2. I try to update my technical knowledge to do my job.					
3. I do my job according to what the organization expects from me.					
4. I plan the execution of my job by defining actions, deadlines, and priorities.					
5. I plan actions according to my tasks					

and organizational routines.					
6. I take initiatives to improve my results at work.					
7. I seek new solutions for problems that may come up in my job.					
8. I work hard to do the tasks designated to me.					
9. I execute my tasks foreseeing their results.					
10. I seize opportunities that can improve my results at work.					

