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Chapter: Environmental Dimensions of Sustainable Development

GREEN HUMAN RESOURCE MANAGEMENT PRACTICES AS A FACTOR DEVELOPING EMPLOYEES' GREEN BEHAVIOUR

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Annotation. Linking environmental sustainability with HRM leads to the reorganization of traditional HRM practices. Practices can also be used for improved environmental performance by shaping individual behaviours. The aim of the article is to investigate the influence of green human resource management practices on employee green behaviour. Theoretical and analytical analysis reveals that green behaviours of employees make HRM environmentally effective, employees prefer environmentally responsible employers, and for organizations, recruiting environmentally aware candidates is more effective, and a green reputation can bring a competitive advantage. The research showed that recruitment and selection do not influence employee green behaviour. It is essential that a two-step GHRM adoption plan for organizations is offered as follows: (1) includes employee empowerment, performance management, appraisal, training, and development (should be given priority while implementing GHRM); (2) includes rewards, and management commitment. It can provide a better understanding for organizations regarding the implementation of GHRM practices and encouraging green behaviours.

Keywords: green human resource management, green human resource management practices, employee green behaviour.

JEL classification: O15, M12, M16.

Introduction

Relevance of the topic. Increasing environmental awareness is shaping the attitudes of governments, organizations, and individuals. Governments are trying to reduce environmental damage through regulations or incentives, organizations are attempting to monitor their environmental outcomes and establish an environmentally friendly reputation, and employees are paying more attention to the environmental values of organizations as they choose where to work. Linking environmental sustainability with Human Resource

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Management (HRM) leads to the reorganization of traditional HRM functions within the framework of environmental improvement. These functions include practices such as recruitment and selection, training and development, performance management and appraisal, rewards, employee empowerment, and management commitment. When HRM aims for positive environmental outcomes and becomes green, also known as Green Human Resource Management (GHRM), its practices, which are used for improved organizational performance, can also be used for improved environmental performance by shaping individual behaviours. Therefore, not only organizational policies but also employees need to be "greened" to engage in environmentally improvement activities at their workplace. Organizations can enable these environmentally friendly or green behaviours of employees through the implementation of the aforementioned GHRM practices.

Level of problem investigation. Many environmental behaviour change programmes focus on individual behaviour and daily practices, while the role of employee behaviour in improving the environmental performance of organisations has generally been ignored (Zibarras, Coan, 2015), and the link between GHRM and employee behaviour has not been sufficiently explored (Dumont *et al.*, 2017). Researchers who have studied the influence of green HRM on employee behaviour have delved into the following aspects: categorising HRM practices that can influence employee pro-environmental behaviour into five areas: employee life cycle, rewards, education and training, employee empowerment and manager involvement (Zibarras, Coan, 2015); the division of employee green behaviour as a whole into two areas: in-role green behaviour and extra-role green behaviour, as well as the examination of the direct and indirect (through the mediation of the psychological green climate) influence of GHRM on employee green behaviour (Dumont *et al.*, 2017); combination of these two approaches: five types of GHRM practices and testing of the influence of each of them on in-role green behaviour and extra-role green behaviour of the employees (Zhang *et al.*,2019); the effects of different types of GHRM practices on employees' proenvironmental behaviour and the mediating effect of proenvironmental psychological capital and the moderating effect of environmental knowledge as well (Saeed *et al.*,2018); green behaviour in the workplace (Ones, Dilchert, 2013; Eroymak *et al.*,2018); distinguishing between individual green behaviour and employee green behaviour by interpreting individual green behaviour as voluntary actions that are done voluntarily, while employee green behaviour involves a degree of organisational monitoring, even if it is voluntary (Ones, Dilchert, 2012; Paille *et al.*,2013; Eroymak *et al.*,2018); pro-environmental behaviour, environmentally-friendly behaviour and green behaviour (Kılıç, Vatansever, 2017). It can be stated that research examining the influence of different categories of GHRM practices on employee green behaviour is still inadequate.

Object of the article is the influence of Green Human Resource Management practices on employee green behaviour.

Aim of the article is to investigate the influence of Green Human Resource Management practices on employee green behaviour.

Objectives of the article:

1. to analyze the concept of GHRM and its practices;

2. to describe employee green behaviour and its types;

3. to examine the links between GHRM practices and employee green behaviour;

4. to analyze the empirical level of researches regarding GHRM practices and employee green behaviour;

5. to investigate, which GHRM practices should be given priority while implementing GHRM.

Research methods. The analysis of the theoretical and analytical premises of GHRM practices and employee green behaviour was performed by methods: analysis, synthesis, and classification. The empirical part of the study uses a quantitative questionnaire survey method. The correlation analysis of the data obtained is performed using SPSS 24.0 to investigate the direct relationship between GHRM practices and employee green behaviour, and to evaluate the hypotheses.

Structure of the article. The article presents theoretical and analytical insights into the concept of GHRM, its practices, and how it influences employee green behaviour. The research methodics, analysis of the empirical research data, and evaluation of research outcomes are presented. Also, conclusions and key ideas for discussion are presented.

1. Theoretical Aspects of Influence of Green Human Resource Management Practices on Employee Green Behavior

1.1 Concept of Green Human Resource Management and its Practices

Today, organisations are increasingly responsible for sustainability and social responsibility, so HR departments have an important role in the development and implementation of sustainability strategies (Kilase and Ibrahim, 2023; Uslu and Kedikli, 2017; Rani and Mishra, 2014). HRM plays an important role in fostering a culture of sustainability within an organization (Öncer, 2019). When HRM focuses on environmental activities, determines and implements environmental policies, GHRM is used to describe this process (Uslu and Kedikli, 2017). GHRM is HRM practices are used to promote pro-environmental behavior, and these practices can help to reduce the carbon footprint of employees with less waste, developing private and business life, lower costs, and improved employee performance (Uslu and Kedikli, 2017; Dumont *et al.,* 2017). Ansari, Farrukh and Raza (2021) stated that GHRM practices help employees in developing pro-environmental attitudes in their professional and personal lives. The main goal is to transform employees into green employees who pay attention to lower carbon footprint and support these practices in order to achieve the organization's environmental goals and make significant contributions to environmental sustainability (Öncer, 2019). Speaking about GHRM practices, the most common ones are recruitment and selection, training and development, performance management and appraisal, rewards, employee empowerment, and management commitment (Nguyen Thi Hong *et al.,* 2024; Veerasamy *et al.,* 2023). Recruitment and selection practice can be defined as attracting and hiring qualified employees within the criteria determined for available positions in terms of traditional HRM. Green recruitment and selection incorporate elements of environmental sustainability into these criteria, attracting and hiring employees who are competent in green awareness, knowledge, and motivation. This approach enables not only organizational goals but also environmental sustainability goals to be achieved. Bangwal and Tiwari (2015) describe this process as hiring individuals who are familiar with environmental management (EM) systems while paying attention to methods like online application forms, online interviews, and less travel. According to Sampene *et al.* (2024), recruiting employees with a green orientation can result in staff engaging in green organizational commitment and green innovation practices within a firm. Zibarras and Coan (2015) add that environmental and personality aspects should be included within job descriptions while selecting these individuals. Speaking about selection, Renwick *et al.* (2013) state the link between the employee and organization values, and how a positive green image affects organizations' selection attractiveness and preferences of high-quality candidates. Having a green image and green reputation is not only important for attracting new talent but also important for retaining employees (Ahmad, 2015). Saeed *et al.* (2018) summarize this process in three aspects: candidates' green awareness, green employer branding, and green criteria, which are integrating personality factors such as green consciousness into the process, organizations' green reputation

and image, and selecting candidates based on green criteria, respectively. Talking about training and development practice, Govindarajulu and Daily (2004) include this function of HRM as a part of 'management commitment' practice since top management decides the environmental policies and the level of training within the organization. They state that training is necessary to achieve continual improvement and to enhance compliance with regulations and public image. Bangwal and Tiwari (2015), and Zibarras and Coan (2015) add that training is related to awareness, key knowledge and skills, and empowerment and motivation of employees which corresponds to recognizing the necessity for green actions, to gain fundementals to carry out green behaviors such as ways to solve environmental problems like waste reduction, proper utilization of resources, conservation of energy etc. It is essential to recognize that green training and development are not limited to environmental departments, but rather extend to all levels of the organization, and all individuals should be included in this process (Saeed *et al.,* 2018). Veerasamy, Joseph and Parayitam (2023) highlight the importance of green training and development programs in encouraging employees to behave in an environmentally friendly manner, emphasizing that employee participation and engagement are vital to ensuring green behavior. Ahmad (2015), Renwick *et al.* (2013) point out that training and development is necessary not only for employees but also for management staff, and that this practice can help managers by developing their leadership skills. Sampene *et al.* (2024) claim that green training organized through GHRM helps employees recognize environmental challenges, similarly, will empower them to gain EM knowledge and skills. Öncer (2019) stated that trainings should include green analysis of the workplace, job rotations for potential green managers within the organization, EM training and programs, recycling, waste management, energy efficiency and safety training, and the organization's environmental practices. For environmental training to be successful there, should be sufficient need analysis and trainee readiness (Zibarras and Coan, 2015). Regarding performance management and appraisal, Bangwal and Tiwari (2015) describe it as an ongoing process of communication between supervisors and employees regarding the organization's environmental goals. Speaking about environmental goals, it can make employees accountable for achieving them, and performance indicators combined with 'performance appraisal' feedbacks can facilitate the environmental performance (Zibarras and Coan, 2015). Nurul Alam *et al.* (2023) stated that green performance management must be implemented methodically by organizations (for example, establishe a set of green performance indicators for all members in performance reviews, covering subjects such as environmental incidents, environmental obligations, carbon emissions reduction). Not only positive reinforcements, but there are also negative reinforcements for non-compliance in green practices in performance management. According to Renwick *et al.* (2013), these negative reinforcements are suspensions, criticisms and warnings, but employees might want to protect themselves by concealing environmental problems as a result of these negative reinforcements. Ahmad (2015) adds that performance appraisal should include competencies such as teamwork, collaboration, diversity, innovation, and environmental stewardship for evaluating employees' green performance. In GHRM, rewards can become a major tool and a reinforcement to motivate employees regarding environmental responsibilities (Govindarajulu and Daily, 2004). According to Bangwal and Tiwari (2015), rewards can be implemented in many forms, such as monetary rewards, non-monetary rewards, and recognition-based rewards. However, monetary rewards are most common among managerial staff and rarely reported for other staff, and individuals below senior management mostly receive non-monetary or recognition-based rewards for environmental behavior (Renwick *et al.,* 2013). Although monetary rewards are strong motivators, not all employees are motivated by money, and some might prefer non-monetary rewards such as paid vacations or time off from work, while others may be more motivated by recognition-based rewards (Govindarajulu and Daily, 2004). Employee empowerment practice consists of activities regarding employee involvement and empowerment in environmental initiatives. It aligns employees' goals, capabilities, motivations, and perceptions with green practices and EM systems (Ahmad, 2015). These initiatives and actions are unlikely to be successful without employee involvement, and

studies report that employee participation in EM systems brings better environmental performance (Zibarras and Coan, 2015). Speaking about employee involvement, there are recent developments and practices to increase employee involvement in EM, such as newsletters, suggestion schemes, problem-solving groups (Renwick *et al.,* 2013), low carbon champions (Clarke, 2006), and setting up green action teams to increase employees' motivation in environmentally friendly actions (Zibarras and Coan, 2015). Implementation of these practices requires a process that covers every employee, from senior management to lower-level staff, and should be designed as a process where all employees can share ideas. A shared vision helps create a sense of partnership and ensures consistency in the organization's different activities (Öncer, 2019). Management commitment. Top management directs the corporate strategy, programs, and reward systems and decides the environmental policies (Zibarras and Coan, 2015; Govindarajulu, and Daily, 2004). Therefore, in strategic decision-making processes, top management should be present alongside HR managers, and GHRM goals, strategies, philosophy, and practices should be aligned with corporate goals (Öncer, 2019). Speaking about the corporate goals, environmental goals of an organization should be frequently communicated to employees by adapting a participative culture (Govindarajulu and Daily, 2004), management can contribute towards an environmentally-conscious organization culture by role modelling green behavior themselves (Ones and Dilchert, 2012; Schein, 1995) and by giving employees freedom to make changes to improve the environment (Govindarajulu and Daily, 2004).

In summary, it can be stated that recruitment and selection, training and development practices are related to employees' knowledge, skills, and abilities regarding green initiatives, while performance management and appraisal, rewards, employee empowerment, and management commitment practices are related to employees' motivation and involvement in green initiatives. In this context, this article classifies major GHRM practices into two groups as follows: (1) knowledge, skills and abilities; (2) motivation and involvement.

1.2 Employee Green Behavior and Its Types

Organizations are unions formed by people who come together in line with common goals and objectives, and cannot be considered independent from the human factor and when it comes to environmental sustainability, apart from things that can be done at the organizational level there are also individual level behaviors that can contribute to environmental sustainability (Eroymak *et al.,* 2018; Ones and Dilchert, 2013). Nguyen Thi Hong *et al.* (2024) define green behavior as behavior that impedes environmental impact, preserves resources, contributes to sustainable work, influences others to behave sustainably, or personally engages in sustainable actions. The most important resource for organizations to achieve their goals is the employee factor (Eroymak *et al.,* 2018). Employees of a particular organization are both instrumental in their organization's environmental damage and can be directly affected by these damages. One of the behaviors exhibited by the employees within the organization is behaviors that are related to environmental improvement and sustainability, these environmental behaviors can be described differently, but “pro-environmental behavior”, “environmentally friendly behavior”, “green behavior” (Nurul Alam, *et al.,* 2023; Kılıç and Vatansever, 2017), “eco-friendly behavior” and “sustainable behavior” are the most common examples - with respect to employees’ efforts in the workplace regarding environmental improvement and sustainability. It is important to note that the concept of green behavior of employees is different from the pro-environmental behaviors exhibited by individuals. Ones and Dilchert (2012) define pro-environmental behaviors of individuals as volitional actions that occur depending on the wishes of individuals, such as driving an eco-friendly vehicle, reducing energy consumption, and paying attention to the use of organic cleaners; these actions manifest themselves as part of an individual's life. Pro-environmental behaviors can be public, such as taking public transportation, or private, such as taking short showers. On the other hand, employee green behaviors include a certain degree of organizational monitoring even if they are voluntary and not included in the job descriptions by the organization, and can be defined as

measurable actions and behaviors of employees that contribute to environmental sustainability as a requirement of the job or organizational citizenship behavior (Eroymak *et al.,* 2018; Ones and Dilchert, 2012). In this context, employee green behaviors can be organizational citizenship (i.e., discretionary, proactive, voluntary) and task-related (i.e., formally required) behaviors. Organizational citizenship behaviors for the environment (OCBE) are discretionary acts by employees in the workplace not rewarded or required and associated with the social and psychological contributions that employees voluntarily display outside the organization's expectations (Paille *et al.,* 2013; Ones, and Dilchert, 2012), such as ensuring the initiation of environmental policies within the organization, and encouraging colleagues to support pro-environmental behaviors (Eroymak *et al.* 2018). On the other hand, task-related or formally required employee green behaviors are green tasks and duties that are brought by the organization to increase the pro-environmental behaviors of the employees (Eroymak *et al.,* 2018). It is important to note that employee green behaviors in the workplace can be found as in-role and extra-role employee green behaviors as well (Ramus *et al.,* 2007). Generally, studies related to green behavior address green, proactive, or pro-environmental behavior and very few studies covered in-role employee green workplace behaviors (Shen *et al.,* 2019). Leung (2008) defines in-role employee green behaviors as expected, evaluated, and rewarded green behaviors at the workplace that are part of the tasks, duties, and responsibilities included in an employee's job description (Shen *et al.,* 2019). On the other hand, extra-role employee green behaviors are not subject to job descriptions; they usually involve non-financial cost-effective green actions initiated by employees that benefit the organization by enhancing efficiency levels, competitive advantages, and employee behaviors (Lee, 2009; Shen *et al.,* 2019). Generally, green behaviors in the workplace are mostly voluntary (i.e., OCBE, discretionary, proactive, or extra-role) green behaviors (Zhang *et al.,* 2019). Lastly, authors Ones and Dilchert (2012) note that there are employee behaviors that can be harmful to the environment. These can occur by avoiding green actions and behaviors that are expected of them, such as recycling, or by engaging in behaviors that harm the environment, such as polluting. These behaviors are employee-ungreen or environmentally irresponsible behaviors, which can be included in counterproductive work behaviors.

In summary, it can be stated that employee green behavior can be voluntary (i.e., OCBE, discretionary, proactive, or extra-role), task-related (i.e., formally required or in-role), or counterproductive work behaviors (i.e., ungreen or environmentally irresponsible). It is important to note that, usually, employee green behaviors in the workplace are voluntary.

1.3 The Links between Green Human Resource Management Practices and Employee Green Behavior

People are more inclined to develop green behavior in the workplace when environmental concerns are transferred from personal life to professional life; however, there is still a lack of research integrating HRM practices to environmental concerns, and it has not been given much importance to which HRM practices drive employees to adapt green behavior at the workplace (Paille *et al.,* 2013). Some green behaviors of employees, such as organizational citizenship behaviors, mediate between HRM practices and the environmental performance of the organization (Kılıç and Vatansever, 2017). In this regard, authors Jackson and Seo (2010) emphasize the importance of discretionary behaviors and suggest that these are the behaviors that employers should understand and pay attention to in order to achieve environmental objectives. Such OCBE actions are not required or rewarded, but rather voluntary actions that benefit the environment. OCBE is important for EM because green behaviors in the workplace are necessary to reduce pollution at the source (Hanna *et al.,* 2000; Hart, 1995), and formal management systems may not suffice to deal with various behaviors that benefit the environment due to the complexity of environmental aspects (Paille *et al.,* 2013). Milliman and Clair (1996) integrated HRM and EM via a model that consists of four steps. The first two, the organization must have an environmental vision, and this vision must consist of goals and a strategy which should be transferred to

employees through training. The last two, employee environmental performance must be evaluated by an the appraisal system according to these goals, and pro-environmental activities in the workplace should be recognized and appreciated through reward programs. Other HRM practices have been included in this process over the years, and literature states that HRM practices can be used to encourage employees regarding environmental sustainability objectives (Paille *et al.,* 2013). Thus, organizations are increasingly adopting GHRM practices and promoting employee green behaviors in the workplace (Öncer, 2019).

Speaking about GHRM practices, employees should also take responsibility for EM to be successful (Uslu and Kedikli, 2017). Therefore, recruitment and selection practices to attract highly qualified employees with knowledge and understanding of green practices and sustainability can bring organizations a green workforce who are willing to take responsibility for EM. In this context, it can be stated that candidates who are enthusiastic about working for a green organization will be much more likely to engage in green activities and exhibit green behavior rather than candidates who lack environmental concerns. The implementation of GHRM practices requires change, and training and development programs are among the first HRM practices to adopt strategic initiatives within organizations. The general aim is to change the organizational culture. There are two important training and development approaches used to change an organization's culture: awareness training and skill training (Uslu and Kedikli, 2017). Awareness is generally accepted as one of the first steps in organizational change (Uslu and Kedikli, 2017), and environmental awareness can enhance employees' capacity to adapt to change and encourage them to adopt green behaviors (Saeed *et al.,* 2018). Performance management and appraisal programs can enable employees to adopt green practices, present green ideas, and encourage employees to be involved in green processes (Öncer, 2019). Having clear performance indicators and using negative measures when employees fail to comply with green goals may push employees to exhibit green behaviors (Saeed *et al.,* 2018). HR should adjust performance management and appraisal rating systems according to behavioral and technical competencies, such as teamwork, collaboration, diversity, innovation, and environmental stewardship (Ahmad, 2015), and it can help employees develop green behaviors in the workplace.Organizations today are developing reward systems to encourage green initiatives carried out by their employees (Ahmad, 2015). These systems can be developed with incentives and various deterrent measures to promote the desired green behaviors (Öncer, 2019). Positive feedback can be provided to employees through incentives, such as email or verbal assessments from managers, that encourage them to exhibit green behavior. In addition, preventive methods such as warnings, criticism, or suspension can be used to prevent disruption in green behavior (Öncer, 2019; Mehta and Chugan, 2015). Employee empowerment is another essential tool for achieving better returns on environmental sustainability goals (Renwick *et al.,* 2013). Empowered employees are motivated and committed to being involved in green practices (Govindarajulu and Daily, 2004), and employee involvement in environmental issues can develop a green learning climate, and such an atmosphere can spread green culture and improve employees' green behavior (Saeed *et al.,* 2018). Another step towards environmental improvement is management commitment, and without it, as well as support from top management, it is very unlikely that employees will be motivated towards environmental improvement (Govindarajulu and Daily, 2004). Top management can be considered not only as decision-makers but also as as role models for adopting green behaviors, as existing studies show that employees' green behaviors are directly influenced by leaders' green behaviors (Zibarras and Coan, 2015; Robertson and Barling, 2013). Based on the analysis of the theoretical research, GHRM practices are divided into two parts: (1) knowledge, skill, and abilities (recruitment and selection; training and development); (2) motivation and involvement (performance management and appraisal; rewards; employee empowerment; management commitment). It shows that not all GHRM practices serve the same purposes. The first group (knowledge, skills, and abilities) indicates that employees must first be competent enough to perform a task before they are held responsible for completing it. In this regard, environmentally competent employees can be recruited for available positions, and employees

can be equipped with the knowledge, skills, and abilities required to carry out environmental tasks through training and development activities. The second group (motivation and involvement) demonstrates that competence alone is insufficient to perform well in a task. An employee can be competent enough to complete environmental tasks, but if they lack motivation, their competence will not be used efficiently, and the performance of a reluctant employee will be low. In this regard, employee empowerment, such as the setup of green teams, and commitment from managers can build a shared vision among employees; while performance evaluations, and rewards can make employees accountable for tasks and help them sustain high performance. Therefore, both groups of GHRM practices work together, and their practices are required for employees to exhibit green behavior and successfully carry out environmental tasks.

In summary, it can be stated that attention is being paid to the use of HRM practices on an individual level, regarding which HRM practices can influence employee green behavior in the workplace. These employee green behaviors in the workplace are mostly voluntary green behaviors. The first model that integrates HRM and EM included practices such as training and development, performance management and appraisal, and rewards to direct, evaluate, and appreciate employee green behavior in the workplace. Later, other GHRM practices have been added to this process. Organizations began to utilize recruitment and selection, as well as training and development practices, to enhance the green knowledge, skills, and abilities of employees. Additionally, they implemented performance management and appraisal, rewards, employee empowerment, and management commitment practices to increase employee motivation and involvement in exhibiting green behaviors in the workplace.

2. Empirical Research Level of Influence of Green Human Resource Management Practices on Employee Green Behavior

Most of the existing research divides the influence of GHRM practices on employee green behavior into two parts: direct and indirect. Direct influence refers to how GHRM practices influence employee green behavior without any mediator; indirect influence refers to a mediator between the GHRM practices and employee green behavior. The article focuses on how GHRM practices directly influence employee green behavior in the workplace. According to Shen *et al.* (2019), hiring qualified employees with existing EM knowledge is more effective than trying to develop green awareness and skills through training and development practices. However, in research that was conducted among Chinese organizations, some of them evaluated candidates' green awareness and skills in the recruitment and selection process only when the position required environmental processes, because environmental protection is mostly considered a government responsibility. Similarly, in a study conducted in Turkey, authors Küçükoğlu and Pınar (2015) found that 76% of respondents agreed that their organization's primary environmental concern is to avoid breaking the law. In this regard, it can be stated that some employers leave responsibility to the government for their negative effects on the environment and do not engage in green activities to protect the environment unless they are enforced by regulations. From employees' perspective, a survey in the UK shows that 86% of British workers say it is important that their employer is responsible to society and the environment (Ipsos, 2005). Organizations cannot be considered independent of the human factor, and employers need to understand that an environmentally friendly corporate image is necessary to maintain a competitive advantage in the process of attracting and retaining high-quality employees (Ipsos, 2005). In this context, 79% of employees stated that an organization with a reputation for environmental protection is more attractive to job candidates (Shen *et al.,* 2019). Additionally, 47% of job seekers stated that they are more likely to join or stay with an organization that addresses social issues (Ipsos, 2005). Therefore, organizations striving for a green reputation can attract highly

qualified and skilled employees with green awareness and retain them, which can bring a competitive advantage and reduced costs to the organization. Shen *et al.* (2019) found that even if employees are green aware, many of them do not understand exactly what they should be doing in terms of environmental improvement. Thus, training and development come into play at this stage in order to translate green initiatives into fundamental actions via environmental trainings such as fire safety, water and electricity use, general waste disposal, and other basic green management knowledge (Shen *et al.,* 2019). However, authors Küçükoğlu and Pınar (2015) found that only 59% of the 63 Turkish organizations from different sectors use at least sometimes training courses aimed at developing/encouraging green behavior. In comparison, 32.8% of the organizations among 214 organizations from different sectors in the UK (Zibarras and Coan, 2015) and 37% of the organizations among 145 organizations in China (Zhang *et al.,* 2019) use at least sometimes training courses aimed at developing/encouraging green behavior, respectively. Although 84% of employees consider induction or training and development practices as important facilitators for green behavior (Küçükoğlu and Pınar, 2015), results show that the implementation rates of these practices in the organizations are much lower than that. This might be due to limited training and development resources and funds (Shen *et al.,* 2019). Accordingly, research shows that out of 63 organizations, only 51% factored environmental impact into their team/departmental budgets (Küçükoğlu and Pınar, 2015). To conclude, authors Zibarras and Coan (2015) found that education and training practices are considered the most effective HRM practice by organizations in the UK to encourage employees to be green. After sharing and disseminating the environmental goals and responsibilities of the organization with employees through recruitment and selection, as well as training and development practices, the next step is the performance evaluation and review of these goals and responsibilities by the integration of environmental performance indicators. Such indicators, when included in individual and organizational performance management practices, will influence and enhance employee engagement in green practices. Renwick (2018) found in his study that performance indicators are driving forces with respect to outcomes and are regarded as important facilitators for practices related to environmental improvement. Regarding facilitators, 71% of employees consider clear performance indicators, including environmental behavior/targets, to be very important or important facilitators of green behavior in the workplace (Küçükoğlu and Pınar, 2015). It is also important to know how organizations measure employees' green performance. Shen *et al.* (2019) state that a Food Packaging company in China measures several items, such as: how much waste employees produce on their machines, running speeds of the machines to understand efficiency levels, the amount of downtime on machines, such as machinists' breaks, etc., cost control, machine breakdowns, and lost time injury. It is also important to note that using environmental performance indicators in the appraisal and feedback process is another key facilitator for green performance (Zibarras and Coan, 2015). The frequency of appraisals can vary among organizations and even among different parts of a particular organization; however, mid-year reviews are more common (Shen *et al.,* 2019). Performance management practices generally evaluate management and regular staff; however, for regular staff, it may only include those with defined jobs related to the environment (Shen *et al.,* 2019). Despite the importance of performance evaluation and appraisal in achieving environmental targets, more than half of organizations do not frequently implement these practices. Employees who meet their green performance targets can be rewarded. It depends on the organization, but these practices can be effective tools to encourage environmental improvement within the organization. Research indicates that 89% of employees consider incentives or reward programs that encourage environmentally friendly behavior as important facilitators of green behavior in the workplace (Küçükoğlu and Pınar, 2015). Not only financial incentives or rewards, but also a word of praise directed at an environmental effort can encourage employees and enhance their participation. These practices, combined, can multiply environmental actions. The driving force here is not the value of the reward, but the value of being praised (Ramus, 2002). Shen *et al.* (2019) stated that a Chinese company offers the following rewards and compensation payments: monthly or quarterly key

performance indicator payments, end-of-year performance reviews and bonus payments, bonus payments for Chinese New Year, a green suggestion box for employees to provide environmental improvement suggestions, and supplementary bonus payments for useful and valuable suggestions. These are available to all employees who meet related green performance targets, and according to Senior HR managers, they increased acknowledgement, engagement, commitment, and motivation of employees with the company's green activities despite the monetary rewards being small (Shen *et al.,* 2019). Handgraaf *et al.* (2013) found that social rewards were more effective than monetary rewards, and public rewards were more effective than private rewards in terms of energy conservation. To give an example of how often reward practices were used, authors Küçükoğlu and Pınar (2015) found that out of 63 organizations surveyed in Turkey, 41% use at least sometimes individual incentives or reward programs that encourage environmental behavior, and this number is 24.6% in the UK (out of 214 organizations) (Zibarras and Coan, 2015). Without employee involvement and empowerment, a company's green activities are likely to be less successful (Zibarras and Coan, 2015). Hanna *et al.* (2000) found a positive relationship between operational and environmental performance, and employee involvement may be the key factor to this relationship. Not only operational or environmental performance, but also from the employees' perspective, engagement and commitment from staff are found to be important facilitators for green behavior by 97% of employees (Küçükoğlu and Pınar, 2015). Speaking about engagement and commitment, an engaged employee has a sense of belonging to the organization, and employees who are committed perform 20% better and are 87% less likely to leave the organization (Ipsos, 2005). Similarly, Gholami *et al.* (2016) found a positive correlation between environmental performance and employee involvement and empowerment. Thus, the involvement of employees is necessary for policies and practices to be implemented successfully. Research shows that workers' involvement in a factory's environmental activity positively influences environmental outcomes in terms of competitive advantage (Brio *et al.,* 2007), and empowered employees are more motivated to be involved in environmental activities (Govindarajulu and Daily, 2004). To involve employees in environmental activities, green teams can be established. They generate ideas, encourage environmental learning, and they work together to solve environmental problems (Renwick, 2018). In this regard, set up of green team to champion environmental efforts is considered as important facilitators for green behavior by 93% of employees; despite this, however, out of 63 organizations surveyed in Turkey, only 33% use at least sometimes employee empowerment practices such as set up of green champions, task force or green teams (Küçükoğlu and Pınar, 2015). In comparison, this number is 49.8% in the UK out of 214 organizations surveyed (Zibarras and Coan, 2015). Research on what drives employee motivation in the workplace reveals that key motivating factors include alignment between an employee's work and organizational goals, feeling valued and recognized, and having a supportive and effective manager (Ipsos, 2005). Top management determines environmental policies, and it is challenging to motivate employees for environmental improvement without management commitment (Govindarajulu and Daily, 2004). Research highlights that over half of British workers believe it is very important for their employer to be responsible to society and the environment. Additionally, 75% of employees who consider their organization to be paying sufficient attention to environmental protection and sustainable development exhibit high levels of commitment (Ipsos, 2005). It is recognized that role modelling can effectively support green behavior (Renwick, 2018). In this regard, 90% of employees consider senior manager commitment as a very important/important facilitator for green behaviors; and lack of management commitment and/or support is considered a very important/important barrier for green behavior (Küçükoğlu and Pınar, 2015). Therefore, management involvement and commitment are essential for not only improving employee motivation, but also for improving the organization's environmental outcomes. Research shows that management involvement in a factory's environmental activity positively influences environmental outcomes in terms of competitive advantage (Brio *et al.,* 2007). Management commitment is one of the most widely used HRM practices to encourage environmentally friendly behavior. Out of 63 organizations surveyed in

Turkey, 70% use at least some management commitment practices, such as 'actively championed by senior management'. For comparison, this number is 63.1% in the UK, based on a survey of 214 organizations (Zibarras and Coan, 2015). In conclusion, commitment from top management positively influences employee green behavior, and it is considered the second most effective HRM practice by organizations to encourage employees to be green, following education and training practices (Zibarras and Coan, 2015).

Further relevant to discuss is how each of the aforementioned GHRM practices influences employee green behavior. Küçükoğlu and Pınar (2015) conducted a study involving 63 organizations from various sectors. One section of the study sought facilitators for pro-environmental behavior, and senior management commitment was identified as the leading GHRM practice, deemed very important/important by 90% of employees. It is essential to note that this study does not include recruitment and selection practices, which may be due to the inadequate use of these practices among organizations. As mentioned in the study, only 22% of organizations always/often use recruitment and selection criteria that recognize environmental behavior. Alnajdawi *et al.* (2017) investigated the impact of GHRM practices (excluding employee empowerment and management commitment) on OCBE in a chemical and fertilizer distribution company with more than 7,000 employees. It should be noted that performance management practices have the highest direct effect on OCBE, and recruitment and selection practices, despite having a positive correlation with OCBE, have the least direct effect. Pham *et al.* (2018) applied a test of the direct and interactive effects of GHRM practices (except recruitment and selection, rewards, and management commitment) on OCBE in 4-5 star hotels. According to the study's results, training and development have the strongest positive influence on OCBE, followed by employee empowerment and performance management practices. Saeed *et al.* (2018) investigated the impact of GHRM practices (excluding management commitment) on employees' pro-environmental behavior across various industries. The results indicate that rewards and compensation practices have the greatest impact, with an 84% direct effect on employee green behavior, while employee empowerment has the least impact, with only a 53% direct effect on employee green behavior. Sudin and Saad (2018) investigated whether GHRM practices (except management commitment) are correlated with OCBE in the Electric and Electronics industry. The results indicate that not all HRM practices have a direct influence on employee green behavior. Practices such as recruitment and selection, as well as reward practices, do not significantly influence OCBE. Niyomdecha and Yahya (2019) investigated the impact of GHRM practices (excluding recruitment and selection, employee empowerment, and management commitment) on OCBE among 231 administrative staff members at a university. Results reveal that training and development have a significant influence on OCBE, while performance management, rewards, and compensation practices have no significant relationship with OCBE. Shaban (2019) tested employees' perspectives on GHRM practices (except management commitment) in private construction companies, comprising ten companies from Egypt and five from the UK. Results reveal that employee empowerment and rewards practices are the most effective, while recruitment and selection are the least effective in Egypt. On the other hand, in the UK, recruitment and selection, as well as employee empowerment practices, are the most effective, while rewards have no significant effect. Silvester *et al.* (2019) analyzed the relationship between GHRM practices (except performance management and appraisal, employee empowerment, and management commitment) and OCBE in a private company. Results show that rewards and compensation most strongly contribute to OCBE, followed by training and development, and recruitment and selection. Zhang *et al.* (2019) investigated the impact of GHRM practices (excluding performance management and appraisal) on in-role and extra-role employee green behaviors in the workplace. It is essential to note that recruitment and selection, along with induction, appraisal, and promotion practices, are collectively referred to as employee life cycle practices in their study. There are no available results on how each of them separately affects employee green behavior. According to the results, since recruitment and selection are the most used practices by organizations compared to induction, appraisal, and promotion practices, the employee life cycle is considered as recruitment

and selection for the study results of Zhang *et al.* (2019). As mentioned earlier, only extra-role green behaviors are taken into account in this article because most of the green behaviors are extra-role or voluntary behaviors, and the results also reveal that GHRM practices have stronger effects on extra-role employee green behaviors. Results also show that recruitment and selection, as well as training practices, have the most significant influence on employee green behavior, while employee empowerment, although positively affecting green behavior, has the least influence on employee green behavior.

It can be stated that all the aforementioned GHRM practices influence employee green behavior. However, when an organization decides to adopt GHRM, the implementation of these practices can be divided into two steps. These steps comprise the "First step GHRM practices," including recruitment and selection, training and development, and management commitment, followed by the "Second step GHRM practices," such as performance management and appraisal, rewards, and employee empowerment. Therefore, although all six GHRM practices have a direct influence on employee green behavior, they can serve different purposes, and the order of implementation of these practices can vary.

3. Empirical Research of Influence of Green Human Resource Management Practices on Employee Green Behavior

3.1 Research Methodics

Aim of the research - to investigate the extent of the influence of GHRM practices on employee green behavior, to determine which practices should be given priority while implementing GHRM.

Objectives of the research:

1. to evaluate the link between general information such as age, job position, company size etc. with GHRM practices;

2. to evaluate the link between “First step GHRM practices” (recruitment and selection, training and development, management commitment) with employee green behavior;

3. to evaluate the link between “Second step GHRM practices” (performance management and appraisal, rewards, employee empowerment) with employee green behavior.

Research methods and hypotheses. This research employed a quantitative method, which enables researchers to use numbers rather than observations, generally considered to provide greater quality and accuracy due to the non-subjective nature of the approach (Babbie, 2012; Shen *et al.,* 2019). Therefore, a quantitative method is chosen to statistically explore the direct relationship between GHRM practices and employee green behavior. In this regard, the research data were collected using the questionnaire survey method. Six GHRM practices were measured using measurement scales conducted by different authors. Two items were used for each GHRM practice, totaling 12 items. *Recruitment and selection* practices were measured based on the scales of Tang *et al.* (2017) and Saeed *et al.* (2018). *Training and development* practices were measured based on the scales of Shen *et al.* (2019). *Performance management and appraisal* practices were measured based on the scales of Pham *et al.* (2018). *Rewards* practices were measured based on the scales of Pham *et al.* (2019). *Employee empowerment* practices were measured based on the scales of Tang *et al.* (2017) and Pham *et al.* (2018). Finally, *management commitment* practices were measured based on the scales of Ronnenberg *et al.* (2011). On the other hand, employee green behaviors consist of 8 items in total and were measured based on the scales of

Saeed *et al.* (2018). The answers to all statements related to GHRM practices and employee green behavior are presented on a Likert scale. The hypotheses are presented in *Table 1*.

Table 1. Hypotheses

H1: Recruitment and selection positively influence employee green behavior	H4: Rewards positively influence employee green behavior
H2: Training and development positively influence employee green behavior	H5: Employee empowerment positively influence employee green behavior
H3: Performance management and appraisal positively influence employee green behavior	H6: Management commitment positively influence employee green behavior

Source: created by the authors.

Survey sample. Sample contains two IT companies (one is a global e-commerce company, and the other is a national company that offers internet service, web, and email hosting services), an automotive company (is one of the dealers of a global brand, which is the only green company in the sample), finance company (is a private bank which operates nationally). It is important to note that the survey was conducted during the pandemic, which resulted in a relatively low response rate. However, the variety of the respondents and the organizations of the survey sample enables drawing conclusions about the main population. The actual questionnaire, which was constructed in English based on existing literature, was translated into Turkish, and the data were collected through an online questionnaire. The samples were taken from the head offices of the companies, and a total of 66 responses were received, with 65 of them suitable for analysis.

Research data analysis and results. This section presents and analyzes the data of the empirical study and the findings regarding recruitment and selection, training and development, performance management and appraisals, rewards, employee empowerment, management commitment, and employee green behavior.

The demographic profile of the respondents in the survey indicates a balanced gender distribution. 76.9% of respondents were between the ages of 25 and 39, which is fairly typical, given that the median age of the Turkish population is 32.4 (TÜİK, 2019). It is also observed that 93.9 % of respondents have either obtained bachelor's or master's degrees. Therefore, it can be assumed that the majority of the respondents have environmental knowledge and awareness to some extent. 37 % of respondents belong to manager positions, while 63% of respondents are employees. It is important to have respondents from both managerial and non-managerial positions since GHRM adoption requires a holistic approach, and all levels of employees should be included in this process. 26.2% of the respondents belong to the IT sector, followed by the finance and automotive sectors, both with 10.8% of respondents. It is important to have same percentage of respondents from finance and automotive sectors for comparison because the finance company is a private bank that operates nationally while the automotive company is a global company and runs a Green Office. This gives the opportunity to determine if there is a significant difference between a green company and a non-green company. 9.2% of respondents belong to other sectors. It can be stated that the majority of the respondents belong to companies having 51 to 2500 employees (33.8% have 51 to 250 employees, and 29.2% have 250 to 2500 employees). In this regard, the influence of organizational size is also explored in this research, and it was found that there are significant differences between small and medium-sized organizations. Having revealed respondent and organization information of the survey sample, *Table 2* illustrates the reliability results of the study variables.

Table 2. Reliabilities of the study variables

	Cronbach's Alpha		**Cronbach's Alpha**
Recruitment and selection	0.89	Employee empowerment	0.91
Training and development	0.94	Management commitment	0.85
Performance management and appraisal	0.87	Employee green behavior	0.68
Rewards	0.78		

Source: created by authors.

Reliability analysis demonstrates the internal consistency of the set of items used in the questionnaire, as represented by Cronbach's Alpha coefficient. As can be seen from the table, all variables have a Cronbach's Alpha greater than 0.70, except for employee green behavior. It is important to note that, according to the SPSS analysis, if the third item of the employee green behavior, which is "At work, I question practices that are likely to harm the environment," is deleted, Cronbach's Alpha rises to 0.70. Furthermore, the SPSS Inter-Item Correlation Matrix indicates that this statement was negatively correlated with three of the employee green behavior items, suggesting that the direction of this statement was negative, whereas the other statements were positive. However, this question was not deleted since the increase in Cronbach's Alpha was insignificant. Having discussed the data reliability, the strength of relationship between all the study variables by correlation results can be viewed in *Table 3*.

Table 3. Correlations of the GHRM practices and employee green behavior

Variable		1. Recruitment and selection	2.Training and development	3. Performance management and appraisal	4. Rewards	5. Employee empowerment	6. Management commitment
7. Employee green behavior	Correlation Coefficient	0.185	.302*	.310*	.279*	.383**	.277*
	Sig. (2-tailed)	0.140	0.014	0.012	0.024	0.002	0.025

Source: created by the authors.

As shown in *Table 3*, five of the GHRM practices correlated positively and significantly with employee green behavior. According to the results of the correlation analysis, there is no significant correlation between recruitment and selection and employee green behavior. Among the GHRM practices that are correlated to employee green behavior, employee empowerment ($r = 0.383$, $p < 0.01$) shows the strongest relationship, followed by performance management and appraisal ($r = 0.310$, $p < 0.05$), training and

development (r = 0.302, p < 0.05), rewards (r = 0.279, p < 0.05), and management commitment (r = 0.277, p < 0.05). These findings support hypotheses H2, H3, H4, H5, and H6.

To better understand why H1 is not supported or why some GHRM practices have less influence on employee green behavior, the results need to be analyzed in detail. In this regard, the Mann-Whitney U test, which is a non-parametric test used to compare two independent groups via mean differences, and the percentage distribution of employees' responses for some of the questions were used to further analyze the research data. The results that show significant differences are presented. To begin with, the Mann-Whitney U test results for recruitment and selection, as well as training and development practices, are presented in *Table 4*.

Table 4. Mann-Whitney U Test for RS and TD

Variable	Sector	N	Mean Rank	Sum of Ranks	U	p
Recruitment and selection	Finance	7	5.21	36.50	8.500	0.035
	Automotive	7	9.79	68.50		
Training and development	Finance	7	5.36	37.50	9.500	0.049
	Automotive	7	9.64	67.50		

Source: created by authors

As shown in *Table 4*, the finance and automotive sectors were compared. The reason for this is that the automotive company runs a green office, while the finance company does not have a green office policy. Furthermore, both of these sectors represent 10.8% of the respondents. According to the results, there are statistically significant differences between the finance sector and the automotive sector in terms of recruitment and selection (p < 0.05) and training and development (p < 0.05) practices. Mean ranks for both practices were found to be significantly higher in the automotive company than in the finance company. Since the automotive company runs a green office, this situation is normal; having a green policy, the automotive company needs to green the workforce as well to successfully run a green office. It is important to note that recruitment and selection show the strongest difference between the two companies. Furthermore, recruitment and selection were not correlated with employee green behavior. These results give rise to the assumption that green recruitment and selection are not common practices in Turkey. To further support this assumption, the responses of employees to recruitment and selection statements are presented. 61.5 % of the respondents at least disagree that their company asks questions related to the environment during interviews. Additionally, 50.8 % of the respondents at least disagree that their company recruits green-aware employees. Therefore, it can be stated that green recruitment and selection is in the initial phase in Turkey compared to other GHRM practices. This could be the main reason why hypothesis H1 was not supported.

Table 5. Mann-Whitney U Test for the influence of company size

Variable	Company size	N	Mean Rank	Sum of Ranks	U	p
Training and development	1-50	14	13.21	185.00	80.000	0.015
	51-250	22	21.86	481.00		
Employee empowerment	1-50	14	14.21	199.00	94.000	0.047
	51-250	22	21.23	467.00		

Source: created by the authors.

Table 5 compares two organizational sizes that were found to exhibit the most significant differences in terms of GHRM practices. As can be seen, organization size significantly influences the extent to which GHRM practices are implemented. In this regard, the most significant differences were found between small and medium-sized organizations in terms of implementing training and development, and employee empowerment practices, where medium-sized companies are more likely to adopt training and development, and employee empowerment practices compared to small-sized companies. As mentioned earlier, training and development practices, especially those requiring more funds to be implemented, give rise to the assumption that larger organizations can allocate more resources to implement GHRM practices. One might ask why the most significant differences are between small and medium organizations but not between small and large organizations? It is essential to note that both of these practices involve more group exercises compared to other GHRM practices, which could be implemented more efficiently in a medium-sized organization than in a large or huge organization. Having discussed the influence of company size on GHRM practices, *Table 6* presents the Mann-Whitney U test results for performance management and reward practices.

Table 6. Mann-Whitney U Test for PM and Rewards

Variable	Job position	N	Mean Rank	Sum of Ranks	U	p
Performance management and appraisal	Manager	20	16.52	330.50	39.500	0.037
	Other	8	9.44	75.50		
Rewards	Manager	20	16.43	328.50	41.500	0.046
	Other	8	9.69	77.50		

Source: created by the authors.

Table 6 compares manager and non-manager job positions. Test results indicate a statistically significant difference between the two groups in terms of performance management and appraisal ($p < 0.05$) and rewards ($p < 0.05$) practices. Mean ranks for both practices were found to be significantly higher for managers than for non-managers. However, it is essential to note that performance management and appraisal practices have the second strongest relationship with employee green behavior based on the

correlation analysis. *Therefore, it can be stated that rewards practices tend to be provided to managerial positions much more than non-managerial positions in organizations in Turkey.* To further support this assumption, employees' responses to rewards statements are presented. 49.2 % of the respondents at least disagree that their company provides social (non-monetary) rewards for environmental achievements. On the other hand, for monetary rewards this percentage increases, 66.1 % of the respondents at least disagree that their company provides monetary rewards for environmental achievements. It is important to note that 67 % of the respondents are non-managers. *Therefore, it can be stated that rewards practices are still not widely applied in organizations in Turkey, especially for employees in non-managerial positions. This could be the main reason why rewards practices show a weaker relationship with employee green behavior in correlation results.* Having discussed the results of performance management and appraisal, as well as rewards practices, *Table 7* focuses on management commitment.

Table 7. Mann-Whitney U Test for RS, TD and MC

Variable	Age	N	Mean Rank	Sum of Ranks	U	p
Recruitment and selection	25-29	14	17.64	247.00	26.000	0.002
	40-49	12	8.67	104.00		
Training and development	25-29	14	17.32	242.50	30.500	0.005
	40-49	12	9.04	108.50		
Management commitment	25-29	14	17.00	238.00	35.000	0.010
	40-49	12	9.42	113.00		

Source: created by the authors.

Although *Table 4* has discussed results of recruitment and selection, and training and development practices by comparing two different sectors, it can be useful to approach and compare results from different angles. In this regard, *Table 7* presents Mann-Whitney U test results by comparing two different age groups. The first group, which is 25 to 29 years old, represents the early stages of the career or even the period of transition from university to work. On the other hand, the second group, which is 40 to 49 years old, represents the middle stages of the career and people who are much more experienced than the first group. As shown in the table above, statistically significant differences exist between the two groups in terms of recruitment and selection ($p < 0.01$), training and development ($p < 0.01$), and management commitment ($p < 0.05$). Mean ranks for all practices were found to be significantly higher for the 25-29 year age group than for the 40-49 year age group. *These results suggest that recruitment and selection, as well as training and development practices, are primarily applied to inexperienced employees, leading them to believe that their managers fully support green practices and allocate adequate resources for such practices. This can explain the significant difference in management commitment practices between the age groups.*

It is also important to note that all three of these GHRM practices are First Step GHRM practices discussed above, which, if applied to all levels of job positions, can be beneficial in the process of GHRM adoption.

Having discussed the results of GHRM practices, it is essential to present the findings regarding employee green behavior. Results show that 76.9% of the respondents agree that they share knowledge and experience about environmental protection with their colleagues. Furthermore, the results show that none of the respondents waste resources such as electricity or water at work. 78.4 % of the respondents agree that they print double-sided whenever possible at work. In addition to that, 92.3 % of the respondents give importance to recycling at work, and 98.4 % of the respondents turn off the lights when they are out of the office. *These results show that employees are willing to display green behavior, but organizations are lacking in applying GHRM practices to encourage employee green behaviors.*

4. Discussion

This section discusses the results of hypothesis testing obtained from analyzing the survey data, which revealed the influence of GHRM practices on employee green behavior.

H1: Recruitment and selection positively influence employee green behavior. According to the research results, recruitment and selection are not found to be significantly related to employee green behavior. This finding basically agrees with those of Sudin and Saad (2018). It is important to note that, in Turkey, only 22% of the organizations always/often use recruitment and selection criteria that recognize environmental behavior, and it is declared as one of the least useful methods by the respondents (Küçükoğlu and Pınar, 2015). Similarly, in this study, although some organizations applied certain green practices, only one green organization was identified. As shown in *Table 4*, when comparing a green organization and a non-green organization, the Mann-Whitney U test results for recruitment and selection indicated that the green organization had significantly higher mean ranks than the non-green organization. Therefore, it can be stated that if green recruitment and selection practices were more prevalent in Turkey, Hypothesis 1 could have been supported.

H2: Training and development positively influence employee green behavior. The analysis of empirical data revealed that training and development are significantly related to employee green behavior, consistent with the findings of studies on the influence of GHRM practices on employee green behavior presented in Chapter 2. However, three of these studies show that training and development have a greater influence on employee green behavior compared to other GHRM practices. In this study, training and development was the third most effective practice, following employee empowerment, performance management, and appraisal. As presented in *Table 4*, training and development, aside from recruitment and selection practices, were found to be distinctive GHRM practices that separate a green organization from a non-green organization. The reason for this distinction is that green organizations adapt green policies, and training and development translate these policies and initiatives into fundamental actions among their employees. Due to limited resources and funds, the implementation rates of these practices in the organizations are not prevalent (Shen *et al.,* 2019). Despite that, training and development have a significant influence on employee green behavior in this study. Thus, hypothesis H2 is confirmed.

H3: Performance management and appraisal positively influencse on employee green behavior. Hypothesis testing revealed that performance management and appraisal are found to be significantly related to employee green behavior. This finding largely aligns with the studies presented in the second chapter, and one of these studies, conducted by Alnajdawi *et al.* (2017), demonstrates that performance

management and appraisal have the greatest influence on employee green behavior compared to other GHRM practices. Based on the results presented in *Table 6*, it can be stated that not all employees are subjected to green performance evaluation, and companies generally set up environmental goals for managers rather than non-managers. Therefore, in Turkey, it can be assumed that green performance management and appraisal processes incorporate the evaluation of managers and employees whose jobs are directly related to the environment or require environmental responsibilities. Similarly, the aforementioned study conducted by Küçükoğlu and Pınar (2015) shows that only 41% of organizations use performance indicators that include environmental behavior/targets in Turkey at least sometimes. Despite this, the results of this study show that no significant difference was found for performance evaluation practices between a green organization and a non-green organization. It is also important to note that this process was found to be the second strongly correlated practice with employee green behavior in correlation analysis, following employee empowerment. Therefore, hypothesis H3 is confirmed.

H4: Rewards positively influences employee green behavior. According to the results of the research, rewards are found to be significantly related to employee green behavior. This finding is consistent with the findings of six studies presented in the 2nd chapter. However, three of the studies found no influence between rewards and employee green behavior. The reason for this can be the different perspectives and motivation levels of employees. Monetary rewards can be very effective for one employee, while another employee might prefer social rewards or praise. Therefore, this process might differ from one organization to another depending on the workforce. It is also important to emphasize that an organization first needs valid performance evaluation indicators to reward its employees fairly. Therefore, the reward process is highly related to performance management and appraisal practices. As presented in *Table 6*, these two practices showed significant differences between managers and non-managers. Therefore, the assumption made for performance evaluations can also be applied to rewards, and it can be stated that the rewards process incorporates the evaluation of managers and employees whose jobs are directly related to the environment or require environmental responsibilities. Although rewards do not show as strong a correlation with employee green behavior as performance evaluations did, this process was found to be the fourth most effective practice on employee green behavior in this study. Thus, hypothesis H4 is confirmed.

H5: Employee empowerment positively influence employee green behavior. Hypothesis testing revealed that employee empowerment is significantly related to employee green behavior. It is essential to note that employee empowerment exhibits the strongest relationship with employee green behavior, as indicated by the research results. This finding generally aligns with those of Küçükoğlu and Pınar (2015), whose study, also conducted in Turkey, found that employee empowerment had a greater influence on employee green behavior. This is pretty normal since Turkey is a collectivistic country, and working in groups is important. Organizations are unions formed by people; therefore, employee involvement is essential for the successful adoption of GHRM, and empowered employees are more motivated to participate in environmental efforts. In conclusion, the results of this study reveal that employee empowerment shows the greatest influence on employee green behavior compared to other GHRM practices. Thus, hypothesis H5 is confirmed.

H6: Management commitment positively influences employee green behavior. The analysis of empirical data revealed that management commitment is found to be significantly related to employee green

behavior. It is important to emphasize that this practice is rarely analyzed as a GHRM practice in the literature. In two of the studies conducted (Küçükoğlu and Pınar, 2015; Zhang *et al.,* 2019), it was found to have an influence on employee green behavior. Therefore, the results of this study are consistent with these studies. Despite authors Küçükoğlu and Pınar (2015) finding that 90% of employees in Turkey consider senior manager commitment as a very important/important facilitator for green behaviors, this study found this process to be the least effective GHRM practice in promoting employee green behavior. As shown in *Table 7*, management commitment exhibits statistically significant differences between employees aged 20 to 29 years and those aged 40 to 49 years. Based on the results, younger employees believe their managers are committed to the environment, whereas older employees do not consider this commitment sufficient. The possible reason for that was explained earlier, but since the sample of the research was small, this situation has likely affected the empirical results of management commitment. Although influence is less significant than other GHRM practices, management commitment has a notable impact on employee green behavior. Therefore, hypothesis H6 is confirmed.

Potential areas of future studies. After the analytical analysis, taking into consideration that Turkey is more of a power distance country, and that commitment from managers are primary and essential for adoption of the GHRM practices since they are the decision makers, they allocate required budget for these processes, and they are also role models for employees; the expectation was management commitment to have a greater influence on employee green behavior. However, empirical analysis showed that among the practices that influence employee green behavior, management commitment is the one that has the least effect. Therefore, this practice cannot be a primary adoption step for GHRM, and was excluded from the first step of the practices. Based on the research results, employee empowerment was found to be the most effective GHRM practice in encouraging employee green behavior. This process builds a shared vision among employees to achieve environmental improvements and shows the importance of motivation and involvement in engaging in green activities. On the other hand, performance management and appraisal showed the second strongest influence on employee green behavior. This practice is a way of transferring accountability to employees, making them responsible for environmental improvement. Therefore, the results of this research provide a basis to consider employee empowerment and performance management and appraisal practices as primary adoption steps for GHRM, and include them in the "First step GHRM practices". On the other hand, training and development remain at the first step of the GHRM, which is consistent with the findings presented in the analytical part, as this practice has shown an influence in all the studies conducted. As mentioned earlier, employees should be competent enough to complete a given task. In this case, green policies can be implemented in an organization only if employees have sufficient environmental competence, which can be gained and improved through training and development practices. Therefore, without training and development practices, an employee who is not environmentally competent may not know how to complete assigned tasks, reduce their carbon footprint, and achieve environmental goals. This makes training and development a translator between green policies and green behaviors, and an essential first step to GHRM adoption. Last but not least, rewards were found to be the second least effective GHRM practice on employee green behavior after management commitment; therefore, this practice cannot be included in the primary adoption steps for GHRM, and remains in the "Second step GHRM practices". Thus, rewards could be provided to employees after implementing performance management and appraisal measures. As a result, it can be stated that a non-green organization can become green by adapting following GHRM steps, which may become the object of further research in this field: (1) First step: Increasing environmental knowledge, skills, and abilities of

employees and greening the workforce by training and development; enhancing employee involvement in green activities and setting up of green teams by employee empowerment; and evaluating them for the achievement of individual and group-level green initiatives by performance management and appraisal practices; (2) Second step: Providing social or monetary rewards to employees for meeting their green performance targets; and enhancing employee motivation and resources by management involvement and commitment in environmental activities.

Conclusions

1. The analysis of the GHRM concept allows to describ it as traditional HRM practices aim to improve environmental sustainability by promoting employee green behaviors. These HRM practices (with managerial impolication) are: (1) Recruitment and selection: allows to attract and recruit highly qualified and environmentally aware candidates; (2) Training and development: translates environmental policies into fundamental actions; (3) Performance management and appraisal: makes employees accountable for environmental targets; (4) Rewards: reinforces and motivates employees for environmental achievements; (5) Employee empowerment: covers all levels of employees, and builds a shared vision in protecting environment; (6) Management commitment: exhibits green behaviors as role models, and allocate resources necessary for green initiatives.

2. After analyzing employee green behavior and its types, it can be stated that the most important resource for organizations to achieve their objectives is the employee factor, and if these objectives are related to the environment, then the behaviors exhibited by employees should be accordingly. When behaviors that contribute to environmental sustainability include a certain degree of organizational monitoring, it can be described as employee green behaviors. Types of employee green behaviors are: (1) Voluntary: not rewarded or required by the organization; (2) Task-related: included in job description, evaluated and required by the organization; (3) Ungreen: environmentally irresponsible behaviors and harmful for the environment. It is important to emphasize that employee green behaviors are mostly voluntary.

3. Examining the links between GHRM practices and employee green behavior, it can be stated that green behaviors of employees make HRM environmentally effective. Recruitment and selection practices build a link between an organization that carries out GHRM practices and a candidate who is enthusiastic about working in an organization where/they can engage in green activities. Training and development build a link with employee green behavior by transferring the environmental vision and objectives of the organization to employees. Performance management and appraisal, and rewards practices are related to employee green behavior since environmental performance of employees is evaluated and rewarded based on performance indicators. Employee empowerment enhances green behaviors by promoting a green culture and fostering a green learning climate. Finally, research shows that leaders' green behaviors directly influence employees' green behaviors, which makes management commitment an important motivating factor for employee green behaviors.

4. After analyzing the empirical level of research regarding the influence of GHRM practices on employee green behavior, it was found that: (1) employees prefer environmentally responsible employers, and for organizations, recruiting environmentally aware candidates are more effective, and green reputation can bring competitive advantage; training and development practices are not widely implemented due to

limited resources and funds; that performance evaluations were found to enhance employee engagement in green activities, however, determining fair and reliable performance criterias can be challenging; rewards increase engagement, commitment and motivation of employees with the organization's green objectives, but since employees can be motivated by different rewards, this process should be implemented according to workforce; employee empowerment is an important facilitator for employee green behavior, and employee involvement positively influences environmental performance and outcomes; majority of the employees consider management commitment as important facilitator for green behaviors; (2) all GHRM practices influence employee green behavior, but when an organization decides to adapt GHRM the implementation of the practices can be divided into two steps: first step includes recruitment and selection, training and development, and management commitment, while second step includes performance management and appraisal, rewards, and employee empowerment.

5. The investigation revealed that recruitment and selection practices do not significantly influence employee green behavior, whereas all other GHRM practices are directly related to employee green behavior. Based on the empirical findings, employee empowerment, performance management and appraisal, and training and development practices should be given priority while implementing GHRM. As a result, the two-step GHRM adoption plan for organizations is adjusted as follows: the first step includes employee empowerment, performance management and appraisal, and training and development, while the second step includes rewards and management commitment.

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ŽALIOJO ŽMOGIŠKŲJŲ IŠTEKLIŲ VALDYMO PRAKTIKA KAIP VEIKSNYS, UGDANTIS ŽALIĄJĄ DARBUOTOJŲ ELGSENĄ

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Santrauka. Didėjantis aplinkosaugos sąmoningumas veikia organizacijų ir darbuotojų požiūrį. Aplinkos tvarumo susiejimas su žmogiškųjų išteklių valdymu lemia tradicinės žmogiškųjų išteklių valdymo praktikos pertvarkymą. Straipsnyje analizuojamas žaliosios ŽIV praktikos poveikis žaliajai darbuotojų elgsenai. Ši praktika gali būti panaudota siekiant geresnių aplinkosaugos rezultatų, formuojant individualią darbuotojų elgseną. Teorinė ir analitinė analizė atskleidė, kad žalioji darbuotojų elgsena ŽIV suteikia aplinkosauginio veiksmingumo, darbuotojai teikia pirmenybę aplinkosaugos požiūriu atsakingiems darbdaviams, o organizacijoms aplinkosaugos požiūriu sąmoningų kandidatų įdarbinimas yra veiksmingesnis, žalioji reputacija gali suteikti konkurencinį pranašumą. Tyrimo rezultatai atskleidė, kad verbavimas ir atranka neveikia žaliosios darbuotojų elgsenos, o visa likusi žaliojo ŽIV praktika yra tiesiogiai su ja susijusi. Organizacijoms siūlomas toks dviejų etapų žaliojo ŽIV diegimo planas: pirmasis etapas apima darbuotojų įgalinimą, veiklos valdymą ir vertinimą, mokymą ir ugdymą, antrasis – atlygį ir vadovybės įsipareigojimą.

Reikšminiai žodžiai: žaliasis žmogiškųjų išteklių valdymas; žaliojo žmogiškųjų išteklių valdymo praktika; žalioji darbuotojų elgsena.