Article

Green Transformational Leadership, GHRM, and Proenvironmental Behavior: An Effectual Drive to Environmental Performances of Small- and Medium-Sized Enterprises

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Abstract: The prevailing research study described in this article is undertaken to investigate how a green transformational leadership style (GTFL) and green human resource management (GHRM) heighten the environmental performance (EP) of small- and medium-sized enterprises. It also focuses on accessing the mediating role of pro environmental behavior (PEB) between GTFL, GHRM, and the EP of the firms. Using a quantitative design of research, data for the study were collected from the small and medium enterprises of Lahore, Pakistan, with a self-administered survey questionnaire. SPSS and AMOS were used for analyzing the data. The various tests, such as structural equation modelling (SEM), correlation, confirmatory factor analysis (CFA), and bootstrapping, were performed to test the hypothesis. The analytical results revealed that GHRM and GTFL lead towards optimizing the EP of the firms. Moreover, the findings shed light on the roles of GHRM and GTFL to engage and motivate the employees for the organization’s ecological betterment by generating PEB in order to reach the EP of the firms. This study will be an extension of the existing body of knowledge by recognizing the predictors of GHRM and GTFL as substantial antecedents of the PEB of employees and the EP of the firms.

Keywords: GHRM; green transformational leadership; pro environmental behaviors; environmental performance; SMEs

1. Introduction

In the recent times, irretrievable changes in the ecosystem, the pervasiveness of pollution of environs, damage to the natural environment, and the application of environmental regulations are increasing the pressure to use cautious efforts for mitigating the deleterious effects by firms towards the environment [1]. The rise in global environmental concerns has led businesses to espouse proenvironmental activities and practices at an increasing rate, to facilitate the firms becoming competitive and ecofriendly [2]. The companies are focusing on conserving energy by using stairs in the place of elevators, printing on both sides of paper, disconnecting and shutting down unnecessary electronic machines and appliances, reducing waste, and creating ideas for protecting the environment. These initiatives by firms are important, as they lead towards improving the ecological performance of the firms [3].

In the expedition to become environmentally friendly, the role played by human resource management (HRM) cannot be overlooked. Furthermore, the awareness regarding green issues is also driving human resources to embrace ecological features of HRM, which is recognized as green human resource management (GHRM). It includes the practices of HRM, which enhance the positive outcomes of the environment [4]. GHRM is considered to be one of the predictors of environmental performance, since going green impacts the overall supply chain procedures, culture, strategies, production, values, and waste.
management, as well as the behaviors of employees [5]. Along with this, GHRM helps firms implement environmentally friendly policies and practices, including green aspects in the recruitment, selection, remuneration, reward, and withdrawal of employees [6]. The conception of GHRM is gaining much attention in the dilemma of environmental management [7].

The firms take serious steps to develop congruence to achieve the milestones of divergent goals (such as financial and ecofriendly goals), which are going to be a win-win situation for the sustainable development and protection of the environment. An efficacious representation of an organization’s environment heavily depends on the ecological behaviors of the employees [8]. Proenvironmental behaviors are considered measurable, environmentally responsible behaviors facilitating the firm’s becoming sustainable and ecofriendly [9]. The employees play a crucial role in assisting the firms to become green by means of depicting green behaviors [10]. As a result, the proenvironmental behaviors drive and ensure the firm’s environmental performance to a greater extent [11]. As the catalyst agents of GHRM, employees exhibit green behaviors along with exerting efforts to gain environmental performance [12]. Numerous research scholars indicated that the green behaviors of employees are related to different aspects, such as individual qualities [13], leadership roles [14], and the climate of the firm [15]. Remarkably, GHRM [16,17] and green leadership [18] are attracting attention as two of the leading implements of environmentally friendly management. The GHRM assists in improving the environmental performance of the firms [19]. The results of past studies suggested that the HRM leads toward exerting positive influence on the green performance of the firm [20,21]; however, the role played by the leaders is becoming critical, since they have greater latitude for impacting the environmental performance of the firm [22,23].

Transformation leaders are those who create inspirational visions, driving the subordinates to take the initiative in completing the tasks and achieving their goals [24]. Moreover, the transformational leadership style encourages the employees to develop creative ideas in the firm along with taking actions to enhance innovation. Transformational leaders are key to the success of advancing any innovation in a firm [25]. The transformational leader also plays a dynamic role in achieving environmental sustainability, and this research area is given little attention at a global level. The research study of [26] indicated that transformational leaders influence the green performances of firms. Another research study highlighted that green transformational leadership leads to achieving environmental goals [27]. The green transformational leadership enhances the green behaviors of the employees, which ultimately influence the green performance of firms [28]. Green transformational leaders aim to protect the environment of the organization by means of stimulating green behavior in their followers [8].

Nevertheless, the previous studies discussed the green HR management and green transformational style of leadership in a joint way [29,30], ignoring the fragmented mechanisms of both constructs on the green behavior of the employees. Leadership and HRM practices serve as different goals to influence and manage the employees of the organization [31]. Based on their aims, both constructs can exist separately in the firm in the form of HRM practices and the roles of leadership in shaping the behavior of employees in a more effective way. To bridge this gap, the present study seeks to split up these two axes, considering that the influence of GHRM and green transformation leadership on the green performance of a firm can not only improve the explanatory power of research, but will also be helpful for revealing how multiple situational aspects such as GHRM and green transformational leadership improve the environmental performance of an organization through employee proenvironmental behaviors.

The sustainability of organizations mainly focused on large firms compared to small and medium enterprises (SMEs) [32], while the SMEs produce a large portion of environmental influences generated by their commercial activities, remains underexamined in the literature [33]. Nonetheless, the increase in the pressure from the stakeholders to implement the initiatives related to environmental management is becoming the rule for
business firms [34,35]. The system of the environmental management of an organization depends on the development and sustainment of the organization’s internal behaviors and capabilities [36], wherein the SMEs are considered to be the significant defaulters due to shortfalls of the employees’ behaviors and attitudes that are required to address the intricate challenges of environmental sustainability [37]. The SMEs should focus on green transformational leadership [38] as well as GHRM [39] to influence the employees’ proenvironmental behaviors [40] and encourage them to achieve green performance [19]. Globally, the SMEs are facing several environment-related matters. According to the report of [41], Lahore is at the top of the list of the most polluted cities in the world. Numerous SMEs are working in Lahore whose commercial activities are also influencing the environment, so it is high time to consider the SMEs’ environment-related concerns. Following this logic, this research investigates the implications of GHRM and green transformational leaderships on the environmental performances of the SMEs of Lahore. Furthermore, this study focuses on examining the mediating role of proenvironmental behaviors between GHRM and green transformational leadership as it has received less attention in previous studies.

The current research study will be significant for SMEs in advancing their green and environmental performances. If the organizations wish to embolden the ecological behaviors of the individuals, this can be done by adopting the practices of GHRM for the ecological betterment of the firm, along with the achieving the green goals of the SMEs. This research is significant for leaders since employees are likely to respond accordingly to their leaders. Thus, leaders must be cautious about their actions at their places of work. The ecofriendly behaviors of leaders are positively related to their followers’ ecological behaviors. The green behaviors of employees can be helpful for the management of a company in accomplishing its sustainable goals. This study is significant for employees, leaders, and managers as it helps them focus on greening the SMEs so that the firms reach their peak environmental performances by implementing ecofriendly HRM and environmental-related leadership styles by means of generating green behaviors in employees. This study attempts to discover the answers to the following research questions:

- RQ1: What are the impacts of GHRM on the environmental performance of SMEs?
- RQ2: What are the influences of green transformational leadership on the environmental performance of SMEs?
- RQ3: What are the mediating effects of proenvironmental behaviors on the association between GHRM, green transformational leadership, and the environmental performance of SMEs?

2. Literature Review
2.1. Variables of the Research Study

2.1.1. GHRM

GHRM is denoted as HRM based on managing the environment [1]. GHRM consists of all the practices of human resources aligned with a firm’s green goals [2]. Recently, research scholars have begun to put emphasis on the applications of GHRM in firms as a novel trend of research in the field of environment management, aiming at unifying the practices of HRM [3,4]. GHRM is categorized into different practices. First, GHRM focuses on developing the ecological abilities of the personnel through ecofriendly recruiting, selecting, and training. Secondly, GHRM considers enhancing the green motivations of employees by means of recompensing their ecological performance. Thirdly, GHRM refers to stimulation of the involvement of the employees through empowering them and creating a culture within the organization that is environmentally friendly [1].

2.1.2. Green Transformational Leadership

The concept of green transformational leadership is considered to be the behavior of leaders whose key goal is to deliver a clear inspiration and vision for motivating and supporting their employees to achieve the green goals of the firm [5,6]. The green transformational leaders motivate the employees to acquire information [7,8] along with involving
and engaging them in green processes, ecofriendly behaviors, and activities [9] to improve the ecological performance of a firm [10]. The green transformational leaders aim to convey the norms to their followers to protect the environment of an organization by stimulating green attitudes and behaviors [11,12].

2.1.3. Proenvironmental Behaviors

The proenvironmental behaviors denote the responsible behaviors related to the environment that assist the organization in being ecological [13], as well as the preparedness of the employees to engage themselves in activities based on green behaviors [14]. The proenvironmental behaviors of employees are usually considered to be extra role actions of the employees for enhancing the welfare and success of the organization [15]. The organizations emphasized the initiative taken by employees to enhance ecofriendly performance [16]. The successes of the various environmentally friendly initiatives by the firm rely on proenvironmental behaviors [12]. The ecofriendly behaviors of employees significantly contribute towards the protection of the natural environment and the environmental performance of the firm [13].

2.1.4. Environmental Performance

The environmental performance refers to the initiatives of an organization for meeting and exceeding their social expectations in the natural environment, in a way to go beyond the mere acquiescence with regulations and procedures [17]. It considers the environment-related influences of processes, as well as the consumption of resources and products, in a manner that best fits the legal requirements of the environment [18]. Past research studies indicated that the green performance of a firm is wholly dependent on the quality of the green products, ecofriendly behaviors, green practices, and green style of leadership, in addition to incorporating ecological sustainability in its business operations [8,19–21].

2.2. Theoretical Framework

The current research study will retrieve support from the resource-based view (RBV) [22] and the ability, motivation, and opportunity theory (AMO) for examining and explaining the environmental performances of SMEs in Lahore. The association between firm performance and human capital is not a new linkage, since it has its origins in the HRM and strategy literature [22,23]. The RBV theory claims that a firm’s performance and competitive edge depends on the firm’s leverage upon their resources that are rare, difficult to imitate by competitors, and valued [22]. Moreover, if the strategic resources are exceptional and out of the reach of the competitors to substitute or duplicate with any other alternate resource that can complete similar tasks, the firm can achieve superior performance and also acquire a competitive edge based on its competitive resources [24]. Drawing upon the RBV theory with regards to the performance, it is considered that employees and leaders are critical resources of a firm, as the key aim of GHRM is to focus on developing, motivating, and providing opportunities to the employees to exhibit superior behaviors for the improving green performance and sustaining the firm’s ecological competitive advantage [25]. It is argued that human resources and leaders satisfy the mentioned criteria of RBV to generate and support a high level of performance, since the human capital is usually entrenched in the multifaceted social systems of the firm, along with ensuring that the human capital is taking on the particular features that are useful for a specific firm rather than its competitors [23]. Based on RBV theory, leadership is one of the critical resources in the field of environmental management in a firm [26,27]. The transformational leadership creates an innovative setting, as well as inspires, motivates, and encourages workers to trust and identify the aims of their leaders, which eventually influences the performance of the firm [28–30]. The green transformational style of leadership is crucial for achieving positive green performance of the firm [30], helping the subordinates to be productive at both the firm and individual levels [31] by showing green behaviors [5].
In addition, the ability motivation opportunity (AMO) theory [32] for examining performance suggests that the abilities, motivations, and opportunities available to the employee contribute to the performance of the organization; it is an integrating viewpoint that illustrates why and how the leaders and the HRM activities are improving the performance of a firm [32]. The AMO theory is frequently used in human resource management research [32]. According to the AMO theory, human resource activities affect the abilities of employees (through hiring, selecting, training, and developing), as well as their motivation (in terms of reward, remuneration, compensation, and incentives) and opportunities (empowering employees and building a sense of teamwork) for contributing to the performance of a firm [33]. In the prevailing study, the AMO theory focuses on the employees’ job-related attitudes and behaviors originating from the HRM application [32,34]. Based on the AMO theory, it is claimed that the GHRM in the firm attracts, motivates, rewards, and retains the employee’s behaviors to achieve the ecological objectives and purposes of the firm [35]. Additionally, by using the AMO theory, GHRM assists organizations with a predominant architecture by utilizing ecofriendly hiring, selecting, and training, giving rewards based on performance, and empowering the employees for attracting, motivating, training, and retaining the green talent that enhances the green performance of a firm [33].

2.3. Hypothesis Development

2.3.1. GHRM and Environmental Performance

The regular job of human resources is to ensure that the strategic corporate visions are communicated to the employees to allow them to understand the prophecy, which is considered to be the main concern of HR experts [36]. To ensure the successful implementation of the strategic goals of the organization, as well as its efficiency, the HRM plays a crucial role [37]. The details of green human resource management (HRM) include hiring and retaining the personnel who are conscious about the environment and giving the employees ecofriendly training, along with considering the employees’ consciousness of the environment; these things contribute to the positive environmental performance of the firm [38]. The results of a study [39] indicated that GHRM is significantly and positively related to the environmental performance of the hotel industry. According to the research study [40], the GHRM enhances the organization’s environmental performance. GHRM plays a positive role in improving the green performance of the health sector [39]. Considering the RBV theory [22], the GHRM is considered to be the important resource of firms since it focuses on improving the green performance of the firm and helping the firm to achieve a sustained competitive edge [25]. Henceforward, centered on the above review, the subsequent hypothesis is posulated:

**H1.** GHRM positively influences the environmental performance of the firms.

2.3.2. Green Transformational Leadership and Environmental Performance

Amidst the dynamic markets, the transformational leadership provides a clear vision regarding the present as well as the future courses of action of the firms [41]. Transformational leaders drive greater levels of commitment, trust, and performance in the firm [41]. The dimension of transformational leadership that is intellectually inspired impacts the efficacy of the employees and the performance of the firm [42]. A green transformational style of leadership plays a significant role in helping the firm deliver its ecological visions and strategies [24], which ultimately leads to the ecofriendly performance of the firms [11,43]. Green transformational leadership influences organizational performance in different manners, including worker commitment and trust, as well as the financial well-being of the firm [44] and positive ecological outcomes [45]. The results of [46] highlighted that the ecological transformational leaders significantly affect the green performance of the organizations in various ways. Considering the theoretical basis of the RBV theory, the leaders play a crucial role in motivating, inspiring, and encouraging the employees’ firms; that leadership role can upsurge the outcomes and productivities of the firms in efficient ways [6,28,30]. Green transformational leaders play a key role in improving a
firm’s ecological performance [30,31]. Thus, the mentioned theoretical underpinning, as well as the research evidence, led to the generation of the following hypothesis:

**H2.** Green transformational leadership positively influences the environmental performances of firms.

2.3.3. GHRM and Environmental Performance: The Mediating Role of Proenvironmental Behaviors

The literature review emphasized the importance of behavioral human resource management in influencing the work behaviors and attitudes of the employees [47]. The GHRM is helpful for the development of proenvironmental attitudes in personnel in both their personal and professional lives. The GHRM stimulates the behaviors of employees regarding environmental responsibility [48] by engaging them in green events [49]. GHRM lowers the costs of firms for achieving high efficiency and improving the relation between employees and firms. GHRM sets ecological responsibility, goals, targets, initiatives, and activities by encouraging workers to depict green attitudes and behaviors. Likewise, the GHRM improves the environmental performances of firms and creates opportunities for the personnel to participate and get involved in the green programs of the organization. The environment-based jobs and work designs inspire workers to gain knowledge regarding the environment by involving them in green behaviors [50]. Presently, the protection of the environment and sustainability is crucial for organizations, since firms are focusing on adopting ecological practices of management and operations of business. To achieve ecofriendly sustainability, one of the significant ways is engaging the employees in the proenvironmental behaviors in a consistent and frequent way [51,52]. Proenvironmental behaviors of the employees facilitate the businesses’ becoming ecological [13]. Proenvironmental behaviors depict the extra-role behaviors of the employee aiming at improving the welfare and effectiveness of the business firms [15]. The firms are increasingly emphasizing the employee-related initiatives for enhancing green performance [12]. An organization’s success depends on implementing different green initiatives that rely on the employees’ proenvironmental behaviors. Furthermore, the proenvironmental behaviors of the employees positively contribute to the firms’ green performances [13]. In the presence of GHRM, the personnel depict ecological behaviors that motivate employees to green activities, increasing the environmental performance of the organization. For this reason, it is concluded that GHRM is positively related with proenvironmental behaviors of the employees [11] that ultimately increase the environmental performance of the firm [13]. Based on the theoretical underpinnings of the AMO theory and the RBV theory, the activities of human resources affect the attitudes and behaviors of employees, leading to an improvement in performance [33]; thus, GHRM helps the employee to depict the green attitudes and behaviors that enhance the ecological performance of the organization [35]. Therefore, the discussed empirical evidence and theoretic provision the following hypothesis are hypothesized:

**H3.** Proenvironmental behaviors mediate the relationship between GHRM and environmental performance of the firms.

2.3.4. Green Transformational Leadership and Environmental Performance: The Mediating Role of Proenvironmental Behaviors

The employees acquire behaviors when they notice others performing them and then attempt to adopt equivalent behavior patterns [53,54]. Accordingly, as the leaders act as role mentors and paragons for their followers, so the transformational leaders have the ability to impact the ecological behaviors of their subordinates by exhibiting environmentally friendly practices [55]. The green transformational leader is concerned about persistent and sustainable growth by integrating the employees’ ecological values with the firm’s environmental values and driving the employees’ ecological behaviors. Besides this, the green effect is a quality of leadership depicted by the supervisors who are serving as role models in ensuring environmental sustainability, resulting in encouraging the ecofriendly
behaviors of their subordinates [56]. According to the study [57], transformational leaders significantly drive the behaviors of their employees by motivating, inspiring, and satisfying them. The green transformational leaders enabled their subordinates to realize the importance of environmentally friendly behaviors via encouraging and reaffirming their ecological practices [58]. The environmental performance of the firms is influenced by the ecological behaviors depicted by the employees [59,60]. Green behaviors consist of the conversions of materials and energy, the recycling of water, and the implementations of ecological projects [60]. The results of a recent study indicate that the behaviors of leaders in sharing knowledge with their subordinates is vital for encouraging the firm performance [61]. The research studies of [62,63] conclude that the relationship among the green behaviors of the employees and the firm’s ecological commitment and green performance is positively significant (Figure 1).

![Conceptual Framework](image)

**Figure 1.** Conceptual Framework: Author’s Creation.

Moreover, it is substantiated that the green transformational style of leadership is a predictor of the ecological behaviors of employees [64] and their green performance [65–67]. According to the theoretical underpinnings of the RBV theory, leaders create an innovative environment by motivating and inspiring their subordinates to acquire required behaviors that influence the performance of their organization [27]. The green transformational leaders enhance the performance of their firms [61] assisting their followers in being productive at their workplace as well as at the individual level [31] through presenting ecological behaviors [5]. Consequently, considering the review of the literature and the theoretical foundation, the following hypotheses are proposed:

**H4.** Proenvironmental behaviors mediate the relationship between the green transformational leadership and the environmental performance of the firms.

3. Materials and Methods

3.1. Research Population and Sample

The objective of the current study was to examine how green transformational leadership and green human resource management increase the environmental performance of a firm with the mediating roles of proenvironmental behaviors. Therefore, the data was collected from the selected SMEs of Lahore after confirming their indulgence and adoption of GHRM by contacting the HR managers, safety managers, general managers, and environmental officers. The SMEs of Lahore were selected for various reasons. First, according to the survey of [41], the world’s most polluted city is Lahore. Secondly, since the SMEs are together producing a large portion of environment-related influences [41], they are likely to influence the natural environment. The research study was quantitative in nature using a deductive approach. Using a cross-sectional study, a self-administered
questionnaire was used to collect the data from the SMEs of Lahore (Supplementary Materials). Nonprobability sampling was used for ensuring that the sample was representative of the population. The managers and employees who were directly involved in the adoption of ecological practices and activities were involved in the current research study. A total of 450 questionnaires were distributed during March–July 2022 to the selected SMEs, of which 370 questionnaires were returned completely filled. Furthermore, the researcher informed the respondents of the study about the objective, purpose, and confidentiality of the data. After obtaining the permission of the SMEs, the survey questionnaire was distributed to the participants. To reduce biasness, the respondents were given instructions before participating [42]. Since the researcher measured the independent as well as the dependent variables simultaneously, some measures were taken by the researcher to avoid the common method variance issues [68]. Firstly, the suggestion of the research of [43] was adopted for overcoming the common method variance; the variables and their dimension’s titles were not included for mitigating the cause and effect of the participants already knowing what was being examined [68]. Secondly, the respondents were informed that their and their responses’ anonymities will be prioritized and ensured. The researcher evaluated the reliability of the measured variables using SPSS. The correlation analysis was also performed. To test the hypothesis, confirmatory factor analysis was performed on Amos prior to running the structural equation modeling. The bootstrapping technique was used to test mediation.

3.2. Measures

The questionnaire of the current research was adapted from the past research studies, and the participants were asked to give their responses on a “five-point Likert scale ranging between 1—strongly disagree to 5—strongly agree.” In order to measure GHRM, the scale developed by Dumont et al. [46] was adapted to have six (06) items. An example of GHRM is: “My leader inspires subordinates with an environmental plan.” For measuring the green transformational leadership, the six (06)-items scale of Chen and Chang [38] was used in the current study. The item example of green transformational leadership is: “My company sets green goals for its employees.”

Moreover, the researcher used the three (03)items scale of Frese et al. [69] to measure proenvironmental behaviors, also suggested by Sobaih et al. [44]. An example of proenvironmental behavior is: “I am involved in becoming environmentally friendly.” The environmental performance was measured by the scale developed by Kim et al. [70] that has seven (07) items. An example of environmental performance is: “My company has reduced waste.”

4. Data Analysis

4.1. Measurement Model

Reliability is considered as the ability to gauge consistency in results while testing. Using Cronbach’s alpha, reliability is measured, informing the researcher regarding the consistent values of the variables [45]. In order to check the consistency in the responses of the participants of the research study, the researcher conducted the reliability test. The test assesses the scale validity that was used in the research study and the values ranged from 0 to 01. Table 1 shows that all the values of Cronbach’s alpha range with the suggested value. The higher values show that the scale is more reliable and consistent. Moreover, CR determines the validity of constructs. There are two types of validity: discriminant validity and convergent validity. The convergent validity was tested using the factor loading, showing the value above the threshold (0.5), which is suggested by [71]. Along with this, the values of average variance extracted are also above the value (0.5), which is claimed by [71] given in Table 1.
Table 1. Statistics of Confirmatory Factor Analysis.

<table>
<thead>
<tr>
<th>Factors and Items</th>
<th>Regression Weights</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP1</td>
<td>0.636</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP2</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP3</td>
<td>0.81</td>
<td>0.863</td>
<td>0.514</td>
<td>0.507</td>
</tr>
<tr>
<td>EP4</td>
<td>0.795</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP5</td>
<td>0.623</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP6</td>
<td>0.644</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTFL1</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTFL2</td>
<td>0.894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTFL3</td>
<td>0.833</td>
<td>0.924</td>
<td>0.670</td>
<td>0.283</td>
</tr>
<tr>
<td>GTFL4</td>
<td>0.810</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTFL5</td>
<td>0.731</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTFL6</td>
<td>0.817</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHRM3</td>
<td>0.755</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHRM4</td>
<td>0.795</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHRM5</td>
<td>0.700</td>
<td>0.838</td>
<td>0.564</td>
<td>0.507</td>
</tr>
<tr>
<td>GHRM6</td>
<td>0.751</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEB1</td>
<td>0.746</td>
<td>0.779</td>
<td>0.541</td>
<td>0.049</td>
</tr>
<tr>
<td>PEB2</td>
<td>0.740</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEB3</td>
<td>0.720</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Confirmatory factor analysis is used for measuring and giving confirmation about the theory (Figure 2). The measurements of CFA focus on specifying how the variables in the theoretical framework represent the constructs of the study, and the researcher is already aware of the factors and connections among the factors. Using their knowledge of theory and statistical evidence, the researcher proposes the association between variables and then tests the propositions and hypothesis empirically [46]. The study uses the measurement of model fitness of [72], indicating the values of the goodness-of-fit index (GFI), comparative fit index (CFI), and the root mean square error of approximation (RMSEA). The value of a good fit for CFI and GFI is >0.95, whereas a value of >0.90 is considered acceptable. The values of GFI, CFI, and RMSEA depict that the model is a good fit as follows: (Cmin/Df is 2.869, CFI = 0.949, GFI = 0.918, RMSEA = 0.062).

Figure 2. Confirmatory factor analysis. Source: author’s calculation through the help of Amos SEM.
4.2. Discriminant Analysis

The researcher measured the discriminant validity using the Fornell-Lacker (1971) criterion. The AVE of the square root is greater than all the constructs’ paired correlation. The diagonal bold values Like (0.717) represent the square root of AVE. Table 2 shows the diagonal square root of the average variance extracted, which is greater than the paired correlations of all the constructs.

Table 2. Discriminant Analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Performance (EP)</td>
<td>(0.717)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Transformational Leadership (GTFL)</td>
<td>0.504 **</td>
<td>(0.819)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Human Resource Management (GHRM)</td>
<td>0.566 **</td>
<td>0.556 **</td>
<td>(0.751)</td>
<td></td>
</tr>
<tr>
<td>Proenvironmental Behavior (PEB)</td>
<td>0.308 **</td>
<td>0.240 **</td>
<td>0.142 **</td>
<td>(0.735)</td>
</tr>
</tbody>
</table>

** p < 0.05. 1 = (EP) 2 = (GTFL); 3 = (GHRM); 4 = (PEB). The diagonal bolded values represent the discriminant validities.

4.3. Common Method Variance

The data collection method was cross-sectional; the data might have had some issues related to biasness. There might be a problem with CMB in the data that can be checked through a single Harman factor test [73]. The results revealed that the absence of CMB in our study is 33.904%.

4.4. Structural Equation Modelling

Structural Equation Modelling (SEM) is used to analyze a model with multiple interrelated dependence relations (Figure 3). In addition, SEM is also used for examining the magnitude and nature of the hypothesized relations, along with assessing the direct and indirect associations amongst the study constructs at the same time [47]. Table 3 reports the results regarding GTFL effects on PEP and GHRM effects on PEP. GTFL has a significant positive impact on PEP (B = 0.275, p < 0.05), and GHRM also has a significant positive impact on PEP (B = 0.498, p < 0.05). Moreover, our results for the control variables show a non-significant effect on the environmental performance of the firm: gender (β = –0.062, p = 0.147), age (β = –0.017, p = 0.744), qualification (β = –0.035, p = 0.436), and experience (β = 0.075, p = 0.054).

![Figure 3. AMOS-SEM model. Source: author’s calculation through the help of AMOS-SEM.](image)

Table 3. Structural Equation Modelling.

<table>
<thead>
<tr>
<th>Model Fit Indices</th>
<th>Paths</th>
<th>Estimates</th>
<th>SE</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cmin/df = 3.509, CFI = 0.930</td>
<td>H1: GHRM—EP</td>
<td>0.498</td>
<td>0.018</td>
<td>***</td>
</tr>
<tr>
<td>GFI = 0.900, RMSEA = 0.072</td>
<td>H2: GTFL—EP</td>
<td>0.275</td>
<td>0.018</td>
<td>***</td>
</tr>
</tbody>
</table>

Note: *** p < 0.001.
4.5. Mediation Analysis

To analyze the mediation hypothesis, the technique of bootstrapping has been employed. The bootstrapping technique is a resampling technique that is considered one of the most reliable, authentic, and vigorous to analyze the variables’ mediation [48]. The statistics in Table 4 show that the direct beta without mediation is significant ($\beta = 0.491$, $p < 0.001$). The direct beta with mediation is significant in the presence of PEB ($\beta = 0.775$, $p < 0.001$). The indirect effect of GTFL–PEB–EP is also significant ($\beta = 0.011$, $p < 0.001$). Thus, PEB partially mediates the association of GTFL and EP. Likewise, the direct beta without mediation is significant ($\beta = 0.263$, $p < 0.001$). The direct beta with mediation is significant in the presence of PEB ($\beta = 0.552$, $p < 0.001$). The indirect effect of GTFL–PEB–EP is also significant ($\beta = 0.026$, $p < 0.001$). Thus, PEB partially mediates the association of GHRM and EP.

Table 4. Mediation Analysis.

<table>
<thead>
<tr>
<th>Path</th>
<th>Direct Beta without Mediation</th>
<th>Direct Beta with Mediation</th>
<th>Indirect Effect</th>
<th>Mediation Type</th>
<th>Confidence Interval 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LLCI</td>
</tr>
<tr>
<td>GTFL . . . PEB..EP</td>
<td>0.491 ***</td>
<td>0.775 ***</td>
<td>0.011 ***</td>
<td>Partial Mediation</td>
<td>0.005</td>
</tr>
<tr>
<td>GHRM..PEB..EP</td>
<td>0.263 ***</td>
<td>0.552 ***</td>
<td>0.026 ***</td>
<td>Partial Mediation</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Note: *** $p < 0.001$.

5. Discussion and Conclusions

As the focus of organizations increases regarding environmental concerns, firms are actively taking action to protect the environment through allocating resources, formulating numerous ecological strategies, and undergoing ecofriendly corrective measures. The most recent development on the organizational level is adopting the GHRM; this action requires further consideration by researchers [49]. There is extant literature available that focuses on GHRM as well as its related consequences [50,51]. In contrast, the antecedents and predictors of GHRM by descriptive contrivance are still at the investigating stage [52]. In this regard, deriving from RBV theory and AMO theory, this current study examines the mediating role of proenvironmental behavior in the associations of GHRM, green transformational leadership, and environmental performance. The results of the study reveal that GHRM is significantly related to environmental performance (i.e., H1). Congruently, in accordance with the RBV theory [53], GHRM is a significant resource for firms as it helps them achieve highly ecofriendly performance. The literature review in the field of GHRM has also verified the link between the hotel industry and the health sector [50,54,55]. However, the existing research notes the positive influence of GHRM on the green performance of the small and medium enterprises of Lahore, Pakistan. The results of the study also indicate that green transformational leadership is significantly related to environmental performance (i.e., H2). Similarly, according to the theoretical underpinnings of the RBV theory [53], the leader’s role is crucial to inspire and encourage employees, increasing their outcomes and productivities [56–58] in the same way that the green transformational leaders improve the environmental performance [59,60] of firms. The findings of the study are consistent with the previous research study [59–62], showing a direct correlation between green transformational leaders and environmental performance. The findings of the study are valuable, as the green transformational leaders focus on compelling and motivating the personnel to understand the environmentally sustainable objectives of the organization thorough providing the subordinates with a clear goal, inspiration, vision, and passion, along with providing for their needs to fulfill the green performance of SMEs. Moreover, the research study also confirms that the implementation of GHRM causes the employees to exhibit proenvironmental behaviors that ultimately enhance the overall environmental performance of a firm (i.e., H3). Correspondingly, keeping in view the theoretical basis of
the RBV [53] and AMO theories, HRM practices influence the individuals’ attitudes in the organization that improve the firm’s productivity [63]. Similarly, GHRM initiatives by the company impels employees to demonstrate ecological behaviors, thus improving green performance. The more effective the GHRM initiatives the organizations take, the more the personnel display ecofriendly behaviors [64]. The findings show relevance with the literature, highlighting that businesses can implement GHRM practices as motivational tools for the workers to exhibit ecological behaviors [51,65], which is considered a significant contributor to the organizational environmentally friendly performance [74,75]. When the firm invests in and applies GHRM by making sincere efforts to hire, educate, and motivate their workers in ecological initiatives that enrich green performance through the employees’ proenvironmental behaviors. The study of [76] argued that workers behave according to the human resource practices of their organization, since the HRM practices influence the behavior of employees at their workplace [77] and that contributes towards the overall performance of the organization [78]. On the contrary, the current study provides notable findings about the environmental performance of SMEs, revealing that when the firm invests in and applies GHRM by making sincere efforts to hire, educate, and motivate their workers about ecological initiatives, they enrich the green performance through the employees’ proenvironmental behaviors in the SMEs. According to the information of the researcher, it seems that the current study is an initial endeavor to examine the mediating role of proenvironmental behavior among the direct relation of GHRM and the environmental performance of the SMEs of Lahore. In addition, the study also specifies that the green transformational leadership leads towards generation of proenvironmental behaviors in the employee, which enrich the environmental performance (i.e., H4). Consistently, based on the RBV theory [57], leaders, through creating innovative environments, motivate and inspire their followers to acquire required attitudes and behaviors that affect the performances of their organizations [61,62]. The outcomes of the study are relevant to past studies confirming that green transformational leaders predict the green behaviors and attitudes of employees [60] and their ecological performances [79–81]. The study provides valuable results by highlighting that green transformational leaders becoming role models for the employees prompts green behaviors in their followers which ensure the occurrence of ecological performance. Unlike previous studies, the current study examines the mediation of proenvironmental behaviors among the association of the green transformational leadership and environmental performance of the SMEs of Lahore. However, the literature discussed the green HR management and green transformational style of leadership together as the mediating path and the moderating mechanism, overlooking the fragmented mechanism of both constructs on the ecological behavior of the employees and green performance [30,76]. The study is different from previous studies, as it considers the aims of both constructs. Both can exist in the firm separately for forming the behavior and improving the performance of the organization and employees’ behavior in HRM practices and the roles of leaders. To the best of the researchers’ knowledge, this study is going to be the first attempt at examining the GHRM and green transformational leadership as independent variables influencing the environmental performance through the proenvironmental behavior mediation mechanism.

5.1. Practical Implications

The adoption and implementation of GHRM are crucial for developing countries, as it helps the firms to conserve resources through work-related activities of developing economies that influence and safeguard the environment in a positive way. Business firms can use a range of GHRM activities such as ecological hiring, training, and rewarding to augment the ecological performance of a firm by exhibiting proenvironmental behaviors. The results of the study recommend to the managements of firms that the GHRM and green transformational leadership are antecedent to the proenvironmental behaviors of the employees. According to [82], the leaders align individual values with firm values. Against this backdrop, the management should ensure that the GHRM practices and green
transformational leaders trigger the ecological behaviors in the employees leading towards green performance. The study provides suggestions for the managers and leaders to motivate their employees so that they can behave in an ecofriendly way. GHRM initiatives are associated with the environment that influences the managers and employees. Given society’s growing interest in ecological concerns, the results of the study recommend that organizations, managers, and employees consider the initiatives and efforts that can best protect the environment, improve sustainability, and foster green productivity. Furthermore, the businesses must guide their leaders to acknowledging the importance of the environment and practicing green behavior, since leaders are role models for their employees and enhance their followers’ ecofriendly influences.

5.2. Theoretical Implications

This study is adding value to the body of knowledge thorough providing an explanatory mechanism to link the GHRM and green transformational leaders with proenvironmental behavior for achieving environmental performance. Environmental concerns are snowballing, emphasizing firms’ roles in protecting the environment [77]. In response to the increasing demand, the firms are shifting to ecological practices and adopting GHRM [4,55,65], whereas the empirical evidence to investigate the ecological effects of such rehearsals are uncommon 50,53,78]. Along with this, the role of leaders in predicting green outcomes is also rare [50,51]. Subsequently, the study contributes to the literature as it considers the influence of different variables that are triggering the environmental performance of SMEs in this sustainable and ecofriendly era, such as GHRM, proenvironmental behaviors, and green transformation leadership. The current study advances the AMO [79,80] and RBV [53] theories in understating and explaining the causes of ecological performance. Applying the RBV theory, the leaders and employees are crucial to the organization, so they must be valued in order to achieve higher performance when their behaviors are influenced [53,81,82]. Advancing the AMO theory [79], the present study suggests that the firm should apply GHRM practices for attracting, motivating, and retaining ecofriendly employees so that the green performance of an organization is improved [63]. The research incorporates the AMO [79] and RBV [53,81] theories, along with illustrating how and why GHRM and leaders promote ecological performance [80,82] by driving employees’ ecological behaviors. The study results affirm that GHRM and transformational leadership are the firms’ strategic resources that are affecting their environmentally friendly performance via the green behaviors of employees.

5.3. Limitations and Future Directions

Even though the study provides numerous practical and theoretical implications, it has some limitations that can be opportunities for future research. The study adopted a self-administered questionnaire by the employees of selected SMEs in Lahore. Hence, the findings cannot be generalized to different contexts and countries. The researcher can take up any other country and context in the future, and the results can be compared. The study was cross-sectional, and data were collected at the same point in time. Additionally, the concept of GHRM is a new idea [65], and it is expected that its outcomes will arrive in the long run so that longitudinal studies can be conducted. The study considers the quantitative side of collecting the respondents’ data, overlooking the responses’ insights. In future, the researcher can triangulate the sources of data by using qualitative insight to conduct interviews with the respondents regarding the reasons for the responses of the participants. The study is not considering any gender, age, or experience as moderating variables. Although the past research [83] established that the gender of leaders is likely to influence the jobs and outcomes of organizations, in the future, age and gender influence can serve as moderators and mediators. Moreover, in the future, studies can examine the role of each individual’s moral considerations, cultural values, green values, and harmonious passions [82]. In future, the S-V Fit theory [84], Social Cognitive Theory [85], or Norm Activation Model [86] can be used as a theoretical basis.
Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/su15054537/s1. Survey Questionnaire.

Author Contributions: Software, J.A.E.P.; Formal analysis, E.E.; Writing—original draft, S.E. All authors have read and agreed to the published version of the manuscript.

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