sustainability

MDPI

Article

Exploring Links Between Green HRM, Greenwashing, and Sustainability: The Role of Individual and Professional Traits

Francisco Cesário [1,2], Ana Sabino [2,3,*], Ana Palma-Moreira [4] and Mafalda Pinto-Coelho [2]

[1] Management Department, Atlântica—Instituto Universitário, 2730-036 Lisbon, Portugal; fcesario@ispa.pt
[2] School of Psychology, ISPA—Instituto Universitário, 1149-041 Lisboa, Portugal; mafs_pc@hotmail.com
[3] APPsyCI—Applied Psychology Research Center Capabilities Inclusion, 1149-041 Lisboa, Portugal
[4] Faculdade de Ciências Sociais e Tecnologia, Universidade Europeia, Quinta do Bom Nome, Estr. da Correia 53, 1500-210 Lisboa, Portugal; ana.moreira@universidadeeuropeia.pt
* Correspondence: asabino@ispa.pt

Abstract: This study aims to investigate the influence of Green Human Resources Management practices and greenwashing on the three pillars of sustainability—social, environmental, and economic. The moderating role of age and gender as individual characteristics and managerial position and sector as professional characteristics is also analyzed. A convenience sample of 232 respondents was used. Path analysis was employed to assess hypothesized relationships in the proposed model. Results suggest that different Green Human Resources Management practices influence social, environmental, and economic dimensions and individual and professional characteristics play a pivotal role in this relationship. Specifically, it is important to highlight the importance of green performance management and rewards and the non-significant influence of green training. Greenwashing seems to be a determinant of social and economic sustainability. The results emphasize that, for organizations to boost their employees' perception of the three pillars of organizational sustainability, they must be aware of the specificities of their workforce and act accordingly. This work is relevant because it emphasizes the unique role of each GHRM practice as an antecedent of sustainability. It also contributes to the understanding that specific individual and professional characteristics affect the employees' perception of sustainability.

Keywords: green human resources management; greenwashing; organizational sustainability; triple bottom line

Academic Editor: Lucian-Ionel Cioca

Received: 5 February 2025
Revised: 17 February 2025
Accepted: 18 February 2025
Published: 19 February 2025

Citation: Cesário, F.; Sabino, A.; Palma-Moreira, A.; Pinto-Coelho, M. Exploring Links Between Green HRM, Greenwashing, and Sustainability: The Role of Individual and Professional Traits. *Sustainability* **2025**, *17*, 1764. https://doi.org/10.3390/su17041764

1. Introduction

Sustainability is presently one of the most discussed topics, and society is, more than ever, concerned and aware of the need for change in environmental issues [1]. In 2015, the United Nations identified 17 goals (SDGs) as part of the 2030 Agenda for Sustainable Development, which represent a global commitment that encourages a partnership between individuals, organizations, and societies so that behaviors, implemented policies, decisions, and strategies result from a balanced and simultaneous focus on the three dimensions considered in the Triple Bottom Line (TBL) model—economic, social, and environmental [2,3].

In Portugal, according to data published in the Aggregate Report 2022 on the Journey 2030 by BCSD Portugal, 93% of Portuguese companies have a commitment to sustainability in their mission/vision, even though this number drops by 15% when we consider the companies that reflect these intentions in their organizational strategy. In general, 68% of companies are positioned in the "Know and Build" stages of the 2030 Journey, which means

they recognize the need and opportunities for sustainability and are therefore beginning to carry out diagnoses and define priorities, objectives, and action plans. These companies are larger (>250 employees), in contrast to micro-enterprises and SMEs whose levels of sustainable maturity are lower.

The TBL approach, proposed by [4], argues that companies and, consequently, their respective performance, should not focus exclusively on generating economic value, but on creating value for society and the environment in sustainable ways [5,6]. Therefore, organizational sustainability fosters sustainable development by integrating social, economic, and environmental aspects of organizational performance [7].

As a result of the growing attention and prioritization of the environment, people are seeking to adopt more ecological behaviors [1] and, as consumers, they are also increasing their levels of demand for the services and products they purchase, moving away from organizations that are seen as acting less environmentally friendly or whose environmental impact is more harmful [1].

For this reason, organizations are also increasingly realizing the importance of adopting more responsible practices and actively contributing to a more balanced planet. Thus, to meet this sustainability challenge that organizations are progressively facing, the implementation of sustainable human resources practices, most of them related to the environmental pillar which is called Green Human Resources Management (GHRM), is a must. These GHRM practices have been one of the ways of responding to the problem, demonstrating to different stakeholders the active involvement of companies in resolving environmental issues [8]. However, there are no previous studies on the influence of GHRM practices on employees' perceptions of social, environmental, and economic organizational sustainability. We therefore aim to test the influence of GHRM practices on the three pillars of organizational sustainability.

On the other hand, pressured by growing environmental awareness, pressure to meet sustainability criteria [9], and to meet the interests and needs of their customers, organizations often advertise products, services, activities, and initiatives presented as eco-friendly, to work positively on their image and reputation, maintain their competitiveness and thus not be left out on the road towards sustainability [1]. However, some of them communicate messages which may not be aligned with their real sustainable practices. This incongruence between what is communicated and the employees' perceptions of the real practices is called greenwashing [6,10,11]. In 2021, the European Commission released the results of an extensive analysis of different websites to identify violations of European Union legislation on greenwashing. Portugal was not left out of this analysis, with the Directorate-General for Consumer Affairs verifying dozens of allegations in various sectors of activity such as textiles, energy, and automobiles [12]. In this sense, previous studies showed that greenwashing is present in the Portuguese labor market. However, it is not clear if the employees perceive their organizations as being greenwashers and its impacts on the perception of organizations' sustainability in its three pillars—social, economic, and environmental. Thus, we aim to verify the influence of greenwashing perceptions on the three pillars of organizational sustainability.

Although it is important, the implementation of HRM practices, in particular GHRM, practices may not be of the knowledge of all organization's employees. Employees are not always aware of organizational practices, mainly if they do not work in that area/department, which may hinder and/or bias their assessment in that regard. Thus, the present study also aims to verify to what extent employees are aware of and know their employers' GHRM practices and efforts to become a sustainable workplace. To do so, we will verify participants' capability to assess GHRM practices and greenwashing perceptions scales

through the response rates of an additional response option which we labeled "Do not know/I never thought about it/I have no information about it".

Although studies on sustainability are increasing, there is a gap in the knowledge of how different groups perceive this phenomenon. Thus, we are also interested in understanding how the moderating roles of gender, age, managerial position, and sector on the relationship between the perception of GHRM practices and greenwashing influence the perception of social, economic, and environmental organizational sustainability.

We found this study to be innovative as it addresses relevant constructs which need more theoretical and empirical underpinning and highlights that diversity in the work setting must be considered as different groups may prioritize different dimensions which may lead to different perceptions of how GHRM and greenwashing are related to organizational sustainability. By identifying these differences, organizations may act accordingly to adjust and propose tailor-made policies more aligned with the specificities of their workforce.

2. Literature Review

2.1. Green Human Resources Management

The concept of "green" Human Resources Management (GHRM) refers to a set of practices applicable to different HR areas, which have an ecological impact on the organization and are key to supporting it in achieving its strategies and a more positive sustainable performance [13–15]. In other words, GHRM practices are about aligning HR policies, practices, and strategies with organizational green goals [15–17].

Cesário et al. (2022) [18] proposed a GHRM practices model comprising five dimensions in which employees are asked to evaluate their perceptions of organizational green efforts on green recruitment and onboarding (GRO), green training (GT), green Performance management and rewards (GPMRs), green internal communication (GIC), and green sustainable culture (GSC). In the present study, GHRM practices will be assessed based on [18]'s work as it was already used in Portugal and comprises the main focus of HR practices.

Drawn upon Social Identity Theory [19], this conceptual model assumes that employees' perceptions of organizational adoption of GHRM practices can result in greater employee–organization identification [20]. Indeed, when organizations implement these practices, they send signals to employees (current and future) of their commitment to social responsibility and how they integrate environmental and social dimensions into their strategic priorities [21].

This is a point to keep in mind, as different authors argue that HRM practices are tools that make it possible to align employees with the organization's sustainable strategy [6,11], fostering environmentally conscious behaviors through training, evaluation, and rewards that will leverage the ecological goals to be achieved [15].

2.2. Organizational Sustainable Performance: A Triple Bottom Line (TBL) Approach

The Triple Bottom Line (TBL) approach emerged as a comprehensive perspective on sustainability, which proposes that sustainable performance combines the social, environmental, and economic dimensions simultaneously [4]. According to this model, organizational success is based on a conscious balance between profits, the planet, and people [22].

More than communications focusing on sustainable initiatives and results, or seeking legitimacy in these ways, it is important that this information is truthful and reflects a balanced assessment of the actions taken by organizations based on the three TBL pillars and how they genuinely and proactively integrate this sustainable awareness into their own identity and value proposition for multiple stakeholders [9,23].

The focus can no longer be solely on profit. Consumers are more demanding and increasingly skeptical, so the integration of the social and environmental dimensions into organizational strategies and operations should occur as a natural result of organizations' ambitions to become sustainable, while simultaneously embracing the different dimensions [24].

A correlational study on the impact of HRM on organizations showed that employee participation in organizational sustainability initiatives mediates the relationship between HRM practices and organizational results in terms of environmental sustainability [15].

Based on previous studies, there is evidence that applying sustainable practices constitutes a competitive advantage for organizations [25]. Several studies have shown a positive relationship between HRM practices and the sustainable performance of organizations [13,22,26], emphasizing the relevance of the support given by leaders to environmental goals and initiatives so that the implementation of HRM practices becomes more effective [22].

In particular, a systematic review carried out by [27] revealed that HRM initiatives were driven by imperatives related to corporate social responsibility and that the eco-friendly behavior of employees demonstrated a mediating role in the relationship between green HR practices and the social sustainability of organizations. Other studies [20,28,29] have also emphasized that corporate performance, specifically the environmental dimension, is boosted when GHRM practices are implemented by encouraging and promoting green behavior by employees.

However, it is not only with the social and environmental pillars that this relationship has been studied, since a study by [30] highlighted the association between GHRM practices and the financial benefits they bring to organizations.

Based on the previous arguments we present the following hypothesis:

Hypothesis 1. *GHRM practices are positively and significantly related to the three pillars of organizational sustainability (economic, environmental, and social).*

2.3. Greenwashing

Although there is no universally accepted definition of this concept, greenwashing is commonly held as a perceptual phenomenon [6,10] that can be understood as deliberate false advertising carried out [1] or the sharing of vague information [12] by organizations, misleading [31] and/or not supported by evidence [1,32], which can convey a misleading idea that the practices, products, and/or services in question are environmentally friendly when they are not [11]. Other perspectives can be considered by understanding greenwashing as "a tactic used to make an organization, service or product appear environmentally sustainable without actually reducing its environmental impact" [33] or as the organizational disclosure of information about environmental issues to maximize its perceived legitimacy [34]. In this sense, organizations select, exaggerate, or embellish the information to be communicated through reports, advertising, and corporate websites based on apparently positive impacts, thus conveying a favorable (potentially false) image of transparency and responsibility [35,36], but without highlighting that this information can mask real corporate performance in other equally relevant dimensions [37].

A study carried out by [38] revealed that the adoption of greenwashing behaviors by organizations can, in some cases, be motivated by financial constraints, so a company's economic situation can open the door to greenwashing as a way of disclosing results and information which, although aimed at increasing profits by promoting an image of commitment to social responsibility and sustainable growth, conceals the organization's true performance.

The search for reputation, notoriety, and market opportunities are also pointed out as possible reasons for the occurrence of greenwashing, as companies are pressured to show

themselves to be "green" to satisfy environmentally conscious consumers and customers, maintaining a competitive advantage over other organizations [9,39].

A study performed by [40] revealed that the occurrence of greenwashing negatively affects employees' levels of trust in their organization. Other research also showed that a high perception of greenwashing contributed negatively to career satisfaction, feelings of pride in the organization, and affective commitment [41], as well as to a perception of corporate hypocrisy, which ultimately led to higher turnover intentions [42]. Thus, the effects of greenwashing on financial performance are potentially negative [43] and organizations that practice greenwashing are less likely to be able to attract external investment [44]. We therefore propose the following hypothesis:

Hypothesis 2. *Greenwashing is negatively and significantly related to the three pillars of organizational sustainability (economic, environmental, and social).*

2.4. The Role of Individual and Professional Characteristics

Organizations comprise employees with different individual and professional characteristics and sustainable attitudes and behaviors that may change according to those characteristics. Although some studies confirm this assumption [45–47], little is known about the role of gender and age as individual characteristics and managerial position and sector as professional characteristics on the links between the perception of GHRM practices and greenwashing on the perception of social, economic, and environmental organizational sustainability. Due to the lack of literature on this matter, we aim to test the moderation role of those variables as it is expected to find some relevant differences.

3. Materials and Methods

3.1. Data Collection Procedure

A total of 232 individuals took part in this study, all working in organizations based in Portugal. The sampling process was non-probabilistic, intentional, and snowball. The questionnaire uploaded to the Qualtrics platform included an informed consent form, which guaranteed the anonymity and confidentiality of the data, informed the individuals that there were no right or wrong answers, and asked them to be honest in their responses. The items were presented by instrument since all the items were organized randomly, and we also used different rating scales [48]. The questionnaire was disseminated via a link on social networks like LinkedIn, Facebook, and Instagram. We also sent private emails to our network. Data collection took place between April and May 2024.

3.2. Participants

This study's sample consisted of 232 participants aged between 21 and 69 (M = 32.91; SD = 10.49); 138 (59.9%) were male, 92 (39.7%) were female, and 2 (0.9%) were non-binary. In terms of educational qualifications, 4 (1.7%) had primary education, 53 (22.8%) had secondary education, 80 (34.5%) had a bachelor's degree, 16 (6.9%) had a postgraduate degree, 77 (33.2%) had a master's degree, and 2 (0.9%) had a doctorate. As for their length of service in the organization, 57 (24.6%) had been there for up to 2 years, 63 (27.2%) for between 2 and 3 years, 60 (25.9) for between 3 and 7 years, and 52 (22.4%) for more than seven years. Regarding whether they held a managerial position, 53 (22.8%) said yes, and 179 (77.2%) said no. Of these participants, 21 (17.7%) work in the public sector, 179 (77.2%) in the private sector, and 12 (5.2%) in the public/private sector. Concerning the sector of activity in which their organization operates, 28 (12.1%) belong to the industrial sector, 114 (49.1%) to the services sector, 27 (11.6%) to the logistics, distribution, and trade sector, and 63 (27.2%) to other sectors.

3.3. Data Analysis Procedure

The data were imported into SPSS Statistics 29 software (IBM Corp., Armonk, NY, USA). To test the validity of the instruments used in this study, confirmatory factor analyses were carried out using AMOS Graphics for Windows 29 software (IBM Corp., Armonk, NY, USA). The procedure followed the logic of "model generation" [49]. Considering the recommendations established by [50], six fit indices were combined: Chi-square ratio/degrees of freedom ($\chi^2/gL < 5$); the Tucker–Lewis Index (TLI > 0.90); Goodness-of-fit Index (GFI > 0.90); Comparative Fit Index (CFI > 0.90); Root Mean Square Error of Approximation (RMSEA < 0.08); and Root Mean Square Residual (lower RMSR). Using the data obtained from the confirmatory factor analysis, we calculated the construct reliability for each of the dimensions of the instruments used, whose value should be greater than 0.70. Convergent validity was tested by calculating the average variance extracted (AVE), which should be greater than 0.50 [51]. For internal consistency, Cronbach's alpha was calculated for each instrument's dimensions, and its value should be higher than 0.70 [52].

The sensitivity of the items was tested. The items must have answers at all the response points, the median must not be close to one of the extremes, and the absolute values of asymmetry and kurtosis must be below 2 and 7, respectively [53].

3.4. Instruments

Green Human Resources Practices: To measure Green HR Management practices (GHRM), we used the instrument developed by [18]. This instrument comprises 18 items spread across five dimensions: (1) green recruitment and onboarding (GRO); (2) green training (GT); (3) green performance management and rewards (GPMRs); (4) green internal communication (GIT); and (5) green sustainable culture (GSC). These 18 items are based on a Likert scale (from 0 "Do not know/I never thought about it/I have no information about it" to 5 "always"). A 5-factor confirmatory factor analysis was performed and presented an adequate fit ($\chi^2/gL = 2.45$; GFI = 0.87; CFI = 0.94; TLI = 0.92; RMSEA = 0.079; SRMR = 0.076). Regarding construct reliability, it varies between 0.80 (GPRM) and 0.88 (GRO and GT). The AVE values range between 0.50 (GPRM) and 0.70 (GT), indicating good convergent validity. Concerning internal consistency, Cronbach's alpha values vary between 0.77 (GPRM) and 0.88 (GRO and GT).

Perceived Organizational Sustainability: To assess perceived organizational sustainability based on the Triple Bottom Line (TBL), we used the instrument developed by [54]. This instrument consists of 15 items spread across three dimensions: social; environmental; and economic. These items are classified on a Likert-type rating scale, which varies according to the dimensions: social dimension (from 1 "Strongly disagree" to 5 "Strongly agree"); environmental and economic dimensions (from 0 "Do not know/I never thought about it/I have no information about it" to 5 "Always"). Since the social dimension assesses individuals' attitudes towards socially sustainable efforts, there was no need to verify participants' knowledge on that matter. A three-factor confirmatory factor analysis was carried out. The fit indices obtained were adequate ($\chi^2/gL = 1.43$; GFI = 0.94; CFI = 0.98; TLI = 0.98; RMSEA = 0.043; SRMR = 0.097). As far as construct reliability is concerned, it ranges from 0.87 (environmental and economic) to 0.89 (social). The AVE values vary between 0.57 (economic) and 0.63 (social), indicating good convergent validity. Concerning internal consistency, Cronbach's alpha values vary between 0.87 (environmental and economic) and 0.89 (social).

Perceived Corporate Greenwashing: We used the scale adapted from [55] to evaluate individuals' Perceived Corporate Greenwashing. This unidimensional instrument comprises 4 items, classified on a Likert-type rating scale (from 0 "Do not know/I never thought about it/I have no information about it" to 7 "Totally Agree"). A one-factor confirmatory factor analysis was carried out. The confirmatory factor analysis showed that all the fit indices were adequate ($\chi^2/gL = 1.81$; GFI = 0.99; CFI = 0.99; TLI = 0.99; RMSEA = 0.059;

SRMR = 0.047). The construct reliability of this instrument was 0.83. About the convergent validity, an AVE value of 0.56 was obtained. Regarding internal consistency, it has a Cronbach's alpha of 0.83.

Concerning the items' sensitivity, none has a median close to one of the extremes and all the items have responses at all points. Their absolute asymmetry and kurtosis values are below 2 and 7, respectively, which indicates that they do not grossly violate normality [53].

4. Results

To assess common method bias risk, two models were initially tested, one and nine factors. The fit indices of the one-factor model were found to be inadequate ($\chi^2/gL = 5.18$; GFI = 0.51; CFI = 0.55; TLI = 0.52; RMSEA = 0.134; SMRM = 0.244). In turn, the fit indices of the nine-factor model proved to be adequate or very close to adequate ($\chi^2/gL = 1.70$; GFI = 0.81; CFI = 0.93; TLI = 0.92; RMSEA = 0.055; SMRM = 0.121). Therefore, it can be concluded that theoretical conceptualization, which determines nine variables, adequately represents the observed data. The correlations are consistent with the pattern of relationships theorized.

4.1. Descriptive Statistics for the Study Variables

The first step was to verify the response frequency regarding the "Do not know/I never thought about it/I have no information about it" response option. We performed the analysis considering the number of participants who chose that option per item and the number of participants who also chose that response option in all items comprising a dimension which allows us to understand the participants' percentage not answering to the Likert Scale, by dimension (Table 1). Results per item suggest that item GRO2 "In the selection process of new employees, my company values environmentally conscious candidates" is the most critical as 27.6% of the participants responded, "Do not know/I never thought about it/I have no information about it". Similar percentages were found in the greenwashing scale, as 24,1% of participants chose to answer, "Do not know/I never thought about it/I have no information about it" in item GW4, "The organization where I work selectively discloses its environmental activities or conceals information about its environmental misconduct".

Table 1. Analysis of the response "Do not know/I never thought about it/I have no information about it" per dimension of the instruments used in this study.

Variable	Frequency	%
Green Recruitment and Onboarding	10	4.3
Green Training	8	3.4
Green Performance Management and Rewards	6	2.6
Green Internal Communication	9	3.9
Green Sustainable Culture	6	2.6
Environmental	5	2.2
Economic	12	5.2
Greenwashing	25	10.8

Concerning the analysis per dimension (Table 1), the results suggest that 10.8% of the participants responded, "Do not know/I never thought about it/I have no information about it" in all items related to greenwashing, followed by 5.2% which did not answer to the Likert scale on any item of the economic sustainability scale and 4.3% made the same decision regarding the green recruitment and onboarding.

Following this first step, we carried on with the analysis using only the participants who answered the respective Likert scale.

To better understand the position of the answers given by the participants in this study, descriptive statistics were performed on the variables under study (Table 2).

Table 2. Descriptive statistics.

Variable	*t*	df	*p*	*d*	Mean	*SD*
GRO	−8.16 ***	221	<0.001	0.55	2.40	1.09
GT	−10.55 ***	223	<0.001	0.70	2.20	1.13
GPMR	−21.63 ***	225	<0.001	1.44	1.70	0.90
GIC	−9.02 ***	222	<0.001	0.60	2.33	1.11
GSC	−11.79 ***	225	<0.001	0.78	2.19	1.03
Social	9.58 ***	231	<0.001	0.63	3.62	0.99
Enviro	7.42 ***	226	<0.001	0.49	3.40	0.81
Econo	3.78 ***	219	<0.001	0.26	3.19	0.76
GW	−11.54 ***	206	<0.001	0.80	2.93	1.34

Note: *** $p < 0.001$.

The results show that the participants' answers to all the GHRM dimensions are significantly below the scale's central point (3), which indicates that they consider that their organizations do not implement GHRM practices frequently, with green performance management and Rewards (GPMRs) being the more critical. As for the TBL instrument, the answers given in the social, environmental, and economic dimensions are significantly above the scale's central point which indicates that participants positively evaluate their organizations' sustainable efforts. As for greenwashing, the answers given by the participants are significantly below the central point (4), which indicates that the participants in this study have a low perception of greenwashing (Table 2).

4.2. Hypothesis Testing

Path analysis was used to test the effect of GHRM practices and greenwashing on the three dimensions of perceived organizational sustainability—social, environmental, and economic (Table 3; Figure 1). The five dimensions of GHRM practices and the perception of greenwashing explain 29% of the variability in the social pillar, 31% of the variability in the environmental pillar, and 31% of the variability in the economic pillar of organizational sustainability.

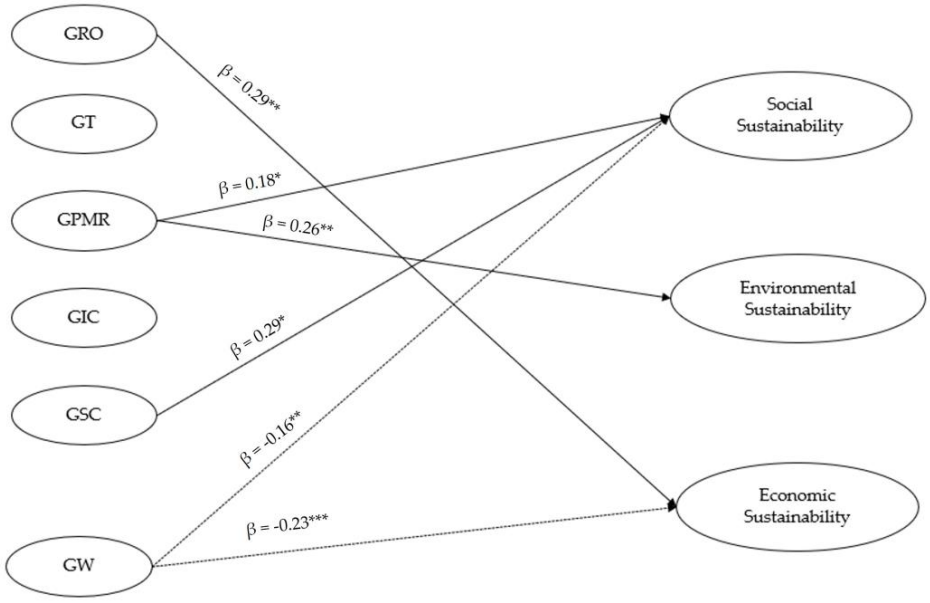

Figure 1. Results of the relationship between GHRM and greenwashing on organizational sustainability. Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 3. Path analysis results of the relationship between GHRM and greenwashing on organizational sustainability.

Independent Variable	Dependent Variable	Total			
		Z	β	*p*	R^2
GRO	Social	0.54	0.06	0.593	0.29
GT		−1.17	0.11	0.240	
GPMR		2.00 *	0.18 *	0.045	
GIC		1.78	0.18	0.073	
GSC		2.28 *	0.26 *	0.023	
GW		−2.67 **	−0.16 **	0.008	
GRO	Envir	1.69	0.18	0.091	0.31
GT		−0.81	0.08	0.418	
GPMR		3.02 **	0.26 **	0.003	
GIC		1.66	0.16	0.097	
GSC		0.86	0.10	0.389	
GW		−0.20	−0.02	0.839	
GRO	Economic	2.80 **	29 **	0.005	0.31
GT		−0.30	0.03	0.768	
GPMR		1.16	0.10	0.247	
GIC		−0.49	−0.05	0.624	
GSC		1.94	0.22	0.053	
GW		−3.82 ***	−0.23 ***	<0.001	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Specifically, results seem to suggest that different GHRM practices dimensions influence differently the three pillars of perceived organizational sustainability, as GPMR and GSC have a positive and significant effect on the social pillar, GPMR has a positive and significant effect on the environmental pillar, and GRO on the economic pillar. Regarding greenwashing, it seems that it significantly and negatively influences the social and the economic pillar of organizational sustainability and there is no significant relationship between greenwashing and the environmental pillar of organizational sustainability.

Based on the results, we can partially confirm Hypothesis 1 and Hypothesis 2.

4.3. The Role of Individual and Professional Characteristics

We then tested whether these relationships varied according to age and gender as examples of individual characteristics and managerial position and sector as examples of professional characteristics. To do so, based on the path analysis we performed multigroup analysis using two groups for each variable under study. Multigroup analysis makes it possible to better reveal the particularities of the relationship between the variables under study according to certain socio-demographic variables [56].

4.3.1. The Role of Age

The sample was divided into two independent groups to test whether there were differences according to the participant's age. We chose to divide the sample according to the average age, which was 32.91 years. This resulted in two groups: one in which the participants were 32 years old or younger (61.6%) and another in which the participants were 33 years old or older (38.4%) (Figure 2).

Results of the multigroup analysis indicate differences according to age (Table 4). It seems that it is in the oldest group that GHRM practices and greenwashing presented higher levels of R-Squared as the dimensions of GHRM practices and greenwashing explain 32% of the variability of the social pillar, 40% of the variability of the environmental pillar, and 42% of the variability of the economic pillar. As for the youngest participants the R-

Squared is approximately 10% less. A closer look at the influence of the GHRM dimensions and greenwashing on the organizational sustainability pillars indicates different patterns across groups.

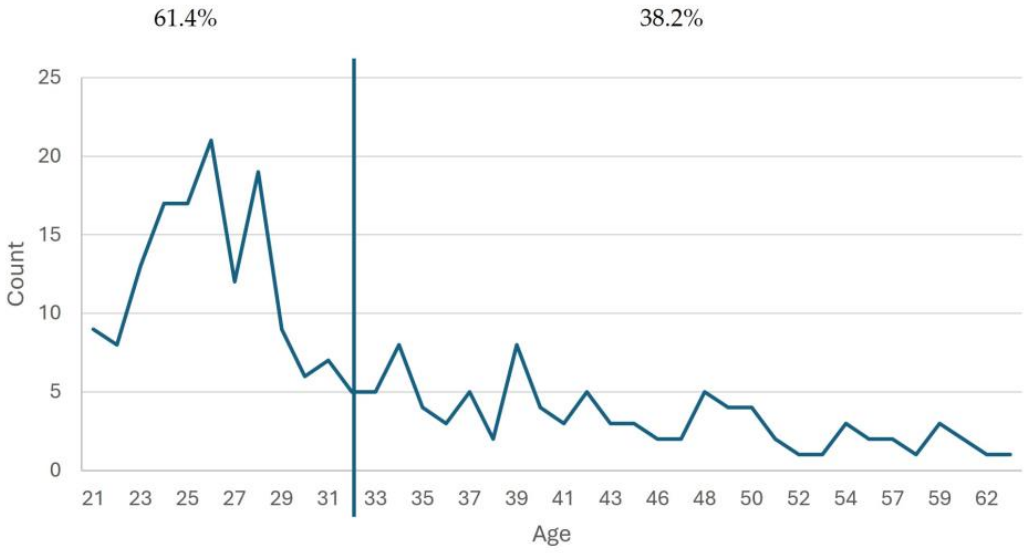

Figure 2. Groups of participants according to age.

Table 4. Differences according to age.

Independent Variable	Dependent Variable	≤32 Years				>32 Years			
		Z	**β**	***p***	**R^2**	**Z**	**β**	***p***	**R^2**
GRO	Social	0.91	0.13	0.364	0.29	−0.06	−0.01	0.951	0.32
GT		−0.82	−0.10	0.415		1.12	−0.17	0.263	
GPMR		1.68	0.19	0.093		1.43	0.21	0.153	
GIC		0.11	0.01	0.913		2.74 **	0.43 **	0.006	
GSC		2.18 *	0.32 *	0.029		0.58	0.10	0.561	
GW		−2.16 *	−0.16 *	0.031		1.68	−0.16	0.093	
GRO	Envir	1.09	0.15	0.274	0.28	1.19	0.18	0.233	0.40
GT		−0.48	−0.06	0.635		−0.72	−0.10	0.474	
GPMR		1.92	0.22	0.055		2.20 *	0.31 *	0.028	
GIC		1.34	0.17	0.182		1.21	0.18	0.227	
GSC		0.72	0.11	0.473		0.76	0.13	0.450	
GW		0.13	0.01	0.897		−0.62	−0.06	0.536	
GRO	Econo	2.60 **	0.36 **	0.009	0.29	1.48	0.23	0.140	0.42
GT		−0.80	−0.10	0.426		0.58	0.09	0.560	
GPMR		1.51	0.17	0.132		−0.08	−0.01	0.936	
GIC		−1.43	−0.18	0.153		0.79	0.12	0.430	
GSC		1.43	0.21	0.152		1.46	0.26	0.144	
GW		−3.73 **	−0.27 ***	<0.001		−1.99 *	−0.18 *	0.047	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Regarding the social pillar of organizational sustainability, participants aged 32 or under are positively influenced by GSC and negatively by greenwashing. Older participants, on the other hand, are more influenced by GIC when perceiving social sustainability. This result seems to emphasize that, to boost a socially sustainable organization, for the younger it is important to promote a green culture (GSC) without discrepancies between what is performed and what is being communicated (greenwashing) as for the oldest the focus must be only on internal communication towards sustainability.

The results regarding environmental sustainability seem to indicate that for the youngest, no GHRM and greenwashing dimensions influence this pillar and for the oldest, the presence of having green goals and rewards during the performance management process is important to perceive their organizations as environmentally sustainable ones.

Lastly, although greenwashing perceptions negatively influence the perception of economic sustainability, independent of age, the results also suggest that the youngest also consider recruitment and onboarding as an effect on how they perceive their organization as being economically sustainable.

4.3.2. The Role of Gender

To investigate differences across gender, we divided our sample into two independent groups—men and women (Table 5). In terms of the analysis of the R-Square, results suggest that is in the social pillar where genders diverge as the GHRM and greenwashing explain 23% of the variability of the social pillar for men and 42% for women. The R-Square for the other two pillars are similar.

Table 5. Differences according to gender.

Independent Variable	Dependent Variable	Male				Female			
		Z	**β**	***p***	**R^2**	**Z**	**β**	***p***	**R^2**
GRO	Social	1.07	0.14	0.286	0.23	−0.65	−0.11	0.514	0.42
GT		−0.43	−0.05	0.668		−1.48	−0.21	0.138	
GPMR		1.78	0.20	0.073		1.10	0.15	0.272	
GIC		−0.45	−0.06	0.657		3.35 ***	0.45 ***	<0.001	
GSC		1.77	0.27	0.077		2.14 *	0.37 *	0.032	
GW		−1.77	−0.14	0.077		−2.18 *	−0.18	0.030	
GRO	Envir	1.08	0.14	0.280	0.34	1.02	0.19	0.307	0.32
GT		−0.66	−0.08	0.512		−0.39	−0.06	0.699	
GPMR		2.85 **	0.30 **	0.004		1.46	0.22	0.145	
GIC		2.16 *	0.28 *	0.031		0.70	0.10	0.487	
GSC		0.03	0.01	0.980		0.10	0.18	0.334	
GW		0.10	0.01	0.919		−0.03	−0.01	0.974	
GRO	Econo	2.27 *	0.30 *	0.024	0.30	1.67	0.30	0.095	0.36
GT		−0.35	−0.04	0.730		0.33	0.05	0.739	
GPMR		1.94	0.21	0.053		3.35 ***	−0.08	<0.001	
GIC		0.08	0.01	0.933		−0.89	−0.13	0.375	
GSC		0.57	0.08	0.567		1.95	0.36	0.051	
GW		−2.62 **	−0.20 **	0.009		−3.28 **	−0.30 **	0.001	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

When comparing genders, it is suggested that, for men, none of the studied dimensions influence the social pillar. However, in the group of women, culture, internal communication, and greenwashing (negatively) influence the social pillar. On the contrary, when analyzing the influence of GHRM and greenwashing on the environmental pillar, for women there is no significant relationship but men seem to valorize green performance management and rewards and green internal communication as possible antecedents. Differences were also found in the antecedents of economic sustainability. Although greenwashing negatively influences the economic pillar in both groups, men are also influenced by green recruitment and onboarding and women by green performance management and rewards.

4.3.3. The Role of Managerial Position

Managerial position was evaluated as having or not having a position of leadership within the organization. In this sense, we divided the sample into the following groups—manager and non-manager (Table 6). Results indicate higher R-Squares for managers as 45%, 54%, and 34% of the variability of social, environmental, and economic sustainability, respectively, are explained by GHRM and greenwashing. For non-managers, these values are 26%, 26%, and 30%, respectively.

Table 6. Differences according to managerial position.

Independent Variable	Dependent Variable	Non-Manager				Manager			
		Z	**β**	***p***	**R^2**	**Z**	**β**	***p***	**R^2**
GRO	Social	−0.15	−0.02	0.880	0.26	0.50	0.09	0.617	0.45
GT		−0.45	−0.05	0.657		−1.84	−0.31	0.065	
GPMR		1.47	0.16	0.143		2.03 *	0.30 *	0.042	
GIC		1.25	0.14	0.211		1.61	0.33	0.106	
GSC		2.41 *	0.31 *	0.016		0.68	0.15	0.494	
GW		−1.20	−0.08	0.229		−3.40 ***	−0.36 ***	<0.001	
GRO	Envir	0.69	0.09	0.493	0.26	1.58	0.27	0.115	0.54
GT		0.27	0.03	0.789		−1.91	−0.29	0.057	
GPMR		2.41 *	0.26 *	0.016		2.43 *	0.33 *	0.015	
GIC		0.67	0.08	0.502		1.82	0.34	0.068	
GSC		0.91	0.12	0.362		0.64	0.13	0.520	
GW		−0.27	−0.02	0.785		1.07	0.11	0.283	
GRO	Economic	0.79	0.10	0.430	0.30	3.27 **	0.67	0.001	0.34
GT		−0.14	0-.02	0.891		−0.25	−0.05	0.799	
GPMR		1.21	0.13	0.227		0.71	0.11	0.480	
GIC		0.01	0.01	0.993		−0.80	−0.17	0.425	
GSC		2.67 **	0.35 **	0.008		−0.28	−0.07	0.772	
GW		−2.45 *	−0.17 **	0.014		−2.17 *	−0.26 *	0.030	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

When comparing both groups, results suggest that, for non-managers, green sustainable culture influences social and economic organizational sustainability. For this group, environmental sustainability is influenced by green performance management and rewards. As for managers, the tendency is different as green performance management and rewards influence more social and environmental sustainability. For this group, economic sustainability is influenced by green recruitment and onboarding. Greenwashing is a determinant for both groups as it negatively influences the economic pillar, but for managers it also has a pivotal role in social sustainability.

4.3.4. The Role of the Sector

When studying the role of the sector, differences were found between the public sector and private sector participants (Table 7). GHRM and greenwashing do not influence the perception of organizational sustainability. As for participants working in the private sector, green internal communication, sustainable culture, and greenwashing are antecedents of the social pillar, green performance management and rewards and green internal communication influence environmental sustainability and green recruitment, and onboarding and greenwashing are significantly related to economic sustainability.

Table 7. Differences according to sector.

Independent Variable	Dependent Variable	Public				Private			
		Z	**β**	***p***	**R^2**	**Z**	**β**	***p***	**R^2**
GRO	Social	−0.31	−0.10	0.759	0.30	0.38	0.04	0.705	0.30
GT		−0.09	−0.02	0.931		−0.73	−0.08	0.463	
GPMR		1.84	0.35	0.066		0.99	0.10	0.322	
GIC		0.62	0.14	0.538		2.01 *	0.22 *	0.044	
GSC		0.62	0.21	0.536		2.34 *	0.28 *	0.019	
GW		−1.10	−0.14	0.173		−2.34 *	−0.15 *	0.019	
GRO	Envir	1.34	0.42	0.179	0.30	1.46	0.16	0.144	0.36
GT		0.24	0.05	0.812		−1.24	−0.13	0.214	
GPMR		1.13	0.21	0.260		3.00 **	0.29 **	0.003	
GIC		−1.41	−0.32	0.158		2.48 *	0.27 *	0.013	
GSC		0.45	0.15	0.655		0.58	0.07	0.565	
GW		−0.37	−0.05	0.713		−0.50	−0.03	0.615	
GRO	Econo	−0.45	−0.16	0.651	0.17	2.87 **	0.31	0.004	0.37
GT		0.05	0.01	0.964		0.75	0.08	0.455	
GPMR		0.85	0.18	0.396		0.68	0.07	0.505	
GIC		0.17	0.05	0.862		−0.11	−0.01	0.916	
GSC		0.92	0.35	0.355		1.46	0.17	0.145	
GW		−0.69	−0.10	0.490		−3.83 ***	−0.24	<0.001	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

5. Discussion

This study aimed to investigate the relationship between GHRM practices and greenwashing with the perception of organizational sustainability. To this end, we used the TBL model, which considers three pillars of sustainability—the social pillar, the environmental pillar, and the economic pillar. After understanding which GHRM practices and greenwashing influence each pillar of organizational sustainability, we also tried to understand whether these relationships of influence varied according to certain individual and professional characteristics. In this way, we also tested the moderating role of age, gender, sector, and management position in the relationship between GHRM practices and greenwashing with the social, environmental, and economic pillars of organizational sustainability.

The first result is that a large percentage of participants said, "I don't know/I never thought about it/I have no information about it" when asked about the implementation of HRM practices, greenwashing, and the environmental and economic pillars of sustainability. Moreover, the results indicate that green recruitment and onboarding and green internal communication are the GHRM dimensions with the highest percentage which seems to indicate that the participants feel they do not have enough information to form an opinion on the efforts to promote green sustainability through these specific practices. Concerning green recruitment and onboarding, the reasons for this may derive from the fact that the participants have only experienced these moments once, so they do not feel able to generalize. As far as green internal communication is concerned, it seems clear that there is a need for greater investment in communicating on this topic, thus ensuring that employees are informed of the organization's efforts to promote environmental sustainability. This seems to be even more pressing when looking at the percentage of participants, approximately 10%, who chose to answer "I don't know/I never thought about it/I have no information about it" on all the greenwashing items. This result could be in line with the high percentage of people who said they had no information about green internal communication, insofar as if the efforts to promote environmental sustainability are not known/communicated, then it is not possible to analyze the possible discrepancy

between what is performed and what is communicated. It should also be noted that, of the three pillars of sustainability, the economic pillar seems to be the one the participants are most unaware of. This may point to the need to promote sustainability through greater transparency of financial results.

Considering the participants who responded to the Likert-scale response rate, it is worth noting that the GHRM practice with the highest response rate, i.e., the one that participants consider having the most knowledge to answer the items—green performance management and rewards—is the one with the most negative evaluation, i.e., the one below the central point. There seems to be a trend in this direction in that, as people feel more informed about GHRM practices, the more negatively these practices are evaluated.

Regarding the influence of GHRM practices and greenwashing on the three pillars of the TBL, the results suggest that not all the predictors influence the three pillars of sustainability in the same way. What stands out is the fact that green performance management and rewards positively influence the social and environmental pillars, so when green goals are introduced into performance management processes and when they are achieved, employees are rewarded, then individuals consider that the organization is enhancing the value of people (social pillar) and promoting environmental sustainability (environmental pillar). As far as the perception of financial sustainability is concerned, green recruitment and onboarding (GRO) stands out in that when individuals perceive environmental efforts in the selection and onboarding process, then they evaluate the organization's financial performance more positively. These results are in line with the literature related to the influence of HRM practices on (non-) financial organizational performance which suggested that HRM is positively linked with financial performance, e.g., [57]. However, more studies on (non-) green recruitment and onboarding and its relationship with perceived financial performance are needed. Greenwashing, on the other hand, tends to negatively influence the perception of social and economic sustainability. The results seem to point to a non-significant relationship between greenwashing and the perception of environmental sustainability. This result requires further research.

This study also sought to investigate whether this assessment varies according to individual and professional characteristics. All the analyses showed that the influence of GHRM practices and greenwashing on the perception of organizational sustainability varies according to age, gender, sector, and position. The results show that in none of the studied subgroups, green training seems to influence the perception of organizational sustainability. This means that green training is the GHRM practice that has the least preponderance in determining the perception of organizational sustainability. This may point to issues related to the effectiveness of training and the transfer of training, which should be explored further. On the other hand, there seems to be a preponderance of green performance management and rewards, which means that, when individuals are evaluated and rewarded for promoting sustainability, they feel that the organization is becoming more sustainable.

5.1. Theoretical and Managerial Implications

This study has several theoretical implications, including understanding the complexity of how GHRM practices are perceived by individuals and the fact that each one plays a unique role in influencing the perception of organizational sustainability in its three pillars. On the other hand, this study also contributed to the need to assess the degree of knowledge that individuals have about the practices and policies implemented in the organization. The results seem to show that the participants do not feel sufficiently informed about the organization's activities, so this lack of knowledge could have an impact

on participants' perceptions regarding their organization and, consequently, may lead to a sense of disengagement.

From a more managerial perspective, this work shows that individual and professional characteristics can be decisive in the way people perceive sustainability and the activities aimed at promoting it. In this sense, for organizations to boost their employees' perception of the three pillars of organizational sustainability, not only must organizations boost their GHRM practices, but they also must be aware of the specificities of their workforce to act accordingly. Thus, acting in a personalized way and making the most of their resources may be decisive in boosting organizational sustainability. It should also be noted that an integrated promotion of sustainability implies investment in all GHRM practices, thus covering the employee's life cycle in the organization. Additionally, when organizations invest in sustainability and create GHRM practices to boost employees' perception of its development, they are also fostering the SDGs. However, while there is a growing body of academic research on GHRM and sustainable development, our findings indicate that these concepts may remain relatively unknown to some participants. In organizational contexts, employees are often unaware of what GHRM entails or whether such practices are implemented within their companies. This gap between academic discourse and practical awareness highlights the need for further research and a more effective dissemination of knowledge to ensure that sustainability-oriented HRM strategies are developed, understood, and integrated into workplace culture.

From a regulatory point of view, studying the predictors of sustainability and the differences in individuals' perceptions in this regard is pivotal to creating more targeted campaign and promotion actions for the SDGs.

5.2. Limitations and Future Research Paths

This study has a set of limitations, namely the fact that it used a cross-sectional design. In the future, this research should be replicated using a longitudinal approach, which will allow causal conclusions to be drawn.

Having concluded that different individual and professional characteristics seem to be determining factors in the way people perceive sustainability, and since this study focused on only four, it is important to follow up by introducing other individual and professional variables, such as academic habilitations, personality, tenure, or modality of work. More in-depth knowledge of this issue could be an asset, for example, in creating segments of the workforce that value specific GHRM practices.

Besides addressing employees' personal and professional characteristics, sustainability and sustainability efforts also depend on the specificities of the industry as recent research has also been focusing on specific sectors, e.g., [58,59]. In the present study, the focus was on individuals' perceptions as the sample characteristics did not allow us to deepen our understanding of the role the type of industry plays in these relationships. Thus, we propose that future studies could address this topic.

Besides the specificities of the industry, national culture may also play a pivotal role in sustainability and in the way organizations manage it and people perceive it. Although the regulatory reports confirm that sustainability development varies across countries, when searching for empirical research on these topics across countries the results are scarce. In this line, a systematic literature review published by Yong and colleagues [60] showed that between 2007 and 2019 only two papers were published comparing GHRM perceptions between countries. Future studies could address this challenge by verifying differences across countries.

Author Contributions: Conceptualization, F.C. and A.S.; methodology, A.S. and A.P.-M.; software, A.P.-M. and M.P.-C.; validation, F.C. and A.S.; formal analysis, F.C. and A.S.; investigation, M.P.-C.; resources, A.P.-M.; data curation, A.P.-M. and M.P.-C.; writing—original draft preparation, A.P-M. and M.P.-C.; writing—review and editing, F.C. and A.S.; visualization, A.P.-M. and M.P.-C. supervision, F.C. and A.S.; project administration, F.C.; funding acquisition, A.S. All authors have read and agreed to the published version of the manuscript.

Funding: This study is part of a research project that received external funding by the FCT—Foundation for Science and Technology—under the reference FCT/UIDB/05299/2020.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Council of Ispa—Instituto Universitário (protocol code I–152-5-24, 11-06-2024). Ethical review and approval were waived for this study because all participants, before answering the questionnaire, had to read the informed consent and agree to it. It was the only way they could answer the questionnaire. Participants were informed about the purpose of the study and that the results were confidential, as individual results would never be known but would only be analyzed in the set of all participants.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Ethical review and approval were waived for this study because all participants, before answering the questionnaire, had to read the informed consent and agree to it. It was the only way they could answer the questionnaire. Participants were informed about the purpose of the study and that the results were confidential, as individual results would never be known but would only be analyzed in the set of all participants.

Data Availability Statement: The data presented in this study are available on request from the corresponding authors. The data are not publicly available since, in their informed consent, participants were informed that the data were confidential and that individual responses would never be known, as data analysis would be of all the participants combined.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Pereira, C. Greenwashing: As contradições entre ideias e ações. *Trends Hub.* **2023**, *3*, 1–3. [CrossRef]
2. Awwad Al-Shammari, A.S.; Alshammrei, S.; Nawaz, N.; Tayyab, M. Green Human Resource Management and Sustainable Performance with the Mediating Role of Green Innovation: A Perspective of New Technological Era. *Front. Environ. Sci.* **2022**, *10*, 901235. [CrossRef]
3. Sánchez-Chaparro, T.; Soler-Vicén, M.A.; Gómez-Frías, V. Be good and look good: Communicating the triple bottom line through corporate websites. *J. Bus. Res.* **2022**, *144*, 136–145. [CrossRef]
4. Elkington, J. *Cannibals with Forks–Triple Bottom Line of 21st Century Business*; New Society Publishers: Stoney Creek, CT, USA, 1997.
5. Høgevold, N.M.; Svensson, G.; Rodriguez, R.; Eriksson, D. Relative importance and priority of TBL elements on the corporate performance. *Manag. Environ. Qual. Int. J.* **2018**, *30*, 609–623. [CrossRef]
6. Westerman, J.W.; Acikgoz, Y.; Nafees, L.; Westerman, J. When sustainability managers' greenwash: SDG fit and effects on job performance and attitudes. *Bus. Soc. Rev.* **2020**, *127*, 371–393. [CrossRef]
7. Hart, S.L.; Milstein, M.B. Creating Sustainable Value. *Acad. Manag. Perspect.* **2003**, *17*, 56–67. [CrossRef]
8. Tanova, C.; Bayighomog, S.W. Green human resource management in service industries: The construct, antecedents, consequences, and Outlook. *Serv. Ind. J.* **2022**, *42*, 412–452. [CrossRef]
9. Carvalho, L. Greenwashing: A diferença entre o "ser" e o "parecer". *Trends Hub.* **2023**, *3*, 1–7. [CrossRef]
10. Seele, P.; Gatti, L. Greenwashing Revisited: In Search of a Typology and Accusation-Based Definition Incorporating Legitimacy Strategies. *Bus. Strategy Environ.* **2017**, *26*, 239–252. [CrossRef]
11. Hronová, Š.; Špaček, M. Sustainable HRM Practices in Corporate Reporting. *Economies* **2021**, *9*, 75. [CrossRef]
12. Silva, D. The fight against greenwashing in the European Union. *UNIO-EU Law J.* **2021**, *7*, 124–137. [CrossRef]
13. Khaskhely, M.K.; Qazi, S.W.; Khan, N.R.; Hashmi, T.; Chang, A.A.R. Understanding the Impact of Green Human Resource Management Practices and Dynamic Sustainable Capabilities on Corporate Sustainable Performance: Evidence from the Manufacturing Sector. *Front. Psychol.* **2022**, *13*, 844488. [CrossRef] [PubMed]

14. Yong, J.Y.; Yusliza, M.Y.; Ramayah, T.; Chiappetta Jabbour, C.J.; Sehnem, S.; Mani, V. Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Bus. Strategy Environ.* **2020**, *29*, 212–228. [CrossRef]
15. Muthuswamy, V.V. Green HRM Practices and Its Impact on Organizations: A Correlational Study. *AgBioForum* **2023**, *25*, 24–33.
16. Renwick, D.W.; Redman, T.; Maguire, S. Green human resource management: A review and research agenda. *Int. J. Manag. Rev.* **2013**, *15*, 1–14. [CrossRef]
17. Jabbour, C.J.C.; Renwick, D.W.S. The soft side of environmentally-sustainable organization. *RAUSP Manag. J.* **2018**, *53*, 622–627. [CrossRef]
18. Cesário, F.; Sabino, A.; Moreira, A.; Azevedo, T. Green Human Resources Practices and Person-Organization Fit: The Moderating Role of the Personal Environmental Commitment. *Emerg. Sci. J.* **2022**, *6*, 938–951. [CrossRef]
19. Tajfel, H. Social identity and intergroup behavior. *Soc. Sci. Inf.* **1974**, *13*, 65–93. [CrossRef]
20. Ahmad, I.; Donia, M.B.L.; Shahzad, K. Impact of Corporate Social Responsibility Attributions on Employees' Creative Performance: The Mediating Role of Psychological Safety. *Ethics Behav.* **2021**, *29*, 490–509. [CrossRef]
21. Rangarajan, N.; Rahm, D. Greening human resources: A survey of city-level initiatives. *Rev. Public. Pers. Adm.* **2011**, *31*, 227–247. [CrossRef]
22. Zihan, W.; Makhbul, Z.K.M. Green Human Resource Management as a Catalyst for Sustainable Performance: Unveiling the Role of Green Innovations. *Sustainability* **2024**, *16*, 1453. [CrossRef]
23. Lock, I.; Araujo, T. Visualizing the triple bottom line: A large-scale automated visual content analysis of European corporations' website and social media images. *Corp. Soc. Responsib. Environ. Manag.* **2020**, *27*, 2631–2641. [CrossRef]
24. Elkington, J. Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *Calif. Manag. Rev.* **1994**, *36*, 90–100. [CrossRef]
25. Muster, V.; Schrader, U. Green work-life balance: A new perspective for green HRM. *Ger. J. Hum. Resour. Manag.* **2011**, *25*, 140–156. [CrossRef]
26. Zaid, A.A.; Jaaron, A.A.M.; Bon, A.T. The impact of green human resource management and green supply chain management practices on sustainable performance: An empirical study. *J. Clean. Prod.* **2018**, *204*, 965–979. [CrossRef]
27. Amrutha, V.N.; Geetha, S.N. A systematic review on green human resource management: Implications for social sustainability. *J. Clean. Prod.* **2020**, *247*, 119–131. [CrossRef]
28. Hameed, Z.; Khan, I.U.; Islam, T.; Sheikh, Z.; Naeem, R.M. Do green HRM practices influence employees' environmental performance? *Int. J. Manpow.* **2020**, *41*, 1061–1079. [CrossRef]
29. Shoaib, M.; Nawal, A.; Zámečník, R.; Korsakienė, R.; Rehman, A.U. Go green! Measuring the factors that influence sustainable performance. *J. Clean. Prod.* **2022**, *366*, 132959. [CrossRef]
30. O'Donohue, W.; Torugsa, N. The moderating effect of 'Green' HRM on the association between proactive environmental management and financial performance in small firms. *Int. J. Hum. Resour. Manag.* **2016**, *27*, 239–261. [CrossRef]
31. Mills, E. A Global Review of Insurance Industry Responses to Climate Change. *Geneva Pap. Risk Insur.-Issues Pract.* **2009**, *34*, 323–359. [CrossRef]
32. Alves, I.M. Green spin everywhere: How greenwashing reveals the limits of the csr paradigm. *J. Glob. Change Gov.* **2009**, *2*, 1–26.
33. Das, L. Greenpeace UK. (s.d.). What Is Greenwashing? 2022. Available online: https://www.greenpeace.org.uk/news/what-is-greenwashing/ (accessed on 12 June 2024).
34. Roberts, D.H.; Koeplin, J.P. Sustainability Reporting Practices in Portugal: Greenwashing or Triple Bottom Line? *Int. Bus. Econ. Res. J.* **2007**, *6*, 29–39. [CrossRef]
35. Chen, Y.S.; Lin, C.L.; Chang, C.H. The influence of greenwash on green word-of-mouth (green WOM): The mediation effects of green perceived quality and green satisfaction. *Qual. Quant.* **2014**, *48*, 2411–2425. [CrossRef]
36. Kim, S.H.; Kim, M.; Han, H.S.; Holland, S. The determinants of hospitality employees' pro-environmental behaviors: The moderating role of generational differences. *Int. J. Hosp. Manag.* **2016**, *52*, 56–67. [CrossRef]
37. Marquis, C.; Toffel, M.W.; Zhou, Y. Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing. *Organ. Sci.* **2016**, *27*, 483–504. [CrossRef]
38. Zhang, D. Are firms motivated to greenwash by financial constraints? Evidence from global firms' data. *J. Int. Financ. Manag. Account.* **2022**, *33*, 459–479. [CrossRef]
39. Yang, Z.; Nguyen, T.T.H.; Nguyen, H.N.; Nguyen, T.T.N.; Cao, T.T. Greenwashing behaviours: Causes, taxonomy and consequences based on a systematic literature review. *J. Bus. Econ. Manag.* **2020**, *21*, 1486–1507. [CrossRef]
40. Mu, H.; Lee, Y. Greenwashing in Corporate Social Responsibility: A Dual-Faceted Analysis of Its Impact on Employee Trust and Identification. *Sustainability* **2023**, *15*, 15693. [CrossRef]
41. Santos, C.; Coelho, A.; Marques, A. Does Greenwashing Affect Employee's Career Satisfaction? The Mediating Role of Organizational Pride, Negative Emotions and Affective Commitment. *Res. Sq.* **2022**, 1–27. [CrossRef]

42. Robertson, J.L.; Montgomery, A.W.; Ozbilir, T. Employees' response to corporate greenwashing. *Bus. Strategy Environ.* **2022**, *32*, 4015–4027. [CrossRef]
43. Testa, F.; Boiral, O.; Iraldo, F. Internalization of Environmental Practices and Institutional Complexity: Can Stakeholders Pressures Encourage Greenwashing? *J. Bus. Ethics* **2018**, *147*, 287–307. [CrossRef]
44. Gatti, L.; Pizzetti, M.; Seele, P. Green lies and their effect on intention to invest. *J. Bus. Res.* **2021**, *127*, 228–240. [CrossRef]
45. Hines, J.M.; Hungerford, H.R.; Tomera, A.N. Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *J. Environ. Educ.* **1987**, *18*, 1–8. [CrossRef]
46. Hsu, S.; Roth, R.E. An Assessment of Environmental Literacy and Analysis of Predictors of Responsible Environmental Behaviour Held by Secondary Teachers in the Hualien Area of Taiwan. *Environ. Educ. Res.* **1988**, *4*, 229–249. [CrossRef]
47. Montgomery, C.; Stone, G. Revisiting consumer environmental responsibility: A five nation cross-cultural analysis and comparison of consumer ecological opinions and behaviors. *Int. J. Manag. Mark. Res.* **2009**, *2*, 35–58.
48. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.Y.; Podsakoff, N.P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903. [CrossRef]
49. Jöreskog, K.G.; Sörbom, D. *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*; Scientific Software International: Chapel Hill, NC, USA, 1993.
50. Hu, L.T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model. A Multidiscip. J.* **1999**, *6*, 1–55. [CrossRef]
51. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
52. Bryman, A.; Cramer, D. *Análise de Dados em Ciências Sociais. Introdução as Técnicas Utilizando o SPSS para Windows*; Celta: Oeiras, Portugal, 2003.
53. Finney, S.J.; DiStefano, C. Non-normal and categorical data in structural equation modeling. In *Structural Equation Modeling: A Second Course*, 2nd ed.; Hancock, G.R., Mueller, R.O., Eds.; IAP Information Age Publishing: Charlotte, NC, USA, 2013; pp. 439–492.
54. Sabino, A.; Moreira, A.; Cesário, F.; Coelho, M.P. Measuring Sustainability: A Validation Study of a Triple Bottom Line (TBL) Scale in Portugal. *Emerg. Sci. J.* **2024**, *8*, 899–916. [CrossRef]
55. Ferrón-Vílchez, V.; Valero-Gil, J.; Suárez-Perales, I. How does greenwashing influence managers' decision-making? An experimental approach under stakeholder view. *Corp. Soc. Responsib. Environ. Manag.* **2021**, *28*, 860–880. [CrossRef]
56. Bakovsky, V.B.; Golovkin, S.I.; Kukharova, T.V.; Utkin, V.A.; Chalaya, E.N.; Shabaldin, N.A. Acute period of polytrauma in children in the light of discriminant analysis. *Russ. J. Pediatr. Surg. Anesth. Intensive Care* **2020**, *10*, 145–156. [CrossRef]
57. Voigt, L.; von der Oelsnitz, D. A framework of HRM in cooperatives: A systematic literature review and future research agenda. *J. Co-Oper. Organ. Manag.* **2024**, *12*, 100232. [CrossRef]
58. Quiroz-Flores, J.C.; Aguado-Rodriguez, R.J.; Zegarra-Aguinaga, E.A.; Collao-Diaz, M.F.; Flores-Perez, A.E. Industry 4.0, circular economy and sustainability in the food industry: A literature review. *Int. J. Ind. Eng. Oper. Manag.* **2024**, *6*, 1–24. [CrossRef]
59. Okeke, A. An exploration of sustainability and supply chain management practises in the oil and gas industry: A systematic review of practises and implications. *Environ. Sustain. Indic.* **2024**, *23*, 100462. [CrossRef]
60. Yong, J.Y.; Yusliza, M.Y.; Fawehinmi, O.O. Green human resource management: A systematic literature review from 2007 to 2019. *Benchmarking Int. J.* **2019**, *27*, 2005–2027. [CrossRef]