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Going Green Together: Effects of Green Transformational Leadership on Employee Green Behaviour and Environmental Performance in the Saudi Food Industry

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Abstract: Over the last few decades, environmental impacts have been a major concern not only for policymakers but also for scholars and leaders of organisations. The leadership of organisations can drive the green behaviour of their employees, thus driving the overall green performance of enterprises. In this research, we examined the direct influence of green transformational leadership (GTFL) on the environmental performance of food organisations and the indirect influence via green behaviour of employees. More specifically, we have examined the mediating effect of employee green behaviour, whether task-related or pro-environmental behaviour, on the association between GTFL and environmental performance. For this purpose, we adopted a pre-tested research instrument for data collection from 1050 employees in different food enterprises across the Kingdom of Saudi Arabia (KSA). We have used Amos structural equation modeling (SEM) to examine the direct and indirect effects of GTFL. The results confirmed a positive significant influence of GTFL on both dimensions of green behaviour, i.e., task-related and pro-environmental behaviour, and on environmental performance. The results showed a partial mediating effect of task-related behaviour in the link between GTFL and environmental performance, whereas pro-environmental behaviour has a perfect mediation effect. The results highlight the dynamic role of pro-environmental behaviour in affecting the above link and send a crucial message to leaders in the food industry about prioritizing proenvironmental behaviour when selecting and recruiting new employees. Additionally, development programs should be conducted to enhance the pro-environmental behaviours among employees.

Keywords: green transformational leadership; green behaviour; pro-environmental behaviour; task-related green behaviour; environmental performance; food industry; Kingdom of Saudi Arabia (KSA)



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1. Introduction

Over the last few decades, environmental impacts have been a main consideration not only for scholars but also for policymakers and organizations [1–4]. Recently, organizations' environmental efforts and pressures, besides legislation, have increased sustainability awareness and experience in dealing with environmental challenges [4–6]. Green practices have been integrated into various organizational aspects from green leadership to green product and/or process practices [7]. In this research, we are concerned about green transformational leadership (GTFL) [8] and its effect on the green behaviour of employees and on the environmental performance of enterprises. We found transformational leadership theory [9,10] as the most relevant framework for understanding how can leaders drive the

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green behaviour of their employees and the environmental performance of their organisations. This is because transformational leaders are concerned about transforming the behaviour of their employees and organisations, including effective environmental management practices [11]. Consistent with this context, the concept of GTFL has been developed by Robertson and Barling [12]. GTFL has been defined as transformational management which focuses mainly on inspiring employees and driving their behaviour towards environmental and green initiatives [9,10]. Several researchers approved that GTFL facilitates pro-environmental behaviour as well as enhances environmental performance [11]. GTFL has emerged to integrate environmental management with HRM operations [13]. GTFL was discovered to be critical in building a culture of sustainability in organisations [14]. In addition to transformational leadership theory, we also draw on the leader-member exchange (LMX) theory [15], to understand the exchange and relationship that occurred between leaders and their subordinates. Several research studies (e.g., [4,8,16,17]) have examined the link between GTFL, green behaviour, and environmental performance. The major results concluded that GTFL is a key predictor of employees' green behaviour [4,8,17] as well as environmental performance [4,8,17,18].

Recent studies (e.g., [14,17,19]) have found a significant relationship between GTFL, employees' green behaviours, and environmental performance. Nonetheless, studies in relation to the interrelatedness of the above-mentioned factors in the food industry remain limited or even unavailable to the finest of researchers' information. This research aims to fill in a knowledge gap about the value of GTFL in driving green behaviours of an employee as well as green performance in Saudi food organizations. The current research aims to test the direct influence of GTFL on overall environmental performance and the indirect effect through green behaviours in employees in food businesses. More particularly, this study has two key objectives: First, the study investigates the direct influence of GTFL on green behaviour, task-related or pro-environmental behaviour, and environmental performance in the Saudi food business. Second, it examines the mediating role of employees' green behaviors, both tasked-related and pro-environmental, in the link between GTFL and the environmental performance of the food business. The research adopted a theoretical framework to test the interrelationship between GTFL and environmental performance via two dimensions of employees' green behaviors. The study provides a set of relevant implications for academics and practitioners in the food industry, particularly those working in food organisations in Saudi Arabia, on how to attain proper environmental performance through GTFL and employees' green behaviours. Thus, on the basis of the above discussion, we generate the below-mentioned three research questions (RQs):

RQ1: How does a green transformational leadership influence the environmental performance of food organisations?

RQ2: How does green behaviour influence environmental performance in food organisations?

RQ3: How does green behaviour of employees intermediate between a green transformational leadership and environmental performance in food organisations?

For achieving the research objectives and answering the research questions, we structured our paper as follows: In Section 2, we present the research theoretical framework by defining the research constructs and reviewing the relationship between the research variables. In Section 3, we present the research methodology, including how we collected and analyzed the research data. In Section 4, we explain the findings of our research. Section 5 presents the discussions of the research. Section 5 presents both the managerial and theoretical implications of the study. Section 7 explains the concluding remarks. Finally, the last part of this research (Section 8) presents boundaries and proposes further research opportunities.

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2. Conceptual Framework and Hypothesis Building

2.1. The Kingdom of Saudi Arabia Context

The KSA is a country located on the Arabian Peninsula in Western Asia with a land area of 2,150,000 km². In general, the country has a desert climate and a semi-arid climate in the southwestern part of the KSA. The economy of the country depends on oil. It is one of the largest producers, exporters, and oil reserves. Since the inauguration of the Saudi Vision 2030 in 2016, the country has witnessed a transformation stage with supplemented programs to improve the quality of life, diversify the economy, and reduce its dependence on oil in the coming years (https://www.vision2030.gov.sa/, accessed on 30 May 2022).

The leadership of the KSA pays great attention to environmental sustainability and is more committed to the international agenda of environmental sustainability to meet climate changes. Last year (March 2021), the Crown Prince of KSA, Mohamed Bin Salman, launched two transformational initiatives to meet climate change and spread the concept of "greening" at the national and regional levels. The first initiative is Saudi Green, which intends to champion climate actions inside the kingdom. The Saudi Green initiative aims not only to reach a net zero by 2060 but also to improve the quality of life inside the kingdom with sustainability for future generations. The Saudi Green initiatives have major targets such as reducing carbon emissions, greening Saudi, leading climate action with ambitious targets as well as protecting land and sea (https://www.saudigreeninitiative.org/, accessed on 30 May 2022). The initiative has well-defined targets and key performance indicators, which contribute to the achievement of the Saudi Vision 2030 goals United Nations Sustainable Development Goals (UNSDGs). The second contribution to environmental sustainability is the Middle East Green initiative, which is intended to drive climate efforts in the region and beyond (https://www.saudigreeninitiative.org/about-middle-east-green-initiative/, accessed on 30 May 2022). These initiatives promote the role of the KSA as a leader in environmental sustainability, regionally and internationally. The reflection of these initiatives includes reductions in desertification, boosting biodiversity, and achieving a more sustainable future for the kingdom and the world.

The Crown Prince announced that "the Green Initiatives will provide huge investment opportunities for the private sector, quality job opportunities for the next generation of leaders in the Kingdom, and enhanced international relationships that will have a positive impact on the region and the world". The Crown Prince stressed the collaboration of all stakeholders to ensure the success of the initiatives. Studies (see for example [20]) confirm that such initiatives cannot succeed without the collaboration of stakeholders. This is because environmental problems are caused by human behaviour, therefore, all stakeholders, including organization owners and leaders should put more effort to deal with these challenges [7]. Hence, the Saudi organization, including Saudi food companies, are currently paying more attention to environmental impacts than before. Additionally, fostering and stimulating employees' "green behaviour" within organizations has become more essential nowadays than ever before. This research contributes to the limited published literature related to the influences of GTFL on EP through the GB of employees in an emerging economy of KSA.

2.2. Defining the Study Constructs

Leadership is considered one of the most crucial factors directing the performance of an organization through establishing a clear vision for the organization's short and long-term commercial operations [8,9,21]. Transformational leadership has received the greatest attention among leadership theories and approaches due to the wide range of its effects on employee behaviour [12]. GTFL can be defined as the attribute of a leader who supports and inspires his subordinates to attain the green-sustainable objectives that seem to go beyond what is desired of them from a green perspective [22]. In accordance with Farrukh et al. [23], GTFL has four dimensions: First, green idealized influence relates to leaders' green and social standards as mentorship for employees to imitate. Second, green inspirational motivation implies that the leader conveys green values and vision,

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which aligns with the organizational strategic objectives and directs employees to make the green vision a reality [24,25]. Third, intellectual stimulation stimulates and supports employee green innovation in order to improve green behaviour as well as environmental performance [26]. Fourth, customized concern signifies that the leader fosters employee green engagement and loyalty to the organization by improving employee well-being at various organizational levels [27].

Green behaviour referred to all positive practices fulfilled at a workplace which meant to benefit the environment, e.g., energy conservation and water conservation. According to Bissing-Olson et al. [28], green behaviour is categorized into two main types: task-related and pro-environmental behaviour. On one hand, task-related behaviour comprises performing the official tasks or standards of procedures indicated in the task specification in a green responsible way [29]. Nonetheless, pro-environmental behaviour is considered a volunteer action that involves any volunteering attitude or practices toward green responsible behaviour [28].

Environmental performance plays a crucial role in environmental conservation from negative consequences (e.g., pollution, wastes) and sustaining an organization's overall performance [7,8,14]. Studies (see for example [14,30]) have shown that environmental performance relies on ensuring proper green attitudes and practices by employees, thus achieving appropriate performance standards. Environmental performance relates to the environmental outcomes (e.g., environmental innovation, environmental engagement, and environmental behaviour) from environmental initiatives to eliminate negative environmental impacts [7,14].

2.3. Green Transformational Leadership and Green Behaviour

There is a growing body of social psychology literature recognizing that employees acquire behaviours through detecting others and then attempting to exhibit comparable patterns of behaviour [4,8,16]. Accordingly, transformational leaders can influence their followers' green behaviour by exhibiting green practices, because leaders act as role models [16]. The study of Robertson and Barling [12] broadened the utilization of transformational leadership in the scope of environmental management. Green transformational leaders, like task-oriented leaders, are concerned with enduring and viable growth through incorporating employees' green values with the green values of organizations as well as driving employee green behaviour. Moreover, the green idealized effect is a leadership quality shown by managers who become a model in serving environmental concerns, encouraging green behaviour of their employees via being their example [31]. Reflecting the work of both theories, LMX and transformational leadership, a recent study by Sobaih et al. [32] showed that transformational leaders have a significant role in driving employees' behaviour via inspiration, motivation, and satisfaction. According to the study of Kura [33], GTFL encouraged employees to realize the significance of green behavior via inspiration and encouraging environmental practices, enabling employees to realize that the business supports and anticipates green behaviour. Hence, these discussions encourage us to propose:

Hypothesis 1 (H1). GTFL positively and directly influences employees' task-related behaviour.

Hypothesis 2 (H2). GTFL positively and directly influences employees' pro-environmental behaviour.

2.4. Green Transformational Leadership and Environmental Performance

Several research studies have been conducted to investigate the influence of GTFL on environmental performance [4,14,34,35]. According to Mittal and Dhar [24], GTFL drives employees to realize an organization's sustainable environmental objectives by giving them a clear vision, aspiration, inspiration, and passion, as well as backing needs to fulfill environmental performance. Consequently, GTFL is considered the predictor of

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environmental performance [8,22,23,27,36]. Another study by Cop et al. [37], showed that GTFL positively and directly influenced environmental job engagement as well as affecting environmental performance. Therefore, these arguments encourage us to propose:

Hypothesis 3 (H3). *GTFL positively and directly influences environmental performance.*

2.5. Green Behaviour and Environmental Performance

The narrow available studies on environmental performance in the food-related setting, i.e., in restaurants, have indicated that green behaviour among employees has a significant and direct effect on environmental performance [14,38]. This green behaviour is similar to pro-environmental behaviour, which includes the conservation of energy, material, water recycling, and the implementation of environmental projects [14]. In line with the LMX theory, a recent study by He et al. [18] found that leaders' behaviour through knowledge sharing with their employees is crucial to enhancing organizational performance. Other research studies on employees' green behaviour and environmental performance [4,39–41] have found that there is a positive relationship between employee green behavior, i.e., green organizational commitment and green organizational citizenship behavior and environmental performance. These discussions encourage us to hypothesize:

Hypothesis 4 (H4). *Employees' task-related behaviour positively and directly influences environmental performance.*

Hypothesis 5 (H5). *Employees' pro-environmental behaviour positively and directly influences environmental performance.*

2.6. The Mediating Effect of Green Behaviour on the Link between Green Transformational Leadership and Environmental Performance

Several studies have confirmed the influence of GTFL on employees' green behaviour and the organization's environmental strategy [4,8,16,31,33]. Furthermore, it has been verified that GTFL is a predictor of employee green behavior [8] and environmental performance [8,22,23,27,36]. A recent study investigated various mediators on the link between GTFL and environmental performance. Another research on restaurants found that corporate social responsibility fully mediates the relationship between GTFL and environmental performance [8]. Another study on the manufacturing industry found that green human resources management and green innovation have a mediation role in the association between GTFL and environmental performance [21]. This research is considered among new attempts to investigate this link. Employees' green behaviors are expected to have a positive mediation on the relationship between GTFL and environmental performance. Hence, we could hypothesize that:

Hypothesis 6 (H6). Employees' task-related behaviour has a mediating effect on the link between GTFL and environmental performance.

Hypothesis 7 (H7). Employees' pro-environmental behaviour has a mediating effect on the link between GTFL and environmental performance.

A summary of the conceptual framework can be seen the theoretical model (Figure 1).

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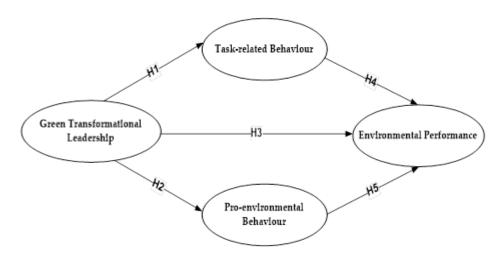


Figure 1. Theoretical model of the study.

3. The Research Methods

3.1. Sampling

We conducted this study using a quantitative approach by adopting a questionnaire survey for data collection. We directed the questionnaire to a sample of employees in the food business across the main cities in Saudi Arabia. We were able to distribute 1400 and collect 1050 usable questionnaires for data analysis. The sample size of the current study was decided depending on the proposition of Krejcie and Morgan [42], which suggested a sample size of 384 participants for a population of one million. There are no published statistics about employees in the food industry. Hence, we decided to have a sample of at least 1000 participants. We decided this based on similar studies (e.g., [17,21,22]). We have decided to take a large sample size to be more representative of our research population compared to similar previous published research. The response rate for our research representatives was 75%. We collected our data in the first two months of the current year, 2022. The process of data collection started when we asked a company that specialized in data collection to assist us in contacting these companies and approaching their staff for a research study. The data collection company contacted about 100 food-business companies to approach their staff and collect data from them. Of these companies, we have collected data from 70 companies by distributing 20 forms, totaling 1400 forms. This means that the current study did not collect data from small businesses. We distributed the questionnaire personally with assistance and guidance from the data collection company after the approval of food business companies. We have asked employees to give their consent before participating in the study. We also have explained the purpose of the research study and confirmed that the study is for research purposes and there is no relevance to their business leaders in order to avoid any power bias. We also confirmed to employees that participation in the study is voluntary and the process of filling out the questionnaire is about 10 min of time. We did not provide any motivating compensation to participants, or a pen to fill the form. We collected most forms at the time of distribution, while we collected the rest at the second visit as some employees requested to take more time for filling out the form. We have had the opportunity to reply to any inquiries and have an interesting discussion with some participants during the process of data collection.

Respondents to the questionnaire had almost equal gender participation, where 52.9% were male and 47.1% were female. In relation to the education of respondents, more than half of the respondents (74%) are bachelor's graduates or equivalent, followed by those who had a secondary school degree or equivalent (16%), whereas 10% were holding a postgraduate degree, i.e., master degree. The age range of the study sample was between 25 and 55 years.

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3.2. Research Measures

We have derived the research measures scales after a comprehensive review of previous studies and pilot tests. The research scale adopted in this study is shown in Table 1. The minimum and maximum values for the questionnaire items addressed to the entire sample vary from 1 to 5. Table 2 shows that the standard deviation for all responses ranges from 0.985 to 1.250, with means ranging from 4.07 to 4.51, indicating that research data are less condensed and more dispersed around the mean value. GTFL was quantified using a six-item scale (a = 0.968). Two sample items included "the leader of the green innovation project inspires the project members with the environmental plans; the leader of the green innovation project provides a clear environmental vision for the project members to follow". Task-related behavior has three factors and a Cronbach alpha of a = 0.924. Additionally, pro-environmental behavior has four factors with an alpha of a = 0.94, and environmental performance has seven factors with an alpha of a = 0.980.

Table 1. The factors in the questionnaire.

Abb.	Factors	Main Factor	Sources	
GTL1	The leader of the green innovation project inspires the project members with the environmental plans			
GTL2	The leader of the project provides a clear environmental vision for the project members to follow			
GTL3	The leader of the green innovation project gets the project members to work together for the same environmental goals	Green Transformational Leadership	Chen and Chang [22]	
GTL4	GTL4 The leader of the green innovation project encourages the project members to achieve the environmental goals		Chang [22]	
GTL5	The leader of the green innovation project acts by considering the environmental beliefs of the project members			
GTL6	The leader of the green innovation project stimulates the project members to think about green ideas			
TB7	Performance appraisal records environmental performance			
TB8	TB8 Performance appraisal includes environmental incidents, responsibilities, concerns, and policy		Williams and Anderson [43]	
TB9	Employee gets reward for environmental management			
PB10	Employees are involved to become environmentally friendly			
PB11	Using teamwork for resolving environmental issues	Pro-environmental behavior	Frese et al. [44]	
PB12	Employees to discuss environmental issues in team meetings	Dertavior		
EP13	Environmental management within our enterprise has reduced waste			
EP14	Environmental management within our enterprise has conserved water usage			
EP15	Environmental management within our enterprise has conserved energy usage	Environmental		
EP16	Environmental management has reduced purchases of non-renewable materials, chemicals, and components	performance	Kim et al. [14]	
EP17	Environmental management has reduced overall costs			
EP18	Environmental management has reduced waste and improved its position in the marketplace			
EP19	Environmental management has helped enhance the reputation of our enterprise			

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Table 2. Descriptive statistics (developed by authors based on previous literature).

Abbr.	Item	Min	Max	M	SD	Skewness	Kurtosi
	Green To	ransformati	onal Leaders	ship			
GTL1	The leader of the green innovation project inspires the project members with the environmental plans	1	5	4.41	1.140	-2.069	3.262
GTL2	The leader of the green innovation project provides a clear environmental vision for the project members to follow	1	5	4.32	1.059	-1.747	2.339
GTL 3	The leader of the green innovation project gets the project members to work together for the same environmental goals	1	5	4.39	1.070	-1.891	2.680
GTL 4	The leader of the green innovation project encourages the project members to achieve the environmental goals	1	5	4.29	1.250	-1.964	2.765
GTL 5	The leader of the green innovation project acts by considering the environmental beliefs of the project members	1	5	4.32	1.128	-1.882	2761
GTL 6	The leader of the green innovation project stimulates the project members to think about green ideas	1	5	4.39	1.137	-2.018	3115
	Та	sk-related	Behaviour				
TB 7	Performance appraisal records environmental performance	1	5	4.07	0.985	-1.474	2.121
TB 8	Performance appraisal includes environmental incidents responsibilities, concerns, and policy	1	5	4.24	1.067	-1.555	1.727
TB 9	Employee gets reward for environmental management	1	5	4.17	1.093	-1.683	2.410
	Pro-e	nvironmen	tal Behaviou	r			
PB 10	Employees are involved to become environmentally friendly	1	5	4.22	1.194	-1.745	2.216
PB 11	Using teamwork for resolving environmental issues	1	5	4.10	1.200	-1.747	2.356
PB 12	Employees to discuss environmental issues in team meetings.	1	5	4.07	1.149	-1.606	2.073
	Envi	ronmental	Performance	<u> </u>			
EP 13	Environmental management within our enterprise has reduced waste	1	5	4.51	1.207	-2.363	4.135
EP 14	Environmental management within our enterprise has conserved water usage	1	5	4.44	1.074	-2.001	2.985
EP 15	Environmental management within our enterprise has conserved energy usage	1	5	4.54	1.002	-2.062	2.768
EP 16	Environmental management has reduced purchases of non-renewable materials, chemicals, and components	1	5	4.49	1.075	-2.123	3.360
EP 17	Environmental management has reduced overall costs	1	5	4.49	1.075	-2.123	3.360
EP 18	Environmental management has reduced waste and improved its position in the marketplace	1	5	4.46	1.002	-1.851	2.136
EP 19	Environmental management has helped enhance the reputation of our enterprise	1	5	4.39	1.137	-2.018	3.115

Model fit: $(\chi^2 (143, n = 1050) = 156,899, p < 0.001, normed <math>\chi^2 = 1.097, RMSEA = 0.049, SRMR = 0.0228, CFI = 0.989, TLI = 0.987, NFI = 0.981, PCFI = 0.827, and PNFI = 0.745). Note: Min = minimum, Max = maximum, M = mean, SD = standard deviation.$

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We would like to emphasize that the original version of the questionnaire took a very specific approach. Certainly, to incentivize potential respondents to perform their duties. We decided to adopt an instrument with limited factors, albeit, the instrument was pre-tested. Furthermore, minor structural changes for improvement purposes were made to some items. The factors in the instrument were measured via Likert scales ranging from 1 "strongly disagree" to 5 "strongly agree".

3.3. The Interpretation of the Data

We adopted the computer statistical software package (SPSS, version 23) to analyze the data. To ensure the quality of representation for the collected data, we analyzed the principal component analysis (PCA). We also confirmed the one-dimensionality of our factors: 53.778% for green transformational leadership, 55.675% for task-related pro-environmental behavior, 51.888% for green behavior, and 56.323% for environmental performance. The KMO indexes confirm values above 0.75, which is a good threshold according to Hair et al. [45], and the Bartlett tests were significant. To conclude, the results of PCA confirmed that research variables were well suited for factoring.

We also adopt the Kaiser criterion for ensuring that only variables with a value greater than "1" are considered. Cronbach's alpha was used to calculate the scales' internal reliability. The results indicated that the Alpha values were excellent [46]. Furthermore, confirmatory factor analysis (CFA) was used on the collected data to ensure that the factors adopted in our research are sufficient. The analysis of our data is supplemented with structural equation modelling (SEM) of AMOS software, version 23. We adopted the proposed techniques in previous studies to gain reliable and valid results as suggested by Roussel et al. [47], which enabled us to gain significantly better results.

4. Key Findings

4.1. The Results of CFA

We adopted CFA to assess the fitness of our chosen factors to our collected data. In our interpretation of the CFA results, we performed the following steps: First, we checked the absolute fit indexes to assess that our collected data fit our research model. For example, we ensured that the Chi²/ddl parsimony index had a value below 5 [48], the SRMR value also below 0.05, and the RMSEA below 0.08 or even below 0.5 [49]. Furthermore, we also checked NFI, TLI, and CFI to confirm they are with a value of 0.90 [50]. In the end, the normalised X2 provides the parsimony indexes (see Table 2).

The data fit the findings of CFA linking all the study factors. The results present x^2 to its degree of freedom = 1.097. The results show that the ratio is less than three, hence, it is considered satisfactory. Moreover, the RMSEA index for the model is 0.049, as a result, the number of adjustments is below 0.5, which indicates the adjustments are reasonable. The values NFI = 0.891, TLI = 0.987, and CFI = 0.989 also attest to the literature-accepted values that offer an excellent fit to the first order model. As a result, the findings of the latter's exploratory factor analysis meet the required standards [47].

According to the literature, the skewness coefficient and the kurtosis coefficient are two indicators that are used to check the normal distribution. First, the skewness figure shows if the data has normal distribution around the mean [51]. The Kurtosis figure links "the shape of the distribution curve of the observations to that of the normal distribution: a positive coefficient indicates a higher concentration of observations, while a negative coefficient points out a flatter curve" [51]. In the current study, the normality assumption is not violated by the symmetry (skewness) and kurtosis coefficients [52] and displays acceptable values. In this regard, we can conclude that all factors have standard distribution (Table 2).

We used convergent validity to ensure that all our variables or factors are associated, which should be over 0.7 [53]. Additionally, the average variance extracted should be over 0.5. We have checked the convergent validity for all of our factors and they were excellent (see Table 3). It was essential to check whether the square root of the average variance

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extracted (AVE) for all four variables, namely: "green transformational leadership", "task-related behavior", "pro-environmental behavior", and "environmental performance is over the association values it shares with other variables, which was as required in our study (see Table 3). The average extracted variance (AVE) scores for green transformational leadership (0.834), pro-environmental behavior (0.801), task-related behaviour (0.801), and environmental performance (0.874). We also checked that the discriminant validity in our research is guaranteed as determined by Hair et al. [53] and Fornell and Larcker [54] (see bold values in Table 3).

Table 3. Convergent and discriminant validity (developed by authors).

Items	SL	CR *	AVE *	MSV *	1	2	3	4
1-Green Transformational Leadership ($\alpha = 0.962$)		0.968	0.834	0.495	0.913			
-The leader of the green innovation project inspires the project members with the environmental plans	0.931							
-The leader of the green innovation project provides a clear environmental vision for the project members to follow	0.892							
-The leader of the green innovation project gets the project members to work together for the same environmental goals	0.903							
-The leader of the green innovation project encourages the project members to achieve the environmental goals	0.933							
-The leader of the green innovation project acts by considering the environmental beliefs of the project members	0.898							
-The leader of the green innovation project stimulates the project members to think about green ideas	0.921							
2-Task-related behaviour ($\alpha = 0.877$)		0.924	0.801	0.625	0. 566	0.894		
-Performance appraisal records environmental performance	0.913							
-Performance appraisal includes environmental incidents, responsibilities, concerns, and policy	0.878							
-Employee gets reward for environmental management	0.894							
3-Pro-environmental behavior ($\alpha = 0.863$)		0.949	0.860	0.677	0.546	0.623	0.927	
-Employees are involved to become environmentally friendly	0.926							
-Using teamwork for resolving environmental issues	0.940							
-Employees to discuss environmental issues in team meetings	0.916							
4-Environmental Performance ($\alpha = 0.914$)		0.980	0.874	0.533	0.692	0.321	0.619	0.934
-Environmental management within our enterprise has reduced waste	0.962							
-Environmental management within our enterprise has conserved water usage	0.921							
-Environmental management within our enterprise has conserved energy usage	0.958							
-Environmental management has reduced purchases of non-renewable materials, chemicals, and components	0.933							
-Environmental management has reduced overall costs	0.926							
-Environmental management has reduced waste and improved its position in the marketplace	0.916							
-Environmental management has helped enhance the reputation of our enterprise	0.927							

^{*} CR = Composite Reliability; AVE = Average Variance Extracted; MSV = Maximum Shared Value.

4.2. Key Findings of SEM

We started this research by developing a theoretical model (Figure 1) based on the review of related literature. We then collected the research data and examined its reliability and validity. We then examined the data to test the research hypotheses through SEM analysis. The results of SEM are presented in Table 4 and Figure 2. The indices of our

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research model were perfect with REMSA = 0.07, NFI = 0.872, TLI = 0.966, CFI = 0.971, and SRMR = 0.0239 (see Table 4). These values confirm that the model has a perfect fit. After obtaining a good model fit criterion, the study hypotheses were analyzed. Each direction in the structural model between the latent variables in Figure 2 represents a research Hypothesis. The direct/indirect relationships between the study variables are shown in Table 4 and Figure 2.

Table 4. Testing the Research Hypothes	Hypotheses.
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Hypotheses	β	C-R T-Value	\mathbb{R}^2	Hypotheses Results
H1—LEAD (GTFL) \rightarrow TASK	0.82 ***	9.603		Supported
H2—LEAD (GTFL) \rightarrow PROACT	0.95 **	9.501		Supported
$H3$ — $TASK \rightarrow PERFOR$ (EP)	0.20 **	0.577		Supported
$H4$ —PROACT \rightarrow PERFOR (EP)	0.13 **	0.681		Supported
H5—LEAD (GTFL) \rightarrow PERFOR (EP)	0.80 **	2.078		Supported
PERFOR (EP) Through TASK			0.681	
PERFOR (EP) Through PROACT			0.753	

Model fit: (χ^2 (147, n = 410) = 183, 655, p < 0.001, normed χ^2 = 1.25, RMSEA = 0.07, SRMR = 0.024, CFI = 0.971, NFI = 0.872, IFI = 0.872, TLI = 0.966, PCFI = 0.835, and PNFI = 0.750), *** p < 0.001; ** p < 0.01.

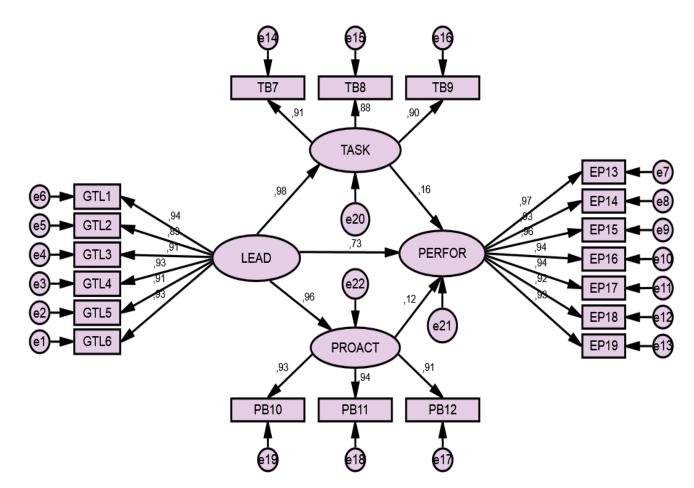


Figure 2. The Research Final Structural Model.

The results of our research showed that GTFL significantly, positively, and directly impacts task-related behaviour (β = +0.824, p < 0.001) and significantly, positively, and directly impacts pro-environmental behaviour (β = +0.95, p < 0.001). Furthermore, task-related behaviour significantly, positively, and directly impacts environmental performance (β = +0.20, p < 0.05). For the pro-environmental behaviour, it significantly, positively, and directly impacts on environmental performance (β = +0.13, p < 0.05), and eventually, the

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GTFL significantly, positively, and directly impacts environmental performance (β = +0.80, p < 0.05). Moreover, the robustness of our final model (Figure 2) is further legitimized by the two significant coefficients of the values of (R^2 = 0.681) through task-related behaviour and (R^2 = 0.753) pro-environmental behaviour (see Table 4). This represents the proportion of environmental performance explained by GTFL and task-related behaviour in the model. GTFL and task-related behaviour justify 68% of the variance of environmental performance explained by GTFL and pro-environmental behaviour in the model. GTFL and pro-environmental behaviour justify 75% of the variance of environmental performance.

We have adopted the methodology of Baron and Kenny [55] to examine the mediating effect of two dimensions of green behaviour (task-related behaviour and pro-environmental behaviour) in the relationship between GTFL and environmental performance. Firstly, we checked the relationship between GTFL and environmental performance is significant, which confirms that there could be a mediation role in this case. As Figure 2 shows, GTFL significantly and positively affects environmental performance (β = +0.80, p < 0.05). In addition, in the regression of environmental performance on GTFL, the coefficients are significant (with Student's test values equal to 8.34 \geq 1.96; p = 0.05 and 8.37 \geq 1.96). Secondly, we checked that GTFL significantly influences the mediator variables, i.e., task-related behaviour and pro-environmental behaviour, considered them as exogenous variables in a regression analysis of task-related behaviour and pro-environmental behaviour on GTFL. Indeed, the model show that GTFL has respectively a significant and positive effect on task-related behaviour (β = +0.824, p < 0.001) and on pro-environmental behaviour (β = +0.956, p < 0.001).

Third, we checked whether the relationship between the mediator variables and environmental performance is significant. The evidence shows that task-related behaviour and pro-environmental behaviour have a significant and positive effect on environmental performance, respectively (β = +0.209, p < 0.05) and (β = +0.130, p < 0.05). In addition, the environmental performance is regressed on both task and GTFL firstly and secondly on pro-environmental behaviour and GTFL. By controlling for the latter, the coefficient between task-related behaviour–environmental performance and pro-environmental behaviour–environmental performance must remain significant.

Finally, we set this research to test the partial or perfect nature of task-related behaviour and pro-environmental behaviour by testing the significance of the direct links between GTFL and environmental performance (see Table 5). Certainly, using the bootstrapping technique provided by Amos "The user-defined estimands", which shows in Table 5 a significant positive link between GTFL and environmental performance even after the introduction of the task-related behaviour as a mediator variable (β = +0.297, p = 0.032 < 0.05). Consequently, the mediation by the task-related behaviour is therefore partial between GTFL and environmental performance. In addition, the Sobel test shows a Z-value equal to 7.01 > 1.96 with a p-value of zero.

Table 5. Results of Mediation (developed by authors).	Table 5	. Results of Med	iation (devel	loped by	authors).
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Hypotheses	Estimate	Lower	Upper	р	Mediation Results
$H6$ —LEAD (GTFL) \rightarrow TASK \rightarrow PERFOR (EP)	0.297	0.177	0.340	0.032	0.032 > 0.05 Partial Mediation
H7—LEAD (GTFL) \rightarrow =PROACT \rightarrow PERFOR (EP)	0.297	0.177	0.340	0.051	0.051 < 0.05 Perfect Mediation

Table 5 shows the relationship between GTFL and environmental performance is not significant after the occurrence of the pro-environmental behaviour as a mediator variable ($\beta = +0.297$, p = 0.051 > 0.05). However, this relationship was significant in the first examination ($\beta = +0.807$, p < 0.05). Hence, we could argue that the effect of pro-environmental behaviour is thus full between GTFL and environmental performance.

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5. Discussion

In this study, we examined the interrelationship between green transformational leadership, green behaviors of employees (task-related and pro-environmental behavior), and environmental performance in different food enterprises operating in Saudi Arabia. The study developed a conceptual model based on a related literature review, especially in relation to the food business wherever available. Following the data collected from employees in different food businesses, the key findings confirmed that GTFL has a positive and direct effect on task-related and pro-environmental behaviors of employees. Hence, we were able to confirm the first and second hypotheses of the study (H1 and H2). Indeed, green leaders become role models and examples for their followers; therefore, they could inspire the green behaviour of their employees through their transformational leadership dimensions. This also reflects the crucial role of leadership in driving the green behaviour of their employees. These results are in agreement with previous studies (e.g., [12,16]), which confirmed that GTFL encouraged employees to realize the significance of green behavior through the inspiration of green attitude and practices, enabling employees to realize that the business supports and anticipates green behaviour.

The study results support Hypothesis 3 and confirmed a direct positive effect of green transformational leadership on the environmental performance of their organisation. These findings confirmed that GTFL drives and motivate employees to understand an organization's sustainable environmental objectives by providing their followers with a clear vision, aspiration, inspiration, and passion, as well as backing needs to fulfill environmental performance. The result also advances previous studies in relation to the effect of GTFL on environmental performance (e.g., [8,23,36,37]).

The results also indicated that green behaviour (task-related and pro-environmental) has a positive impact on environmental performance. The two dimensions of green behaviour positively affect environmental practices such as reduction of waste, saving energy, and conservation of water. The findings support study Hypotheses 4 and 5. Furthermore, these results are in line with earlier research [12,38] as employee green behavior in hotels has a direct impact on environmental performance.

One of the main objectives and research questions in this research was to examine the mediating effect of green behaviour (task-related and pro-environmental) on the relationship between green transformational leadership and the environmental performance of food enterprises. The results, interestingly, showed a partial mediating effect of task-related behaviour in the link between GTFL and environmental performance, whereas pro-environmental behaviour has a perfect mediation effect. This means that pro-environmental behaviour controls the relationship between green transformational leadership and environmental performance. This also means that the existence of pro-environmental behaviour ensures the occurrence of environmental performance.

6. Implications of the Study

The findings of our study have managerial implications for leaders in the food industry. In relation to the managerial implications, to align with Green Saudi Arabia (the recent initiative launched by H.E. Crown Prince of the Kingdom of Saudi Arabia, Mohamed Bin Salman) the leaders in the food industry needs to pay higher attention to the environmental performance impacts, which can be achieved through green leadership and green behaviour of employees. Second, as our research showed leaders and managers of food enterprises should have high consideration pro-environmental behaviours when choosing their employees to ensure positive and significant environmental performance. A psychometric test ensuring such pro-behaviour among potential employees is essential. Third, leaders need to understand their crucial role toward their followers, especially in the area of inspiration, developing, and driving the green behaviour and values of their employees. Managers in the food industry need to conduct development programs to enhance the pro-environmental behaviours among employees.

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The results also have other theoretical implications for scholars. First, the current research takes a new attempt to examine the mediating role of green behaviour in the relationship between GTFL and environmental performance in the food industry in Saudi Arabia, since most research [19,24] focus on direct relationships, with limited studies highlighting the mediating role of pro-environmental behaviour [38]. Second, the study confirmed the direct relationship of GTFL on environmental performance and the indirect relation through the two dimensions of green behaviour (task-related and pro-environmental behaviour). Third, the results of this research confirmed a full mediating effect of pro-environmental behaviour in the link between GTFL and environmental performance. This highlights the crucial role of pro-environmental in affecting the above relationship and motivates scholars to undertake further research on the antecedents of pro-environmental behaviour.

7. Conclusions

In this study, first, we examined the direct effect of GTFL on green behaviour of employees and environmental performance. Hence, the results of this study confirm that there is a positive effect of GTFL on both green behaviour of employees and environmental performance. Similarly, we tested the indirect effect of GTFL on environmental performance through two mediating variables task-related and pro-environmental behaviours. The results showed a partial mediating effect of task-related behaviour in the link between GTFL and environmental performance, whereas pro-environmental behaviour has a perfect mediation effect.

The conclusions of this paper are as follows: First, the positive and direct relationship between GTFL and environmental performance. Second, the positive and direct relationship between GTFL and task-related as well as pro-environmental behaviours of employees. These results confirm the crucial role of leadership in driving the green behaviour of their employees since GTFL inspires employees to engage in the organization's sustainable environmental objectives by providing their followers with a clear vision, aspiration, and passion, as well as backing needs to fulfill environmental performance. Third, the positive and direct relationship between green behavior (task-related and pro-environmental) and environmental performance confirms that the two dimensions of green behaviours positively impact the reduction of waste, conservation of energy, and water. Finally, this study also noted that there is a partial mediating effect of task-related behaviour in the relationship between GTFL and environmental performance, whereas pro-environmental behaviour has a perfect mediation effect. This confirms that pro-environmental behaviour can control the relationship between GTFL and environmental performance. This also means that the existence of pro-environmental behaviour ensures the occurrence of environmental performance, even in the absence of GTFL.

8. Limitation and Research Opportunities

Like other social research studies, our study has some limitations; however, these limitations could be research opportunities. First, this study adopted s self-administered questionnaire, which was conducted on employees in food enterprises located in the Kingdom of Saudi Arabia. Hence, the results cannot be simply generalized to other countries' contexts without further testing. In the future, the results of our research can be examined in another country or can be conducted in another industry such as healthcare, transport, construction, and information technology. Second, in this study, we did not consider some variables such as the gender effect, experience effect, and employee age as a moderating variables in the relationship between GTFL and environmental performance. Previous research [56] confirmed that the gender of leaders could affect job and organisational outcomes. Hence, in the future, dimensions such as gender or age effect as a mediating variable or moderator can be tested.

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Data Availability Statement: Data are available upon request from researchers who meet the eligibility criteria. Kindly contact the first author privately through e-mail.

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References

- 1. Rhead, R.; Elliot, M.; Upham, P. Assessing the structure of UK environmental concern and its association with pro-environmental behaviour. *J. Environ. Psychol.* **2015**, *43*, 175–183. [CrossRef]
- 2. Robertson, J.L.; Barling, J. Contrasting the nature and effects of environmentally specific and general transformational leadership. *Leadersh. Organ. Dev. J.* **2017**, *38*, 22–41. [CrossRef]
- 3. Huda, M.; Mulyadi, D.; Hananto, A.L.; Muhamad, N.H.N.; Teh, K.S.M.; Don, A.G. Empowering corporate social responsibility (CSR): Insights from service learning. *Soc. Responsib. J.* **2018**, *14*, 4, 875–894. [CrossRef]
- 4. Pham, N.T.; Tučková, Z.; Jabbour, C.J.C. Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tour. Manag.* **2019**, 72, 386–399. [CrossRef]
- 5. Chan, E.S.; Hawkins, R. Application of EMSs in a hotel context: A case study. Int. J. Hosp. Manag. 2012, 31, 405–418. [CrossRef]
- 6. Chan, E.S.; Hsu, C.H. Environmental management research in hospitality. Int. J. Contemp. Hosp. 2016. [CrossRef]
- 7. Ones, D.S.; Dilchert, S. Employee green behaviors. In *Managing HR for Environmental Sustainability*; Jackson, S.E., Ones, D.S., Dilchert, S., Eds.; Jossey-Bass/Wiley: San Francisco, CA, USA, 2012; pp. 85–116.
- 8. Tosun, C.; Parvez, M.O.; Bilim, Y.; Yu, L. Effects of green transformational leadership on green performance of employees via the mediating role of corporate social responsibility: Reflection from North Cyprus. *Int. J. Hosp. Manag.* **2022**, *103*, 103218. [CrossRef]
- 9. Bass, B.M.; Avolio, B.J.; Atwater, L. The transformational and transactional leadership of men and women. *Appl. Psychol.* **2022**, *45*, 5–34. [CrossRef]
- 10. Avolio, B.J.; Bass, B.M. Multifactor Leadership Questionnaire (MLQ); Mind Garden: Menlo Park, CA, USA, 2004.
- 11. Peng, J.; Chen, X.; Zou, Y.; Nie, Q. Environmentally specific transformational leadership and team pro-environmental behaviors: The roles of pro-environmental goal clarity, pro-environmental harmonious passion, and power distance. *J. Hum. Relat.* **2021**, 74, 1864–1888. [CrossRef]
- 12. Robertson, J.L.; Barling, J. Greening organizations through leaders' influence on employees' pro-environmental behaviors. *J. Organ. Behav.* **2013**, *34*, 176–194. [CrossRef]
- 13. 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]
- 14. Kim, Y.J.; Kim, W.G.; Choi, H.M.; Phetvaroon, K. The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *Int. J. Hosp. Manag.* **2019**, *76*, 83–93. [CrossRef]
- 15. Graen, G.; Cashman, J.F. A role-making model of leadership in formal organizations: A developmental approach. *Leadersh. Front.* **1975**, *143*, 165.
- 16. Brown, M.E.; Treviño, L.K.; Harrison, D.A. Ethical leadership: A social learning perspective for construct development and testing. *Organ. Behav. Hum. Decis. Proc.* **2005**, *97*, 117–134. [CrossRef]
- 17. Sobaih, A.; Hasanein, A.; Elshaer, I. Influences of green human resources management on environmental performance in small lodging enterprises: The role of green innovation. *Sustainability* **2020**, *12*, 10371. [CrossRef]
- 18. He, C.; McCabe, B.; Jia, G. Effect of leader-member exchange on construction worker safety behavior: Safety climate and psychological capital as the mediators. *Saf. Sci.* **2021**, *142*, 105401. [CrossRef]
- 19. Chaudhary, R. Green human resource management and employee green behavior: An empirical analysis. *Corp. Soc. Responsib. Environ. Manag.* **2020**, 27, 630–641. [CrossRef]

Agriculture **2022**, 12, 1100 16 of 17

- 20. Robertson, J.L.; Barling, J. The psychology of green organizations; Oxford University Press: New York, NY, USA, 2015.
- 21. Singh, S.K.; Del Giudice, M.; Chierici, R.; Graziano, D. Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technol. Forecast. Soc. Change* **2020**, *150*, 119762. [CrossRef]
- Chen, Y.S.; Chang, C.H. The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. J. Bus. Ethics 2013, 116, 107–119. [CrossRef]
- 23. Farrukh, M.; Ansari, N.; Raza, A.; Wu, Y.; Wang, H. Fostering employee's pro-environmental behavior through green transformational leadership, green human resource management and environmental Knowledge. *Technol. Forecast. Soc. Change* **2022**, 179, 121643. [CrossRef]
- 24. Mittal, S.; Dhar, R.L. Effect of green transformational leadership on green creativity: A study of tourist hotels. *Tour. Manag.* **2016**, 57, 118–127. [CrossRef]
- 25. Tepper, B.J.; Dimotakis, N.; Lambert, L.S.; Koopman, J.; Matta, F.K.; Man Park, H.; Goo, W. Examining follower responses to transformational leadership from a dynamic, person–environment fit perspective. *Acad. Manag. J.* **2018**, *61*, 1343–1368. [CrossRef]
- 26. Gu, H.; Duverger, P.; Yu, L. Can innovative behavior be led by management? A study from the lodging business. *Tour. Manag.* **2017**, *63*, 144–157. [CrossRef]
- 27. Li, W.; Bhutto, T.A.; Xuhui, W.; Maitlo, Q.; Zafar, A.U.; Bhutto, N.A. Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *J. Clean. Prod.* **2020**, 255, 120229. [CrossRef]
- 28. Bissing-Olson, M.J.; Iyer, A.; Fielding, K.S.; Zacher, H. Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. *J. Organ. Behav.* **2013**, *34*, 156–175. [CrossRef]
- 29. Norton, T.A.; Parker, S.L.; Zacher, H.; Ashkanasy, N.M. Employee green behavior: A theoretical framework, multilevel review, and future research agenda. *Organ. Environ.* **2015**, *28*, 103–125. [CrossRef]
- 30. Muller-Carmem, M.; Jackson, S.; Jabbour, C.J.; Renwick, D. Green human resource management. Z. Personalforsch. 2010, 24, 95–96.
- 31. Robertson, J.L.; Carleton, E. Uncovering how and when environmental leadership affects employees' voluntary pro-environmental behavior. *J. Leadersh. Organ.* **2018**, 25, 197–210. [CrossRef]
- 32. Sobaih, A.; Hasanein, A.; Aliedan, M.; Abdallah, H. The impact of transactional and transformational leadership on employee intention to stay in deluxe hotels: Mediating role of organisational commitment. *Tour. Hosp. Res.* **2022**, 1467358420972156. [CrossRef]
- 33. Kura, K.M. Linking environmentally specific transformational leadership and environmental concern to green behaviour at work. *Glob. Bus. Rev.* **2016**, *17*, 1S–14S. [CrossRef]
- 34. Haddock-Millar, J.; Sanyal, C.; Müller-Camen, M. Green human resource management: A comparative qualitative case study of a United States multinational corporation. *Int. J. Hum. Resour. Manag.* **2016**, 27, 192–211. [CrossRef]
- 35. Wu, M.H.; Thongma, W.; Leelapattana, W.; Huang, M.L. Impact of hotel employee's green awareness, knowledge, and skill on hotel's overall performance. In *Advances in Hospitality and Leisure*; Emerald Group Publishing Limited: Bingley, UK, 2016.
- 36. Kusi, M.; Zhao, F.; Sukamani, D. Impact of perceived organizational support and green transformational leadership on sustainable organizational performance: A SEM approach. *Bus. Process Manag. J.* **2021**, 27, 1373–1390. [CrossRef]
- 37. Çop, S.; Olorunsola, V.O.; Alola, U.V. Achieving environmental sustainability through green transformational leadership policy: Can green team resilience help. *Bus. Strategy Environ.* **2021**, *30*, 671–682. [CrossRef]
- 38. Elshaer, I.; Sobaih, A.; Aliedan, M.; Azzaz, A. The effect of green human resource management on environmental performance in small tourism enterprises: Mediating role of pro-environmental behaviors. *Sustainability* **2021**, *13*, 1956. [CrossRef]
- 39. Daily, B.F.; Bishop, J.W.; Massoud, J.A. The role of training and empowerment in environmental performance: A study of the Mexican maquiladora industry. *Int. J. Oper. Prod. Manag.* **2012**, *32*, 631–647. [CrossRef]
- 40. Yen, C.H.; Chen, C.Y.; Teng, H.Y. Perceptions of environmental management and employee job attitudes in hotel firms. *J. Hum. Resour. Hosp. Tour.* **2013**, *12*, 155–174. [CrossRef]
- 41. Anwar, N.; Mahmood, N.H.N.; Yusliza, M.Y.; Ramayah, T.; Faezah, J.N.; Khalid, W. Green Human Resource Management for organisational citizenship behaviour towards the environment and environmental performance on a university campus. *J. Clean. Prod.* 2020, 256, 120401. [CrossRef]
- 42. Krejcie, R.V.; Morgan, D.W. Determining sample size for research activities. Educ. Psychol. Meas. 1970, 30, 607–610. [CrossRef]
- 43. Williams, L.J.; Anderson, S.E. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *J. Manag.* **1991**, *17*, 601–617. [CrossRef]
- 44. Frese, M.; Fay, D.; Hilburger, T.; Leng, K.; Tag, A. The concept of personal initiative: Operationalization, reliability and validity in two German samples. *J. Occup. Psychol.* **1997**, 70, 139–161. [CrossRef]
- 45. Hair, J.; Anderson, R.; Tatham, R.L.; Black, W.C. *Multivariate Data Analysis*, 5th ed.; Prentice-Hall: Upper Saddle River, NJ, USA, 1998.
- 46. Nunnally, J.C. Psychometric Theory, 2nd ed.; Mc Graw-Hill: New York, NY, USA, 1978.
- 47. Roussel, P.; Durrieu, F.; Campoy, E.; El Akremi, A. Méthodes d'Équations Structurelles: Recherche et Applications en Gestion; Economica: Paris, France, 2002.
- 48. Pedhazur, E.J.; Pedhazur Schmelkin, L. Measurement, Design, and Analysis: An Integrated Approach; LEA: Hillsdale, NJ, USA, 1991.
- 49. Roussel, P. Méthodes de Développement d'Échelles Pour Questionnaires d'Enquête. In *Management des Ressources Humaines: Méthodes de Recherche en Sciences Humaines et Sociales*; Roussel, P., Wacheux, F., Eds.; De Boeck Supérieur: Paris, France, 2005; pp. 245–276.

Agriculture **2022**, *12*, 1100 17 of 17

50. Bentler, P.M.; Bonett, D.G. Significance Tests and Goodness-Of-Fit in the Analysis of Covariance Structures. *Psychol. Bull.* **1980**, *88*, 588–600. [CrossRef]

- 51. Evrard, Y.; Pras, B.; Roux, E. Market: Etudes et Recherches en Marketing; Dunod: Paris, France, 2000.
- 52. Kline, R.B. *Principles and Practice of Structural Equation Modeling*; Guilford Publications: New York, NY, USA, 2015.
- 53. Hair, J.; Anderson, R.; Tatham, R.; Black, W. Multivariate Data Analysis; Prentice Hall: Saddle River, NJ, USA, 2014.
- 54. Fornell, C.; Larcker, D. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
- 55. Baron, R.M.; Kenny, D.A. The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Pers. Soc. Psychol.* **1986**, *51*, 1173–1182. [CrossRef]
- 56. Gharbi, H.; Sobaih, A.E.E.; Aliane, N.; Almubarak, A. The Role of Innovation Capacities in the Relationship between Green Human Resource Management and Competitive Advantage in the Saudi Food Industry: Does Gender of Entrepreneurs Really Matter? *Agriculture* 2022, 12, 857. [CrossRef]