

THE IMPACT OF GREEN TRANSFORMATIVE LEADERSHIP ON GREEN BUSINESS ETHICS

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ABSTRACT

The aim of this research is to determine the impact of green transformative leadership perceptions of individuals working in the service sector in the TRNC on green business ethics. The universe of the research consists of individuals working in the service sector in the TRNC, and data were obtained from 381 participants within the scope of the study. In the research, a quantitative research approach was adopted and a relational survey model was used. The data were collected through a personal information form, the Green Transformative Leadership Scale and the Green Business Ethics Scale. The data obtained were analyzed with the SPSS program; frequency, percentage, arithmetic mean, standard deviation, reliability analysis, normality analysis, independent sample t-test, one-way analysis of variance, Pearson correlation analysis and regression analysis were applied. As a result of the research, it was determined that the participants' perceptions of green transformative leadership and green business ethics were at a high level. As a result of the correlation analysis, a positive and significant relationship was found between green transformative leadership and green business ethics. As a result of the regression analysis, it was determined that green transformative leadership had a positive and significant effect on green business ethics. Accordingly, it has been concluded that green transformative leadership behaviors are an important element that strengthens employees' perceptions of green business ethics.

Keywords: Green transformative leadership, green business ethics, environmental ethics, work ethics, TRNC.

1. Introduction

1.1. Problem Situation

Today, the increase in environmental problems on a global scale makes it necessary for businesses to consider their environmental responsibilities as well as their economic goals. Climate change, depletion of natural resources, environmental pollution, carbon emissions and sustainable development goals lead organizations to re-evaluate their management approaches on the basis of environmental sensitivity. While organizational success is mostly evaluated in terms of economic performance, efficiency and competitiveness in traditional management approaches, environmental sustainability has become one of the main factors affecting the long-term success of organizations (Chen & Chang, 2013). This change necessitates a reconsideration of leadership approaches on the axis of environmental responsibility. The realization of environmental sustainability goals in organizations depends on the use of environmentally friendly technologies, as well as the adoption of environmental values by employees and ethical environmental behaviors in business processes. The attitudes and behaviors of leaders are as effective as organizational policies in the development of environmentally sensitive behaviors of employees (Robertson & Barling, 2013).

The behaviors of leaders on environmental issues shape employees' perceptions of environmental responsibility, their participation in eco-friendly practices, and their commitment to sustainability goals. At this point, green transformative leadership stands out as an important leadership approach that motivates employees in line with environmental goals, encourages environmentally friendly behaviors and contributes to the formation of a sustainable organizational culture (Graves, Sarkis, & Zhu, 2013).

Green transformative leadership is considered as an expanded form of transformational leadership approach with the dimension of environmental sustainability. In this leadership approach, leaders act as role models for employees on environmental issues, create an environmental vision, support green innovation, and improve employees' environmental awareness. Environmentally friendly behaviors of leaders are observed by employees and contribute to the spread of environmental responsibility culture within the organization (Singh, Del Giudice, Chierici, & Graziano, 2020). Through green transformative leadership, environmental sustainability does not remain a temporary practice within the organization; It becomes a common value that employees adopt, share and reflect on their business processes. This ensures that environmentally friendly behaviors are a part of the organizational culture rather than individual efforts. Internalizing environmental goals is considered important for the development of green business ethics (Robertson & Barling, 2013).

Green business ethics refers to the fact that businesses carry out their activities in line with the principles of environmental responsibility, protection of natural resources, sustainability, environmental justice and sensitivity to future generations. This understanding requires businesses to achieve their economic goals while not harming the environment, using resources consciously, and considering their environmental impact as an ethical responsibility (DesJardins, 2013). The strengthening of green business ethics in organizations is possible when employees adopt environmental ethical values and reflect these values in their daily business behaviors. Leadership behaviors are seen as a determining factor in the transformation of environmental ethical values into employee behaviors. Green transformative leaders convey environmental values to employees, support eco-friendly practices, and increase employees' awareness of environmental responsibility (Crane & Matten, 2016). Leaders' consistent, reliable and exemplary behavior on environmental issues strengthens employees' commitment to environmental ethical values. This can lead to positive results such as energy saving, recycling, efficient use of resources, reduction of environmental risks and development of green organizational citizenship behaviors in organizations (Kim, Kim, Han, Jackson, & Ployhart, 2017). The embedding of environmental ethical values in the organizational culture contributes to the employees' seeing environmentally friendly behaviors as a natural part of organizational responsibility, not as an individual choice. Increasing the environmental responsibility awareness of employees strengthens the environmental performance of the organization and facilitates the achievement of sustainability goals (Ones & Dilchert, 2012).

In organizations operating in the TRNC, the reflection of the understanding of environmental sustainability on employee behavior and organizational culture is becoming more and more important. Issues such as environmental sensitivities brought about by being an island country, the limitation of natural resources, energy use, waste management and environmental protection practices make environmental responsibility more visible for organizations in the TRNC. This situation makes it an important necessity to develop environmentally friendly leadership behaviors and green business ethics in organizations.

There are studies in the literature showing that green transformative leadership has positive effects on environmental performance, green innovation, environmental citizenship behavior and environmental awareness of employees. Despite this, it is seen that studies directly addressing the impact of green transformative leadership behaviors on employees' perceptions of green business ethics in the TRNC sample are limited. This limitation makes it important to examine the relationship between green transformative leadership and green business ethics in the context of the TRNC.

The problem situation of this research is to determine the impact of green transformative leadership on green business ethics in the TRNC. Within the scope of the research, it is examined to what extent green transformative leadership behaviors affect employees' perceptions of environmental ethical values, how the understanding of environmental responsibility is strengthened within the organization, and what role leadership behaviors play in the development of green business ethics.

1.2. Purpose of the Research

The aim of this research is to determine the impact of green transformative leadership on green business ethics in the TRNC. In this research, answers to the following questions are sought:

1. What is the perception level of green transformative leadership of employees in the TRNC?
2. What is the perception level of green business ethics of employees in the TRNC?
3. Is there a significant relationship between the green transformative leadership perceptions of employees in the TRNC and their perceptions of green business ethics?
4. Does green transformative leadership have a meaningful impact on green business ethics?
5. Do the key dimensions of green transformative leadership have a meaningful impact on green business ethics?
6. Do the green transformative leadership perceptions of employees in the TRNC differ significantly according to demographic variables?
7. Do the perceptions of green business ethics of employees in the TRNC differ significantly according to demographic variables?

1.3. Importance of Research

This research is important in terms of examining the relationship between green transformative leadership and green business ethics in the TRNC sample. The adoption of environmental sustainability goals in organizations is closely related to employees' commitment to environmental ethics and the power of leaders to encourage environmentally friendly behaviors. For this reason, it is thought that the research will contribute to the development of sustainability culture in organizations, the strengthening of the understanding of environmental responsibility and the spread of green business ethics behaviors (Robertson & Barling, 2013; Ones & Dilchert, 2012).

The research is also important in terms of providing data on practices related to environmental responsibility and sustainable management approach in the TRNC. It is considered that the findings obtained will guide managers

in developing green leadership behaviors, increasing the environmental awareness of employees and strengthening green business ethics within the organization.

2. Conceptual Framework

2.1. Green Transformative Leadership

Green transformative leadership is defined as the reshaped form of the transformational leadership approach with an environmental sustainability perspective. Increasing environmental problems, climate change, carbon emissions, decrease in energy resources and sustainable development goals make it necessary for businesses to increase their environmental performance. In this process, leaders are expected to put environmental responsibilities at the center of organizational goals as well as economic and organizational goals. Green transformative leadership refers to a leadership approach that motivates employees in line with environmental goals, encourages environmentally friendly behaviors, and leads to the formation of a sustainable organizational culture (Singh, Del Giudice, Chierici, & Graziano, 2020).

Green transformative leadership is based on the reinterpretation of the idealized impact, inspirational motivation, intellectual stimulation and individual interest dimensions of transformational leadership within the framework of environmental sustainability. Leaders aim to develop environmentally friendly behaviors as well as organizational performance of employees. Making environmental goals a part of daily business processes is among the main functions of green transformative leadership (Chen & Chang, 2013).

Green transformative leaders see environmental sustainability as one of the key elements of the organizational vision. It sets environmental performance targets, supports sustainable production and consumption, and develops practices to increase the environmental awareness of employees. Leaders' adherence to environmental values is effective in developing positive attitudes towards the environment (Wang, Li, & Yin, 2024).

Environmental visioning is one of the hallmarks of green transformative leadership. Leaders set environmentally friendly goals for the future of the organization and motivate employees to achieve these goals. A strong environmental vision makes it easier for employees to adopt sustainability practices and increases their voluntary contributions to environmental performance (Begum, Xia, Ali, Awan, & Ashfaq, 2022).

Green transformative leadership also supports employees' environmental innovation behaviors. Since solving environmental problems requires innovative practices, leaders encourage employees to generate environmentally friendly ideas, participate in green innovation activities and develop creative solutions to environmental problems. This strengthens the competitive advantages of organizations as well as their environmental performance (Zhang, Sun, Yang, & Wang, 2023).

Green transformative leadership has significant effects on the development of environmental citizenship behaviors of employees. Environmental citizenship behavior refers to environmentally friendly behaviors that employees voluntarily perform beyond their job descriptions. These behaviors include saving energy, contributing to recycling, reducing resource use, and raising environmental awareness. Green transformative leaders play a guiding role in employees' adoption of these behaviors (Kim, Kim, Han, Jackson, & Ployhart, 2017).

2.2. The Concept of Green Business Ethics

Traditional management approaches of businesses focused on economic gain are now considered together with sustainable management approaches that include environmental and social responsibilities. Issues such as global climate change, rapid depletion of natural resources, environmental pollution, and deterioration of ecological balance necessitate businesses to reevaluate their operations ethically and environmentally. Green business ethics, which emerged as a result of the combination of environmental sustainability and ethical management principles, refers to the fact that businesses carry out their activities in an environmentally friendly, sustainable and ethical manner (DesJardins, 2013).

Green business ethics encompass businesses adhering to ethical principles while fulfilling their environmental responsibilities. Conscious use of natural resources, prevention of environmental damage, protection of the rights of future generations and support for sustainable development are among the basic elements of this understanding. Green business ethics emphasize that businesses should operate without harming the environment and taking into account their social responsibilities while achieving their economic goals (Crane & Matten, 2016).

The principle of environmental responsibility is at the core of green business ethics. Environmental responsibility refers to the decision-making of businesses by taking into account the environmental impacts that may arise as a result of their activities. According to this understanding, businesses should develop voluntary practices to protect the environment beyond complying with legal regulations. Environmental responsibility awareness plays an important role in helping businesses achieve their sustainability goals and gain trust with society (Schaltegger, Burritt, & Petersen, 2017).

Sustainable use of natural resources is one of the important dimensions of green business ethics. The limited resources require businesses to act more consciously in their production and consumption processes. Efficient

use of energy resources, reducing water consumption, supporting recycling activities and reducing the amount of waste are among the basic practices evaluated within the scope of green business ethics. These practices support environmental sustainability and contribute to the long-term success of businesses (Hart & Dowell, 2011).

Green business ethics are also associated with the understanding of environmental justice. Environmental justice means that environmental damages are not burdened on certain segments of society and that all individuals can benefit from environmental resources fairly. Businesses have to take into account the effects of environmental risks on society while carrying out their activities. Environmental pollution and unconscious use of natural resources affect future generations as well as today's societies. Therefore, green business ethics also includes the responsibilities of businesses towards future generations (Velasquez, 2018).

The importance of stakeholder theory is one of the factors that support the development of green business ethics. According to stakeholder theory, businesses are responsible for their employees, customers, suppliers, local communities and the environment as well as their shareholders. This understanding makes reducing environmental impacts and developing sustainable practices one of the main areas of responsibility of businesses. Green business ethics provides businesses with an ethical framework for fulfilling these responsibilities (Freeman, Harrison, Wicks, Parmar, & De Colle, 2010).

The importance of green business ethics becomes more evident with the increase in consumers' awareness of environmental issues. Today, consumers prefer environmentally friendly businesses more as well as expecting quality products and services. Businesses that fulfill their environmental responsibilities gain customer trust, strengthen their brand values, and gain a competitive advantage. In this respect, green business ethics is considered as a strategic management element as well as an ethical requirement (Porter & Kramer, 2011).

Method 3

3.1. Research Model

This research was carried out in line with the quantitative research approach. Quantitative research is an approach based on measuring variables through numerical data and analyzing the obtained data with statistical methods (Creswell, 2014). Relational survey model was used in the research. A relational survey model is a research model that aims to determine the existence and direction of a relationship between two or more variables (Karasar, 2020). In this context, the independent variable in the research was determined as green transformative leadership and the dependent variable was determined as green business ethics.

3.2. Universe and Sample

The universe of the research consists of individuals working in the service sector in the TRNC. Convenience sampling method was used in the research. Convenience sampling is a sampling method based on collecting data from individuals who are willing and accessible to participate in the research (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2020). In this direction, the sample of the research consists of 381 participants working in the service sector in the TRNC.

3.3. Data Collection Tools

A questionnaire form was used as a data collection tool in the research. The questionnaire form consists of three parts. In the first part, there is a personal information form to determine the demographic characteristics of the participants. In the second part, the Green Transformative Leadership Scale, developed by Chen and Chang (2012) and adapted to Turkish by Kerse et al. (2021), was used to measure employees' perceptions of green transformative leadership. The scale consists of 6 items and a single dimension. In the third part, the Green Business Ethics Scale, whose validity and reliability study was conducted by Bayram and Öztirak (2023), was used to measure employees' perceptions of green business ethics. The scale consists of two sub-dimensions, Environmental Ethics and Work Ethics, and 20 items. A 5-point Likert type rating was used in both scales.

3.4. Data Analysis

The data obtained within the scope of the research were analyzed through the SPSS program. Frequency, percentage, arithmetic mean, standard deviation, reliability analysis, normality analysis, independent sample t-test, one-way analysis of variance, Pearson correlation analysis and regression analysis were used in the analysis of the data.

Table 1. Normality of Scales and KMO Analysis Results

Scale / Sub-Dimension	N	Skewness	Kurtosis	KMO	Bartlett χ^2	SD	p
Green Transformative Leadership Scale	381	-,421	,386	,872	986,214	15	,000
Green Business Ethics Scale	381	-,318	,274	,914	3247,586	190	,000
Environmental Ethics Sub-Dimension	381	-,356	,442	,901	2148,763	66	,000
Work Ethics Sub-Dimension	381	-,284	,319	,846	1186,492	28	,000

Table 1 presents the normality and KMO analysis results of the scales. The fact that the skewness and kurtosis values are within acceptable limits indicates that the data are in accordance with the normal distribution. KMO values are .872 for the Green Transformative Leadership Scale; .914 for the Green Business Ethics Scale; It was calculated as .901 for the Environmental Ethics sub-dimension and .846 for the Work Ethics sub-dimension. The fact that the results of the Bartlett Sphericity Test were significant in all scales and sub-dimensions shows that the data are suitable for factor analysis ($p < .05$).

Table 2. Reliability Analysis Results for Scales

Scale / Sub-Dimension	Number of Articles	Cronbach Alpha (α)	Reliability Level
Green Transformative Leadership Scale	6	,921	Highly reliable
Green Business Ethics Scale	20	,944	Highly reliable
Environmental Ethics Sub-Dimension	12	,932	Highly reliable
Work Ethics Sub-Dimension	8	,887	Highly reliable

Table 2 shows the reliability analysis results of the scales. Cronbach's Alpha coefficients were .921 for the Green Transformative Leadership Scale; .944 for the Green Business Ethics Scale; It was determined as .932 for the Environmental Ethics sub-dimension and .887 for the Business Ethics sub-dimension. The values obtained are above .70, indicating that the scales are reliable and can be used in further statistical analysis..

4. Findings

4.1. Demographic Characteristics

The frequency and percentage distributions of the demographic characteristics of 381 service sector employees participating in the research are included.

Table 3. Distribution of Demographic Characteristics of Participants

Variable	Group	f	%
Gender	Male	171	44,88
	Women	210	55,12
Age	25'ten to	64	16,80
	26-35	151	39,63
	36-45	108	28,35
	45 and above	58	15,22
Marital Status	Married	222	58,27
	Single	159	41,73
Education Status	Primary School	10	2,62
	Secondary School	20	5,25
	High School	115	30,18
	Associate degree	70	18,37
	Undergraduate	130	34,12
	Graduate	36	9,45
Average Monthly Income	Income less than expenditure	145	38,06
	Income is equivalent to expenditure	169	44,36
	Income is more than expenditure	67	17,59
Operating Status	Administrator / Division Manager	72	18,90
	Employees	309	81,10
Work Experience	0-5 years	112	29,40
	6-10 years	98	25,72
	11-15 years	74	19,42
	16-20 years	54	14,17
	21 years and over	43	11,29

Variable	Group	f	%
Total Professional Experience	0-5 years	83	21,78
	6-10 years	97	25,46
	11-15 years	88	23,10
	16-20 years	59	15,49
	21 years and over	54	14,17
Total		381	100,00

Table 3 presents the distributions of the demographic characteristics of the participants. 55.12% of the participants were female and 44.88% were male. The highest rate in the age variable is in the 26-35 age group with 39.63%; In terms of marital status, it is seen that 58.27% of the participants are married. The highest rate in education belongs to undergraduate graduates with 34.12%. In terms of average monthly income, 44.36% of the participants stated that their income was equal to their expenses. According to employment status, 81.10% of the participants are employees and 18.90% are managers/unit managers. The highest rate in terms of work experience is in the 0-5 year range with 29.40%; In terms of total professional experience, the highest rate is in the range of 6-10 years with 25.46%.

4.2. Descriptive Statistics

Under this heading, the arithmetic mean and standard deviation values of the Green Transformative Leadership Scale and the Green Business Ethics Scale and their sub-dimensions used in the research are presented.

Table 4. Descriptive Statistics on Scale and Sub-Dimensions

Scale / Sub-Dimension	N	Min.	Max.	Average ($\bar{X}$)	Std. Deviation
Green Transformative Leadership	381	1,67	5,00	4,18	0,61
Green Business Ethics	381	2,05	5,00	4,09	0,55
Environmental Ethics	381	2,08	5,00	4,15	0,58
Work Ethics	381	1,88	5,00	4,01	0,64

When Table 4 is examined, it is seen that the participants' perceptions of Green Transformative Leadership are at a high level ($\bar{X}=4.18$; $SD=0.61$). This result shows that employees perceive their managers as leaders who support environmental sustainability and encourage environmentally friendly behaviors. The general average of the Green Business Ethics Scale is determined as 4.09. This value shows that the participants' perceptions of green business ethics practices in the organizations they work for are high. When the sub-dimensions are examined, it is seen that the highest average is in the Environmental Ethics sub-dimension ($\bar{X}=4.15$; $SD=0.58$). The mean of the Work Ethics sub-dimension is calculated as 4.01 ($SD=0.64$). The averages obtained in both sub-dimensions show that the participants have positive perceptions of environmental ethics and work ethics.

4.3. Difference Analysis Between Green Transformative Leadership Scale and Demographic Variables

Table 5. Comparison of Green Transformative Leadership Scale Scores by Gender

Gender	N	Location.	SS	t	p
Male	171	4,14	0,63	-1,214	,225
Women	210	4,21	0,59		

According to Table 5, the Green Transformative Leadership Scale scores did not differ significantly according to the gender variable ($p>.05$).

Table 6. Comparison of Green Transformative Leadership Scale Scores by Age

Age	N	Location.	SS	F	p	Difference
25'ten to	64	4,06	0,66	3,184	,024	36-45 > 25'ten az
26-35	151	4,17	0,60			
36-45	108	4,29	0,55			
45 and above	58	4,16	0,64			

According to Table 6, the scores of the Green Transformative Leadership Scale differ significantly according to the age variable ($p<.05$). The difference is between the age group of 36-45 years and the age group of less than 25.

Table 7. Comparing Green Transformative Leadership Scale Scores by Marital Status

Marital Status	N	Location.	SS	t	p
Married	222	4,22	0,58	1,587	,113
Single	159	4,12	0,64		

According to Table 7, the Green Transformative Leadership Scale scores did not differ significantly according to the marital status variable ($p > .05$).

Table 8. Comparison of Green Transformative Leadership Scale Scores by Educational Status

Education Status	N	Location.	SS	F	p	Difference
Primary School	10	3,96	0,72	2,671	,022	Graduate > Primary School
Secondary School	20	4,03	0,68			Extra injection > Lise
High School	115	4,09	0,64			
Associate degree	70	4,15	0,61			
Undergraduate	130	4,23	0,56			
Graduate	36	4,38	0,49			

According to Table 8, the scores of the Green Transformative Leadership Scale differ significantly according to the educational status variable ($p < .05$). The difference is between postgraduate graduates and elementary and high school graduates.

Table 9. Comparison of Green Transformative Leadership Scale Scores Based on Average Monthly Income

Average Monthly Income	N	Location.	SS	F	p	Difference
Income is less than expenditure	145	4,08	0,66	4,126	,017	Income is more than expenditure > Income is less than expenditure
Income is equivalent to expenditure	169	4,19	0,57			
Income is more than expenditure	67	4,31	0,52			

According to Table 9, the Green Transformative Leadership Scale scores differ significantly according to the average monthly income variable ($p < .05$). The difference is between participants whose income is more than their expenses and those whose income is less than their expenses.

Table 10. Comparison of Green Transformative Leadership Scale Scores by Employment Status

Operating Status	N	Location.	SS	t	p
Administrator / Division Manager	72	4,34	0,51	2,561	,011
Employees	309	4,14	0,62		

According to Table 10, the scores of the Green Transformative Leadership Scale differ significantly according to the working status variable ($p < .05$). The average of the participants who are managers / unit managers is higher.

Table 11. Comparison of Green Transformative Leadership Scale Scores Based on Work Experience

Work Experience	N	Location.	SS	F	p	Difference
0-5 years	112	4,07	0,66	2,498	,043	11-15 years > 0-5 years
6-10 years	98	4,16	0,60			
11-15 years	74	4,30	0,53			
16-20 years	54	4,21	0,59			
21 years and over	43	4,18	0,63			

According to Table 11, the Green Transformative Leadership Scale scores differ significantly according to the work experience variable ($p < .05$). The difference is between participants with 11-15 years of work experience and participants with 0-5 years of work experience.

Table 12. Comparison of Green Transformative Leadership Scale Scores Based on Total Professional Experience

Total Professional Experience	N	Location.	SS	F	p	Difference
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Total Professional Experience	N	Location.	SS	F	p	Difference
0-5 years	83	4,09	0,65	1,842	,120	None
6-10 years	97	4,15	0,60			
11-15 years	88	4,22	0,57			
16-20 years	59	4,27	0,55			
21 years and over	54	4,17	0,64			

According to Table 12, the scores of the Green Transformative Leadership Scale did not differ significantly according to the total professional experience variable ($p>.05$).

4.4. Difference Analysis Between Green Business Ethics Scale and Demographic Variables

Table 13. Comparison of Green Business Ethics Scale and Sub-Dimensions by Gender

Scale / Sub-Dimension	Gender	N	Location.	SS	t	p
Green Business Ethics	Male	171	4,05	0,57	-1,318	,188
	Women	210	4,12	0,53		
Environmental Ethics	Male	171	4,11	0,60	-1,227	,221
	Women	210	4,18	0,56		
Work Ethics	Male	171	3,97	0,66	-1,186	,236
	Women	210	4,05	0,62		

According to Table 13, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Labor Ethics did not differ significantly according to the gender variable ($p>.05$).

Table 14. Comparison of Green Business Ethics Scale and Sub-Dimensions by Age

Scale / Sub-Dimension	Age	N	Location.	SS	F	p	Difference
Green Business Ethics	25'ten to	64	3,94	0,61	3,472	,016	36-45 > 25'ten az
	26-35	151	4,08	0,54			
	36-45	108	4,20	0,50			
	45 and above	58	4,10	0,57			
Environmental Ethics	25'ten to	64	4,00	0,63	3,214	,023	36-45 > 25'ten az
	26-35	151	4,14	0,57			
	36-45	108	4,26	0,52			
	45 and above	58	4,16	0,59			
Work Ethics	25'ten to	64	3,86	0,69	2,986	,031	36-45 > 25'ten az
	26-35	151	4,00	0,63			
	36-45	108	4,12	0,58			
	45 and above	58	4,02	0,65			

According to Table 14, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Work Ethics differ significantly according to the age variable ($p<.05$). The difference is between the age group of 36-45 years and the age group of less than 25.

Table 15. Comparison of Green Business Ethics Scale and Sub-Dimensions by Marital Status

Scale / Sub-Dimension	Marital Status	N	Location.	SS	t	p
Green Business Ethics	Married	222	4,12	0,54	1,264	,207
	Single	159	4,05	0,56		
Environmental Ethics	Married	222	4,18	0,56	1,331	,184
	Single	159	4,10	0,60		
Work Ethics	Married	222	4,04	0,63	1,091	,276
	Single	159	3,96	0,65		

According to Table 15, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Work Ethics do not differ significantly according to the marital status variable ($p > .05$).

Table 16. Comparison of Green Business Ethics Scale and Sub-Dimensions by Educational Status

Scale / Sub-Dimension	Education Status	N	Location.	SS	F	p	Difference
Green Business Ethics	Primary School	10	3,82	0,69	3,105	,009	Graduate > Primary School
	Secondary School	20	3,91	0,63			Extra injection > Lise
	High School	115	4,01	0,57			
	Associate degree	70	4,09	0,55			
	Undergraduate	130	4,15	0,51			
	Graduate	36	4,32	0,46			
Environmental Ethics	Primary School	10	3,88	0,71	2,874	,015	Graduate > Primary School
	Secondary School	20	3,98	0,66			Extra injection > Lise
	High School	115	4,07	0,60			
	Associate degree	70	4,15	0,58			
	Undergraduate	130	4,20	0,54			
	Graduate	36	4,37	0,48			
Work Ethics	Primary School	10	3,74	0,76	2,761	,018	Graduate > Primary School
	Secondary School	20	3,82	0,70			
	High School	115	3,93	0,66			
	Associate degree	70	4,01	0,64			
	Undergraduate	130	4,08	0,60			
	Graduate	36	4,25	0,52			

According to Table 16, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Work Ethics differ significantly according to the educational status variable ($p < .05$). The difference is generally between postgraduate graduates and participants with lower levels of education.

Table 17. Comparison of Green Business Ethics Scale and Sub-Dimensions by Average Monthly Income

Scale / Sub-Dimension	Average Monthly Income	N	Location.	SS	F	p	Difference
Green Business Ethics	Income is less than expenditure	145	3,98	0,59	4,584	,011	Income is more than expenditure > Income is less than expenditure
	Income is equivalent to expenditure	169	4,10	0,53			
	Income is more than expenditure	67	4,24	0,49			
Environmental Ethics	Income is less than expenditure	145	4,04	0,61	4,216	,015	Income is more than expenditure > Income is less than expenditure
	Income is equivalent to expenditure	169	4,16	0,56			
	Income is more than expenditure	67	4,29	0,51			
Work Ethics	Income is less than expenditure	145	3,89	0,68	3,905	,021	Income is more than expenditure > Income is less than expenditure
	Income is equivalent to expenditure	169	4,02	0,62			
	Income is more than expenditure	67	4,17	0,57			

According to Table 17, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Labor Ethics differ significantly according to the average monthly income variable ($p < .05$). The difference is between participants whose income is more than their expenses and those whose income is less than their expenses.

Table 18. Comparison of Green Business Ethics Scale and Sub-Dimensions by Working Status

Scale / Sub-Dimension	Operating Status	N	Location.	SS	t	p
Green Business Ethics	Administrator / Division Manager	72	4,25	0,48	2,731	,007
	Employees	309	4,05	0,56		
Environmental Ethics	Administrator / Division Manager	72	4,30	0,50	2,516	,012
	Employees	309	4,11	0,59		
Work Ethics	Administrator / Division Manager	72	4,18	0,56	2,438	,015
	Employees	309	3,97	0,65		

According to Table 18, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Work Ethics differ significantly according to the working status variable ($p < .05$). The average of the participants who are managers / unit managers is higher.

Table 19. Comparison of Green Business Ethics Scale and Sub-Dimensions According to Work Experience

Scale / Sub-Dimension	Work Experience	N	Location.	SS	F	p	Difference
Green Business Ethics	0-5 years	112	3,98	0,60	2,946	,020	11-15 years > 0-5 years
	6-10 years	98	4,07	0,55			
	11-15 years	74	4,22	0,49			
	16-20 years	54	4,13	0,54			
	21 years and over	43	4,11	0,58			
Environmental Ethics	0-5 years	112	4,04	0,62	2,688	,031	11-15 years > 0-5 years
	6-10 years	98	4,13	0,57			
	11-15 years	74	4,28	0,50			
	16-20 years	54	4,18	0,56			
	21 years and over	43	4,15	0,60			
Work Ethics	0-5 years	112	3,89	0,68	2,421	,048	11-15 years > 0-5 years
	6-10 years	98	3,98	0,64			
	11-15 years	74	4,13	0,57			
	16-20 years	54	4,06	0,61			
	21 years and over	43	4,04	0,66			

According to Table 19, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Work Ethics differ significantly according to the work experience variable ($p < .05$). The difference is between participants with 11-15 years of work experience and participants with 0-5 years of work experience.

Table 20. Comparison of Green Business Ethics Scale and Sub-Dimensions According to Total Professional Experience

Scale / Sub-Dimension	Total Professional Experience	N	Location.	SS	F	p	Difference
Green Business Ethics	0-5 years	83	4,01	0,59	1,724	,144	None
	6-10 years	97	4,07	0,56			
	11-15 years	88	4,13	0,53			
	16-20 years	59	4,18	0,51			
	21 years and over	54	4,08	0,58			
Environmental Ethics	0-5 years	83	4,07	0,61	1,638	,164	None
	6-10 years	97	4,13	0,58			
	11-15 years	88	4,19	0,55			
	16-20 years	59	4,23	0,53			
	21 years and over	54	4,14	0,60			

Scale / Sub-Dimension	Total Professional Experience	N	Location.	SS	F	p	Difference
Work Ethics	0-5 years	83	3,93	0,67	1,512	,198	None
	6-10 years	97	3,99	0,64			
	11-15 years	88	4,05	0,61			
	16-20 years	59	4,10	0,59			
	21 years and over	54	4,00	0,66			

According to Table 20, the sub-dimensions of the Green Business Ethics Scale, Environmental Ethics and Work Ethics do not differ significantly according to the total professional experience variable ($p > .05$).

4.5. Correlation Analysis

Table 21. Correlation Analysis Results Between Green Transformative Leadership and Green Business Ethics and Its Sub-Dimensions

Variables	1	2	3	4
1. Green Transformative Leadership	1			
2. Green Business Ethics	,684**	1		
3. Environmental Ethics	,661**	,918**	1	
4. Work Ethics	,612**	,874**	,704**	1

$p < .01$

According to Table 21, there is a positive and significant relationship between Green Transformative Leadership and Green Business Ethics ($r = .684$; $p < .01$). There is a positive and significant relationship between Green Transformative Leadership and Environmental Ethics sub-dimension ($r = .661$; $p < .01$). There is a positive and significant relationship between Green Transformative Leadership and the Work Ethics sub-dimension ($r = .612$; $p < .01$). There is a positive and significant relationship between Green Business Ethics and Environmental Ethics sub-dimension ($r = .918$; $p < .01$). There is a positive and significant relationship between Green Business Ethics and the Work Ethics sub-dimension ($r = .874$; $p < .01$). There is a positive and significant relationship between Environmental Ethics and Business Ethics ($r = .704$; $p < .01$).

4.6. Regression Analysis

Table 22. Regression Analysis Results on the Impact of Green Transformative Leadership on Green Business Ethics

Dependent Variable	Independent Variable	B	Hrd. Hata	b	t	p	R	R ²	F	Model p
Green Business Ethics	Green Transformative Leadership	,617	,034	,684	18,253	,000	,684	,468	333,172	,000

According to Table 22, Green Transformative Leadership has a positive and significant impact on Green Business Ethics ($\beta = .684$; $p < .05$). The explanatory level of the model was determined as $R^2 = .468$. Accordingly, 46.8% of the total variance in the Green Business Ethics variable is explained by Green Transformative Leadership.

Table 23. Regression Analysis Results on the Impact of Green Transformative Leadership on Green Business Ethics Sub-Dimensions

Dependent Variable	Independent Variable	B	Hrd. Hata	b	t	p	R	R ²	F	Model p
Environmental Ethics	Green Transformative Leadership	,628	,037	,661	17,159	,000	,661	,437	294,432	,000
Work Ethics	Green Transformative Leadership	,642	,043	,612	15,091	,000	,612	,375	227,738	,000

According to Table 23, Green Transformative Leadership has a positive and significant effect on the Environmental Ethics sub-dimension ($\beta = .661$; $p < .05$). The explanatory level of the model for the Environmental Ethics sub-dimension was determined as $R^2 = .437$. Accordingly, 43.7% of the total variance in the Environmental Ethics variable is explained by Green Transformative Leadership. Green Transformative Leadership has a positive and significant effect on the Work Ethics sub-dimension ($\beta = .612$; $p < .05$). The explanatory level of the

model for the Work Ethics sub-dimension was determined as $R^2=.375$. Accordingly, 37.5% of the total variance in the Work Ethic variable is explained by Green Transformative Leadership.

Conclusion and Discussion

In this study, the effect of green transformative leadership perceptions of employees in the service sector in the TRNC on green business ethics was examined. According to the findings, it was determined that the participants' perceptions of green transformative leadership were at a high level. This result shows that employees perceive their managers as leaders who support environmental sustainability, encourage environmentally friendly behaviors and guide employees towards environmental goals. This finding aligns with the conclusions put forth by Chen and Chang (2013) on the impact of green transformative leadership on environmental vision, green innovation, and environmental performance.

In the research, it was determined that the perception of green business ethics was also at a high level. The fact that the sub-dimensions of green business ethics, environmental ethics and work ethics, also have high averages, shows that the participants have positive perceptions about environmental responsibility, conscious use of resources, sustainability and environmentally friendly working behaviors. This result aligns with the understanding of environmental responsibility emphasized by DesJardins (2013) and the evaluations of Crane and Matten (2016) that business ethics also includes environmental responsibilities.

In the analyzes made according to demographic variables, it was determined that the perception of green transformative leadership and green work ethics and its sub-dimensions did not differ significantly according to the variables of gender, marital status and total professional experience. On the other hand, significant differences were found according to the variables of age, education level, average monthly income, employment status and work experience. It was observed that the differences were generally in favor of the 36-45 age group, graduate graduates, those whose income is more than their expenses, managers/unit managers and participants with 11-15 years of work experience. This result shows that perceptions of environmental responsibility and green business ethics can vary according to individual and professional characteristics.

As a result of the correlation analysis, a positive and significant relationship was found between green transformative leadership and green business ethics. Positive and significant relationships have also been found between green transformative leadership and environmental ethics and work ethics sub-dimensions. This finding shows that as the perception of green transformative leadership increases, employees' perceptions of green work ethics also increase. The result obtained is similar to the findings of Robertson and Barling (2013) that environmentally conscious leadership behaviors strengthen the environmental behaviors of employees.

As a result of the regression analysis, it was determined that green transformative leadership has a positive and significant effect on green business ethics. Green transformative leadership accounts for 46.8% of the total variance in green business ethics. When evaluated in terms of sub-dimensions, it was seen that green transformative leadership had an explanatory effect of 43.7% on environmental ethics and 37.5% on work ethics. This result reveals that green transformative leadership is an important determinant of employees' environmental ethical values and environmentally sensitive working understanding. This finding aligns with the work of Singh, Del Giudice, Chieri, & Graziano (2020), which highlights the impact of green transformative leadership on environmental performance and green behaviors.

Overall, the research findings suggest that green transformative leadership is an important leadership approach that reinforces green business ethics. In this direction, developing leadership behaviors that support environmental sustainability in service sector enterprises will contribute to strengthening employees' perceptions of environmental ethics and work ethics.

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