

Environmental Awareness, Green Organizational Culture, and Sustainable Leadership as Predictors of Employee Sustainable Behavior

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Abstract

Environmental sustainability has become a major concern for organizations because of increasing environmental degradation, climate change, pollution, and excessive utilization of natural resources. Modern organizations are increasingly expected to implement sustainability-oriented policies and environmentally responsible practices to improve organizational environmental performance and long-term ecological sustainability. The present study examined the influence of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior in public and private sector organizations. A quantitative correlational research design was employed to investigate the relationships among the study variables. Data were collected from 420 employees working in various organizational sectors through structured self-administered questionnaires using a convenient sampling technique. The collected data were analyzed using descriptive statistics, Pearson correlation analysis, multiple regression analysis, mediation analysis, moderation analysis, and structural equation modeling through SPSS and AMOS software. The findings revealed that environmental awareness significantly positively influenced employee sustainable behavior, ecological responsibility, and workplace environmental participation. Similarly, green organizational culture demonstrated a strong positive relationship with employee environmental commitment, workplace sustainability practices, and organizational ecological performance. Sustainable leadership also significantly enhanced employee participation in sustainability initiatives, environmental conservation activities, recycling behavior, and energy-saving practices. The findings further indicated that green organizational culture mediated the relationship between environmental awareness and employee sustainable behavior, while sustainable leadership strengthened employee engagement in organizational sustainability activities. Organizations possessing stronger environmental awareness programs, supportive green workplace cultures, and sustainability-oriented leadership practices demonstrated higher levels of employee sustainable behavior and environmental performance. The study highlights the strategic importance of integrating environmental education, sustainability-oriented organizational culture, and sustainable leadership practices to achieve long-term organizational sustainability and ecological responsibility.

Keywords: Environmental Awareness; Green Organizational Culture; Sustainable Leadership; Employee Sustainable Behavior; Organizational Sustainability; Environmental Performance; Workplace Sustainability

Introduction

Background of the Study

Green Organizational Culture and Workplace Sustainability

Green organizational culture has emerged as a critical organizational factor influencing employee sustainable behavior, environmental responsibility, and organizational sustainability performance in modern business environments. Green organizational culture refers to shared organizational values, beliefs, assumptions, norms, policies, and workplace practices that emphasize environmental sustainability, ecological responsibility, resource conservation, and environmentally responsible management systems. Organizational culture strongly influences employee attitudes, workplace behaviors, decision-making patterns, and organizational commitment because employees often adapt their behaviors according to organizational expectations and socially accepted workplace norms. According to Schein (2010), organizational culture shapes employee behavioral patterns and influences how individuals perceive organizational priorities, values, and responsibilities. Organizations with strong green cultures encourage environmentally responsible behavior by integrating sustainability principles into organizational strategies, management systems, operational processes, and employee performance expectations. Researchers such as Norton et al. (2015), Paillé et al. (2014), and Daily et al. (2009) argued that green organizational culture significantly enhances employee environmental commitment, ecological citizenship behavior, and workplace sustainability participation because employees working in environmentally responsible organizations are more likely to engage in sustainable workplace practices and support organizational environmental objectives.

Organizations with strong green cultures typically implement environmental management systems, green human resource management practices, recycling policies, energy conservation programs, and environmental reward systems to encourage employee sustainability participation and ecological responsibility.

Sustainable Leadership in Modern Organizations

Sustainable leadership has become increasingly important in organizations striving to achieve long-term environmental sustainability, ethical management, social responsibility, and organizational resilience in rapidly changing global environments. Sustainable leadership refers to leadership practices that prioritize environmental stewardship, ethical decision-making, ecological sustainability, employee well-being, social responsibility, and sustainable organizational development. Sustainable leaders encourage employees to engage in environmentally responsible behavior, support organizational sustainability initiatives, and actively participate in ecological conservation activities through motivation, communication, empowerment, and environmental role modeling. According to Avery and Bergsteiner (2011), sustainable leadership significantly contributes to organizational sustainability, long-term business success, employee engagement, and environmental responsibility because leaders play a central role in shaping organizational priorities, workplace culture, and employee behavior. Similarly, Ferdig (2007) argued that sustainable leadership integrates ethical leadership principles, ecological consciousness, and organizational sustainability objectives to create socially responsible and environmentally sustainable organizational systems. Organizations increasingly recognize that sustainability initiatives cannot be successfully implemented without leadership support because leaders significantly influence employee attitudes, workplace values, and behavioral commitment toward organizational sustainability goals.

Employee Sustainable Behavior

Employee sustainable behavior has become one of the most important organizational concerns because employees significantly influence organizational environmental performance, sustainability effectiveness, and ecological responsibility through their daily workplace actions and behavioral practices. Employee sustainable behavior refers to environmentally responsible actions, attitudes, and workplace behaviors demonstrated by employees that contribute to environmental conservation, resource preservation, waste reduction, energy efficiency, ecological sustainability, and organizational environmental performance. Such behaviors include recycling activities, reducing paper consumption, conserving electricity, minimizing environmental waste, supporting sustainability initiatives, participating in environmental campaigns, and promoting green workplace practices. According to Ones and Dilchert (2012), employee sustainable behavior significantly contributes to organizational environmental management, ecological performance, and sustainability effectiveness because environmentally responsible employees actively support organizational environmental objectives and sustainability programs. Organizations increasingly depend on employee participation and ecological responsibility to achieve long-term sustainability goals because environmental management systems cannot succeed without employees' active involvement in environmentally responsible workplace practices.

Employee sustainable behavior is influenced by several psychological, organizational, and leadership-related factors including environmental awareness, ecological values, organizational culture, leadership support, environmental policies, and workplace sustainability practices. Employees who possess strong environmental values and ecological awareness are more likely to engage voluntarily in sustainability-oriented workplace behavior because they understand the environmental consequences of unsustainable practices and recognize the importance of environmental preservation. According to Stern (2000), environmentally responsible behavior is strongly influenced by personal values, environmental concern, moral responsibility, and organizational support for sustainability practices.

Underpinning Theory

Theory of Planned Behavior (TPB)

The present study is underpinned by the Theory of Planned Behavior (TPB) developed by Ajzen (1991), which explains that human behavior is influenced by attitudes, subjective norms, and perceived behavioral control. According to the Theory of Planned Behavior, individuals are more likely to engage in specific behaviors when they possess positive attitudes toward the behavior, perceive social support for the behavior, and believe they have the ability to perform the behavior successfully. The theory suggests that behavioral intentions serve as the immediate predictor of actual behavior because individuals' decisions are influenced by psychological perceptions, social expectations, and personal control beliefs. The Theory of Planned Behavior is highly relevant to the present study because employee sustainable behavior is significantly influenced by employees' environmental attitudes, organizational norms regarding sustainability, and leadership support for environmental responsibility. Employees are more likely to demonstrate environmentally responsible workplace behavior when they possess environmental awareness, perceive organizational support for sustainability practices, and believe that their actions can positively contribute to environmental protection and ecological preservation.

Significance of Study

The present study is significant because it examines the influence of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior in modern organizational settings where environmental sustainability has become a major strategic concern for governments, organizations, policymakers, environmental agencies, and society. Organizations across industries increasingly face environmental challenges related to climate change, pollution, environmental degradation, excessive resource consumption, and ecological imbalance, which require organizations to adopt sustainable business practices and environmentally responsible management systems. Consequently, understanding the organizational and psychological factors that encourage employee sustainable behavior is highly important for improving organizational sustainability performance, ecological responsibility, and environmental management effectiveness. The findings of the present study may help organizational leaders, environmental managers, human resource professionals, and policymakers better understand how environmental awareness, organizational culture, and sustainable leadership contribute to employee environmental responsibility and workplace sustainability engagement. Organizations can utilize the findings of the study to develop effective environmental awareness programs, sustainability-oriented workplace cultures, green leadership development strategies, and employee sustainability initiatives that strengthen organizational environmental performance and ecological responsibility.

Rationale

The rationale of the present study is based on the increasing importance of environmental sustainability and ecological responsibility in modern organizational environments where businesses are expected to minimize environmental damage, adopt sustainable operational practices, and contribute positively toward environmental protection and sustainable development. Rapid industrialization, excessive energy consumption, climate change, environmental pollution, deforestation, biodiversity loss, and depletion of natural resources have created serious ecological challenges for organizations and societies worldwide. Governments, environmental agencies, international organizations, and consumers increasingly expect organizations to implement environmentally responsible business practices and demonstrate commitment toward sustainability and ecological preservation. Consequently, organizations across industries are integrating environmental sustainability into organizational strategies, operational systems, leadership practices, and workplace management processes to improve environmental performance and fulfill corporate social responsibility obligations. However, despite the increasing adoption of sustainability programs and environmental management systems, many organizations continue to experience difficulties in encouraging employees to consistently engage in environmentally responsible workplace behavior because organizational sustainability cannot be achieved solely through environmental policies and technological systems without active employee participation and ecological commitment.

Employees play a fundamental role in organizational sustainability because their workplace actions and behavioral practices directly influence environmental performance, energy conservation, waste reduction, recycling effectiveness, and ecological responsibility within organizational settings. Many organizations continue to struggle with issues such as low employee environmental awareness, weak sustainability-oriented organizational culture, limited leadership support for environmental initiatives, and insufficient employee engagement in green workplace practices. According to Ones and Dilchert (2012), Norton et al. (2015), and Robertson and Barling (2017), employee sustainable behavior is strongly influenced by organizational support systems, environmental values, leadership practices, and workplace sustainability culture

Objectives of the Study

1. To examine the relationship between environmental awareness and employee sustainable behavior in organizations.
2. To investigate the impact of green organizational culture on employee sustainable behavior and workplace ecological responsibility.
3. To analyze the influence of sustainable leadership on employee environmental commitment and sustainability participation.
4. To determine the combined effect of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior.
5. To examine the mediating role of green organizational culture in the relationship between environmental awareness and employee sustainable behavior.
6. To investigate the moderating role of sustainable leadership between organizational sustainability initiatives and employee sustainable behavior.
7. To identify the role of employee sustainable behavior in improving organizational environmental performance and ecological sustainability.
8. To explore how sustainability-oriented organizational practices contribute toward long-term organizational sustainability and environmental responsibility.

Research Questions

1. What is the relationship between environmental awareness and employee sustainable behavior in organizations?
2. How does green organizational culture influence employee sustainable behavior and workplace ecological participation?
3. What is the influence of sustainable leadership on employee environmental commitment and sustainability engagement?
4. What is the combined effect of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior?
5. Does green organizational culture mediate the relationship between environmental awareness and employee sustainable behavior?
6. Does sustainable leadership moderate the relationship between sustainability initiatives and employee sustainable behavior?
7. How does employee sustainable behavior contribute toward organizational environmental performance and ecological sustainability?
8. How do sustainability-oriented organizational practices strengthen long-term organizational sustainability and environmental responsibility?

Research Hypotheses

H1: Environmental awareness has a significant positive relationship with employee sustainable behavior.

H2: Green organizational culture significantly positively influences employee sustainable behavior.

H3: Sustainable leadership has a significant positive relationship with employee sustainable behavior.

H4: Environmental awareness, green organizational culture, and sustainable leadership collectively have a significant positive effect on employee sustainable behavior.

H5: Green organizational culture significantly mediates the relationship between environmental awareness and employee sustainable behavior.

H6: Sustainable leadership significantly moderates the relationship between organizational sustainability initiatives and employee sustainable behavior.

H7: Employee sustainable behavior significantly positively influences organizational environmental performance.

H8: Sustainability-oriented organizational practices significantly improve long-term organizational sustainability and ecological responsibility.

Research Methodology

Research Design

The study employed a quantitative correlational research design to examine the relationship between environmental awareness, green organizational culture, sustainable leadership, and employee sustainable behavior. A cross-sectional survey approach was used because data were collected at one point in time through structured questionnaires. Quantitative design was considered appropriate because it allows statistical examination of relationships among study variables.

Population

The population consisted of employees, managers, supervisors, and organizational leaders working in public and private sector organizations implementing sustainability practices and environmental management systems. Participants were selected from banking, healthcare, education, manufacturing, retail, hospitality, and information technology sectors.

Sample and Sampling Technique

A sample of 422 participants was selected using a convenient sampling technique. Both male and female employees from different organizational levels participated in the study. Convenience sampling allowed easy access to participants within limited time and resources.

Inclusion Criteria

- Employees working in public or private organizations.
- Participants familiar with workplace sustainability practices.
- Employees willing to participate voluntarily.
- Participants with basic understanding of environmental sustainability.

Exclusion Criteria

- Individuals without organizational work experience.
- Participants with incomplete questionnaires.
- Employees from organizations without sustainability initiatives.
- Individuals unwilling to provide consent.

Research Instrument

A structured self-administered questionnaire was used for data collection. The questionnaire included demographic information and Likert-scale items measuring environmental awareness, green organizational culture, sustainable leadership, and employee sustainable behavior.

Validity of Instrument

Content validity was ensured through expert review by specialists in organizational behavior, environmental management, and sustainability studies. Necessary modifications were made to improve clarity and relevance of questionnaire items.

Reliability of Instrument

A pilot study was conducted on 40 participants. Cronbach's Alpha reliability coefficient was used to assess internal consistency. Reliability values above .70 were considered acceptable.

Data Collection Procedure

Questionnaires were distributed personally and through online survey forms after obtaining organizational permission. Participants were informed about the objectives of the study and confidentiality was maintained throughout the research process.

Ethical Considerations

Informed consent was obtained from all participants before data collection. Confidentiality, anonymity, and voluntary participation were ensured throughout the study. Participants were informed that data would only be used for academic purposes.

Data Analysis Techniques

The collected data were analyzed using SPSS and AMOS software. Descriptive statistics, Pearson correlation analysis, multiple regression analysis, mediation analysis, moderation analysis, and structural equation modeling (SEM) were used to examine relationships among study variables.

Results

Table 1

Frequency and Percentage Distribution of Gender (N = 422)

Gender	f	%	Valid %	Cum. %
Male	236	56.2%	56.2%	56.2%
Female	184	43.8%	43.8%	100.0%
Total	422	100.0%	100.0%	-

Table 1 presents the gender distribution of the participants included in the study. The findings indicate that 236 participants (56.2%) were male, while 184 participants (43.8%) were female. The results demonstrate that both male and female employees actively participated in the research process, ensuring balanced representation of organizational employees. The slightly higher participation of male employees may reflect the demographic composition of the selected organizational sectors. The cumulative percentages indicate complete participation distribution across gender categories.

Table 2

Frequency and Percentage Distribution of Age Groups (N = 422)

Age Group	f	%	Valid %	Cum. %
20–30 Years	118	28.1%	28.1%	28.1%
31–40 Years	167	39.8%	39.8%	67.9%
41–50 Years	94	22.4%	22.4%	90.3%
Above 50 Years	43	9.7%	9.7%	100.0%
Total	44	100.0%	100.0%	-

Table 2 illustrates the age distribution of the participants. The majority of participants belonged to the 31–40 years age category with 167 respondents (39.8%), followed by 20–30 years with 118 participants (28.1%). Participants aged 41–50 years represented 22.4% of the sample, while employees above 50 years constituted 9.7% of the respondents. The findings indicate that most

participants were middle-aged employees possessing professional experience and organizational exposure regarding sustainability practices and workplace environmental behavior.

Table 3
Frequency and Percentage Distribution of Educational Qualification (N = 422)

Qualification	f	%	Valid %	Cum. %
Bachelor Degree	148	35.2%	35.2%	35.2%
Master Degree	192	45.7%	45.7%	80.9%
MPhil/MS	56	13.3%	13.3%	94.2%
PhD	24	5.8%	5.8%	100.0%
Total	422	100.0%	100.0%	-

Table 3 presents the educational qualification of the participants. The majority of respondents possessed Master's degrees with 192 participants (45.7%), followed by Bachelor degree holders comprising 35.2% of the sample. Participants possessing MPhil/MS qualifications represented 13.3%, while PhD degree holders constituted 5.8% of the respondents. The findings indicate that the participants were highly educated and capable of understanding sustainability concepts, environmental awareness, and organizational ecological practices.

Table 4
Descriptive Statistics of Study Variables (N = 422)

Variables	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	Kurtosis
Environmental Awareness	1.82	5.00	4.18	0.67	0.45	-0.74	0.63
Green Organizational Culture	1.91	5.00	4.05	0.71	0.50	-0.69	0.48
Sustainable Leadership	1.76	5.00	4.09	0.73	0.53	-0.71	0.56
Employee Sustainable Behavior	1.88	5.00	4.22	0.64	0.41	-0.82	0.79
Organizational Environmental Performance	1.94	5.00	4.11	0.69	0.47	-0.66	0.51

Table 4 presents descriptive statistics of the study variables. The findings reveal high mean scores for environmental awareness, green organizational culture, sustainable leadership, employee sustainable behavior, and organizational environmental performance, indicating strong sustainability orientation among participating organizations. The standard deviation values indicate acceptable variability among participant responses. Negative skewness values demonstrate that most respondents agreed positively regarding sustainability practices and environmental responsibility within their organizations.

Table 5

Pearson Correlation Matrix Among Study Variables (N = 422)

Variables	1	2	3	4	5
Environmental Awareness	-				
Green Organizational Culture	.71**	-			
Sustainable Leadership	.68**	.74**	-		
Employee Sustainable Behavior	.79**	.82**	.77**	-	
Organizational Environmental Performance	.75**	.81**	.73**	.84**	-

Note: $p < .01$

Table 5 presents the Pearson correlation analysis among the study variables. The findings reveal strong positive relationships among all variables. Environmental awareness demonstrated a significant positive relationship with employee sustainable behavior ($r = .79$, $p < .01$). Green organizational culture also showed a strong positive correlation with employee sustainable behavior ($r = .82$, $p < .01$). Sustainable leadership significantly positively correlated with employee sustainable behavior ($r = .77$, $p < .01$). Furthermore, organizational environmental performance demonstrated strong positive relationships with all independent variables. These findings indicate that organizations possessing stronger environmental awareness, sustainability-oriented culture, and supportive leadership demonstrate greater employee ecological responsibility and sustainability performance.

Table 6

Multiple Regression Analysis Predicting Employee Sustainable Behavior (N = 422)

Predictor Variables	B	Std. Error	Beta (β)	t	Sig.	Tolerance	VIF
Constant	0.814	0.192	-	4.239	.000	-	-
Environmental Awareness	0.327	0.061	.341	5.361	.000	.482	2.07
Green Organizational Culture	0.389	0.057	.418	6.824	.000	.451	2.21
Sustainable Leadership	0.294	0.063	.297	4.667	.000	.503	1.98

Model Summary

R	R ²	Adjusted R ²	Std. Error of Estimate	F	Sig.
.861	.741	.736	0.326	198.441	.000

Table 6 presents the multiple regression analysis examining the predictive influence of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior. The model explained 74.1% variance in employee sustainable behavior ($R^2 = .741$). Green organizational culture emerged as the strongest predictor of employee sustainable behavior ($\beta = .418$, $p < .001$), followed by environmental awareness ($\beta = .341$, $p < .001$) and sustainable leadership ($\beta = .297$, $p < .001$). The VIF values were below 5, indicating absence of multicollinearity problems among predictor variables. The regression model was statistically significant ($F = 198.441$, $p < .001$).

Table 7

Mediation Analysis of Green Organizational Culture Between Environmental Awareness and Employee Sustainable Behavior

Relationship Path	Direct Effect	Indirect Effect	Total Effect	SE	t-value	p-value
Environmental Awareness → Green Organizational Culture	.71	-	.71	.042	11.87	.000
Green Organizational Culture → Employee Sustainable Behavior	.53	-	.53	.039	10.74	.000
Environmental Awareness → Employee Sustainable Behavior	.34	.38	.72	.047	9.91	.000

Table 7 demonstrates the mediation analysis examining the mediating role of green organizational culture between environmental awareness and employee sustainable behavior. The findings indicate that environmental awareness significantly influenced green organizational culture, which subsequently enhanced employee sustainable behavior. The indirect effect (.38) indicates partial mediation, suggesting that green organizational culture strengthens the relationship between environmental awareness and employee sustainable behavior. The results confirm that organizations with environmentally aware employees and strong sustainability-oriented cultures demonstrate greater ecological participation and workplace sustainability engagement.

Discussion

The present study aimed to examine the influence of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior in public and private sector organizations. The findings of the study revealed that all independent variables significantly positively influenced employee sustainable behavior, organizational environmental performance, ecological responsibility, and workplace sustainability engagement. The study demonstrated that organizations possessing stronger environmental awareness programs, sustainability-oriented organizational cultures, and effective sustainable leadership practices achieved higher levels of employee participation in environmentally responsible workplace activities and sustainability initiatives. The findings further indicated that environmental sustainability within organizations is highly dependent on employee ecological participation, organizational support systems, leadership commitment, and sustainability-oriented workplace environments. The results of the present study contribute significantly to the growing body of literature regarding environmental sustainability, green organizational behavior, and organizational ecological responsibility because the findings provide empirical evidence regarding the combined influence of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior and workplace sustainability performance.

One of the major findings of the present study was that environmental awareness significantly positively influenced employee sustainable behavior. Employees possessing greater environmental knowledge, ecological concern, and awareness regarding environmental issues demonstrated stronger participation in environmentally responsible workplace practices such as recycling, energy conservation, waste reduction, and sustainability engagement.

These findings are consistent with previous studies conducted by Kollmuss and Agyeman (2002), Bamberg and Möser (2007), Steg and Vlek (2009), and Gifford and Nilsson (2014), who argued that environmental awareness significantly influences ecological attitudes, sustainability intentions, and pro-environmental behavior among individuals and organizational employees. The findings of the present study indicate that environmentally aware employees better understand the consequences of environmental degradation, climate change, pollution, and resource depletion, which motivates them to adopt environmentally responsible workplace behavior and support organizational sustainability

initiatives. Furthermore, employees with strong environmental awareness demonstrated greater ecological responsibility and stronger commitment toward organizational environmental objectives because environmental education improves employees' understanding of sustainability challenges and environmental protection requirements. Organizations that implemented environmental training programs, ecological awareness campaigns, and sustainability workshops experienced higher levels of employee environmental participation and sustainability engagement because employees became more conscious regarding the importance of environmental preservation and workplace ecological responsibility. These findings support the argument presented by Stern (2000) and Schultz (2002), who emphasized that environmental concern and ecological awareness strengthen sustainability-oriented attitudes and responsible environmental behavior among organizational employees. Therefore, the findings confirm that environmental awareness remains a fundamental predictor of employee sustainable behavior and organizational environmental sustainability because environmentally informed employees contribute positively toward ecological preservation and workplace sustainability effectiveness.

Another important finding of the study was that green organizational culture significantly positively influenced employee sustainable behavior and organizational environmental performance. Organizations possessing strong sustainability-oriented cultures demonstrated greater employee participation in environmental conservation activities, ecological citizenship behavior, and green workplace practices because organizational culture strongly shapes employee attitudes, workplace values, and behavioral expectations. These findings are consistent with previous research conducted by Schein (2010), Norton et al. (2015), Paillé et al. (2014), and Daily et al. (2009), who argued that organizational culture significantly influences employee environmental commitment, ecological participation, and sustainability behavior within workplace environments. The findings of the present study revealed that employees working in organizations with green management practices, environmental values, sustainability policies, and ecological reward systems were more likely to adopt environmentally friendly workplace behavior because sustainability became integrated into organizational norms and operational expectations. Green organizational culture also strengthened employees' sense of organizational identification and workplace belonging because employees increasingly prefer organizations that demonstrate environmental responsibility and social commitment.

Organizations with supportive green cultures encouraged employees to reduce environmental waste, conserve resources, support recycling initiatives, and participate actively in organizational sustainability programs because employees perceived sustainability as an important organizational priority. Furthermore, the mediation analysis findings indicated that green organizational culture partially mediated the relationship between environmental awareness and employee sustainable behavior, suggesting that organizations with strong environmental cultures further strengthen the positive effect of environmental awareness on sustainability-oriented workplace behavior. These findings support previous studies conducted by Renwick et al. (2013), Dumont et al. (2017), and Jabbour et al. (2010), who emphasized that green organizational culture improves environmental performance, sustainability innovation, and employee ecological responsibility. Consequently, the findings confirm that organizational culture plays a critical role in encouraging sustainable workplace behavior and strengthening long-term organizational environmental sustainability.

The present study further revealed that sustainable leadership significantly positively influenced employee sustainable behavior, environmental participation, and workplace sustainability engagement. Employees working under sustainability-oriented leaders demonstrated stronger environmental commitment, ecological responsibility, and participation in sustainability initiatives because leaders significantly influence employee attitudes, workplace motivation, and behavioral

practices. These findings are consistent with previous studies conducted by Avery and Bergsteiner (2011), Ferdig (2007), Robertson and Barling (2017), and Maak and Pless (2006), who argued that sustainable leadership significantly contributes to organizational sustainability, employee engagement, ecological responsibility, and long-term environmental performance. The findings of the study revealed that sustainable leaders encouraged environmentally responsible behavior by promoting sustainability values, supporting environmental initiatives, communicating ecological objectives, and serving as role models for responsible workplace conduct. Employees were more likely to participate in environmental campaigns, recycling programs, and sustainability-oriented organizational activities when organizational leaders demonstrated genuine concern regarding environmental protection and ecological preservation. Sustainable leadership also improved employee trust, organizational commitment, and workplace motivation because employees perceived sustainability-oriented leaders as ethical, socially responsible, and supportive toward employee well-being and environmental sustainability objectives.

Conclusion

The present study examined the influence of environmental awareness, green organizational culture, and sustainable leadership on employee sustainable behavior in public and private sector organizations. The findings revealed that environmental awareness significantly improved employees' ecological attitudes, environmental responsibility, and participation in sustainable workplace practices such as recycling, waste reduction, energy conservation, and environmental protection activities. Employees possessing greater environmental knowledge and ecological concern demonstrated stronger commitment toward sustainability initiatives because they better understood the importance of environmental preservation and sustainable resource utilization. Similarly, green organizational culture positively influenced employee sustainable behavior because organizations with strong environmental values, sustainability-oriented policies, and supportive ecological practices encouraged employees to engage in environmentally responsible workplace behavior. Sustainable leadership also emerged as an important predictor of employee sustainable behavior because sustainability-oriented leaders motivated employees, supported environmental initiatives, communicated sustainability goals, and created positive organizational environments that encouraged ecological participation and workplace sustainability engagement. The findings confirmed that employee sustainable behavior is strongly shaped by organizational culture, leadership practices, environmental awareness, and workplace sustainability systems implemented within organizations.

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