

ECO-CENTRIC LEADERSHIP REIMAGINED: SPARKING EMPLOYEE GREEN BEHAVIORS AND THRIVING AT WORK THROUGH GREEN DIGITAL TRANSFORMATION

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Abstract

Sustainability is no longer just a trend—it has emerged as a vital strategy for businesses aiming to foster sustainable practices and maintain their competitive edge. Managers are now expected to consider and align environmental, social, and ethical objectives with organizational strategies to implement eco-friendly practices effectively. This study examines the influence of eco-centric leadership on green behaviors of employees and thriving at work with green digital transformation serving as a mediating mechanism. Grounded in social learning theory, the research employed a survey questionnaire for data collection, utilizing a multi-stage stratified proportional snowball sampling method. The findings reveal that eco-centric leadership positively and significantly influences employee green behavior and workplace thriving. Additionally, green digital transformation mediates the positive relationship between eco-centric leadership and these outcomes. The results highlight the importance of fostering eco-centric leadership to cultivate a workplace environment that promotes ecological values, conservation-oriented beliefs, and employee thriving. These insights have meaningful implications for organizational policy development, underscoring the need to embrace and support eco-conscious leadership styles. This study offers valuable contributions to understanding the interplay between leadership, employee behavior, and sustainable development. It sheds light on how eco-centric leaders drive positive environmental change by influencing employee behaviors through green and digital transformation initiatives.

Keywords: *Eco-centric Leadership, Employee Green Behaviors, Green Digital Transformation, Thriving at Work, and Social Learning Theory.*

1. Introduction

Organizations are perceived as aware of environmental protection and engaged in social initiatives to ensure sustainability (Li et al., 2025; Jindal et al., 2025). Companies can mitigate environmental consequences by adopting green practices and emphasizing a sustainable culture and eco-friendly operations (Özgül & Demir, 2025; Fosu et al., 2024; Saleem et al., 2024). The significance of eco-conscious leadership is undeniable for firms pursuing sustainable growth (Pichlak et al., 2024). The conservational strategy of the organization impacts the employee's actions towards employee green behaviors (EGB) (Khanra et al., 2022; Arun et al., 2021). Nonetheless, research highlighted that besides environmental strategy of the organization, the style of leaders is critical that influences the ecological behaviors of the employees (Uddin et al., 2021; Kumar et al., 2021). While the organizations are adopting conservational ideals based on the rigid procedures, the success of the environmentally friendly operations of the organization heavily rely on the participation of the employees in green behaviors (Zhang et al., 2023; Zafar et al., 2022).

Previous studies concluded that job autonomy and transformational leadership are the factors that promote sustainable behaviors of the employees (Jiang et al., 2022; Jiang et al., 2020), whereas there is a shortcoming in the literature to understand the influence of other antecedents of EGB.

In order to achieve higher degree of sustainability, it is crucial that the organization focus on sustainable style of leadership (Begum et al., 2022a). The style of leadership positively influences the eco-friendly behaviors of the employees at the workplace (Khan & Khan, 2022; Ahmad et al., 2022). Furthermore, for encouraging ecological participation of the employees the role played by a relevant and effective style of leadership cannot be denied (Zafar et al., 2022; Dey et al., 2022). Past studies have analyzed the influence of different style of leadership naming environmental specific leadership (Tuan, 2021), ethical leadership (Kuenzi et al., 2020), responsible leadership (Zhang et al., 2021), spiritual leadership (Anser et al., 2021), green transformational leadership (Begum et al., 2022a) on the ecological behaviors of the workers. Nevertheless, the research examining the influence of eco-centric leadership on EGB are limited. The leadership style affects employee behavior in the workplace (Ahmad et al., 2024; Hillberg Jarl, 2024). In this context, eco-centric leadership arises as a means to motivate followers to engage in sustainable practices (Hasan et al., 2025; Biswas et al., 2022). In contrast to other leadership styles, eco-centric leadership promotes a clear and consistent approach by establishing green principles as the foundation of the organization's culture and philosophy (Patwary et al., 2023; Pham & Pham, 2023). Eco-centric leadership prioritizes ecological issues and green responsibility, fostering enhanced environmentally friendly behaviors among employees (Edwards, 2024; Faraz et al., 2023).

The notion of green digital transformation underscores the significance of sustainable practices, sustainability, and environmental responsibility (Abbas & Khan, 2023). The organization's leadership must make deliberate decisions to mitigate the negative impacts of its operations and practices by conserving the natural environment and resources, thereby safeguarding the planet through the adoption of ecological practices and the promotion of sustainability (Ma & Ma, 2024; Huang et al., 2023). Green digital transformation involves creating a unified vision to advance sustainable development, innovation, collaboration, and the integration and enhancement of environmental technologies, methodologies, practices, and behaviors within an organization (Abbas, 2025). Organizations worldwide are progressively adopting digitalization and sustainable practices; thus, it is crucial to comprehend how leadership encourages and rationally motivates subordinates towards green and digital initiatives to promote and prioritize sustainable behavior (Talwar et al., 2023). Green digital transformation catalyzes a shift in worker attitude by promoting the use of digitalization that fosters sustainable development and enhances ecological behaviors (Alabdali et al., 2024; Chu et al., 2023; Begum et al. 2022b).

Eco-centric leadership is seen as a form of spiritualism that inspires followers to prioritize environmental protection via humanitarian endeavors (Pichlak, 2024). Eco-conscious leaders foster a nurturing environment in the workplace, instilling a sense of purpose in their followers, who feel respected and valued, recognizing that their contributions to the organization are appreciated by the company (Patwary et al., 2023) leading towards increasing their thriving at work. Eco-centric leaders engage in active listening and emphasize equity and acknowledgment, which fosters employee growth, vitality, and increased learning, enabling people to flourish in their work environment and workplace thriving (Araujo et al., 2022). Employees who excel in their positions demonstrate resilience to environmental changes (Xu et al., 2025) and a strong dedication to environmental protection via the adoption of sustainable practices (Patwary et al., 2023; Suryani et al., 2023). The incorporation of green digital transformation within an

organization fosters employee awareness of the company's commitment to environmental sustainability and digital advancement, thereby cultivating a healthier, more resilient, engaged, and thrived workforce (Okros & Virga, 2023).

The dangers and problems related to climate change and ecological sustainability are multifaceted, encompassing social, environmental, and economic dimensions (Islam, 2025; Chungyalpa & von Rosing, 2025). The issues manifest within the firm through the relationship between leaders and employees, influencing attitudes and actions about the organization's sustainable objectives (Doshi et al., 2025). A critical issue for the industrial and service sectors is environmental degradation, which adversely impacts nature, the environment, and society, contributing to climate concerns (El Khoury et al., 2025). The industrial sector emits pollutants into soil, air, and water, contributing to global warming and environmental alterations. Conversely, the service sector is not directly implicated in climate change; however, it still consumes energy and produces carbon emissions. Thus, it plays a vital role in protecting nature, society, and the environment by endorsing initiatives that aim to reduce energy consumption and promote sustainable practices (Rawat et al., 2024). The company must be cognizant of environmental difficulties and engage in ecological practices (Filgueiras et al., 2024). To tackle environmental sustainability challenges, firms must motivate their employees to demonstrate eco-friendly habits and excel in their roles through the influence of environmentally conscientious leaders.

This research project seeks to examine the impact of eco-centric leadership on employee green behavior and thriving at work, mediated by green digital transformation. The study aims to address the subsequent research inquiries: How can eco-centric leadership impact employee green behavior? ii) In what manner does eco-centric leadership affect thriving at work? Does green digital transformation mediate the impact of eco-centric leadership on employee green behavior and thriving at work? The research is crucial for the business to ensure that management practices adhere to green principles and foster a corporate culture that prioritizes the attainment of sustainable objectives and environmental sustainability (Chungyalpa & von Rosing, 2025). Moreover, the integration of green digital transformation enhances these initiatives, as digital solutions and green technologies can augment organizational operational efficiency, reduce carbon footprint, cultivate environmentally conscious attitudes and behaviors, support sustainability objectives, and elevate employee engagement, thereby fostering a commitment to environmental stewardship through the adoption of ecological practices and adaptability to environmental changes.

2. Literature Review and Hypothesis Development

2.1 Underpinning Theory

The present study benefits from a more comprehensive application of social learning theory, which has evolved significantly since the foundational contributions of Bandura (1977, 1986). Social learning theory provides a framework for understanding why individuals engage in specific behaviors, positing that individuals acquire new knowledge and behavioral patterns either through direct experience or by observing others (Bandura, 1977, 1986). The demonstration of exemplary eco-centric behavior by leaders serves an informative and reinforcing function, signaling to employees the value of emulating environmentally conscious actions. Consequently, employees are increasingly attentive to sustainability initiatives aimed at environmental preservation (Su et al., 2020). This study posits that social learning within organizations emerges as a byproduct of leadership strategies in which leaders actively model green behaviors and cultivate environments conducive to learning and reciprocal engagement. Central to social learning theory is the assertion that individuals acquire appropriate behaviors through observation and

interaction with the actions and responses of role models (Bandura, 1977). Runhaar et al. (2008) emphasized the necessity for leaders to embody a sense of environmental responsibility, a concept referred to by Bansal & Roth (2000) as “social” incentives. Eco-centric leaders are frequently perceived as credible and authoritative figures due to their embodiment of pro-environmental behaviors (Uddin et al., 2021). As advocates for environmental conservation, such leaders exemplify higher-order environmental values, attitudes, and actions within the organizational context. By serving as role models, eco-centric leaders foster green behaviors among employees through both motivational and informational pathways (Bandura, 1977). In response, subordinates are inclined to emulate the eco-conscious behaviors demonstrated by credible leadership figures (Al Halbusi et al., 2021).

2.2 Hypothesis Development

2.2.1 Eco-centric Leadership and Employee Green Behaviors

The sustainable development goals of a business are impacted by two critical factors: leadership style and employee behavior (Farzad & Roshdieh, 2024). Eco-centric leadership is an ideology that exemplifies a leader's eco-conscious conduct by integrating ecological issues into decision-making and serving as a role model for subordinates (Hasan et al., 2024). Eco-centric individuals are concerned about the environment, encouraging their followers to adopt green behaviors by fostering a culture that prioritizes sustainable and ecological activities (Akbar & Ahmad, 2024). The culture established by eco-centric leaders fosters standards among employees that promote environmentally beneficial behavior. A leader dedicated to the preservation of nature, the environment, and society supplies resources to followers that motivate them to execute their responsibilities in an ecologically sound manner, therefore fostering their green behavior (Biswas et al., 2022). According to Zafar et al. (2023), a leader with an eco-centric vision exhibits characteristics that foster sustainable activities, including energy conservation, waste reduction, recycling, and resource minimization. Conferring to social exchange theory, eco-centric leaders prioritize the attainment of sustainable objectives by ensuring that staff are aware of environmental preservation and demonstrate eco-friendly behaviors in the workplace (Uddin et al. 2021). Based on the discussion, it is hypothesized:

H1: Eco-centric leadership positively influence employee green behaviors.

2.2.2 Eco-centric Leadership and Thriving at Work

The eco-centric leadership style is characterized by spiritualists who inspire employees to prioritize environmental protection through humanitarian actions (Pichlak, 2025). The leaders emphasize instilling a sense of purpose in their followers by cultivating a supportive workplace environment, consequently leading employees to feel respected and recognize the value of their contributions to the organization (Edwards, 2024; Patwary et al., 2022). Eco-centric leadership emphasizes active listening, equity, and acknowledgment while promoting the development of subordinates and enhancing their learning and vitality to enable their success in the workplace (Araujo et al., 2022). The elevated learning and vitality among employees enable them to excel at work, demonstrating resilience to ecological changes (Goh et al., 2022) and revealing a higher degree of satisfaction and commitment (Suryani et al., 2023; Patwary et al., 2022). Employees that excel in their work environment exhibit superior health, resilience, and engagement (Rai et al., 2024; Huang & Zhou, 2024). According to social exchange theory, the resources provided to employees by eco-centric leaders, such as opportunities to acquire new environmental skills and knowledge, as well as enhancements to their welfare, enhance their flourishing in the workplace. Considering the literature, it is postulated:

H2: Eco-centric leadership positively influence thriving at work.

2.2.3 Mediation of Green Digital Transformation

In the evolving business landscape, organizations may foster a sustainable future through creative and conservation-oriented practices that benefit both nature and society (George et al., 2021) by integrating digital and environmentally friendly operations (Rosario & Dias, 2022). As technology evolves, it has enhanced the accessibility and dissemination of environmental information and issues through digital transformation (Feroz et al., 2021; Wang et al., 2021). The advancement of technology enables employees to access information and knowledge regarding green practices, ecological regulations, conservation, and sustainability (Valerio-Urena & Rogers, 2019), thereby assisting them in decision-making and participation in environmentally friendly actions and behaviors (Mehmood et al., 2022). Ultimately, digital transformation enables the firm to engage in environmental initiatives and motivates people to participate in eco-friendly practices (Wang et al., 2021). The leadership of a company is essential for the effective integration of digital and sustainable practices (Ly, 2024). Multiple research investigations have determined that a green leadership style is essential for achieving favorable organizational results in various circumstances (Odugbesan et al. 2023; Farrukh et al. 2022). Zhao & Huang (2022) emphasized that eco-conscious leadership is a successful style when organizational sustainability and digital results are achieved via the integration of environmental and technical activities. In this context, the eco-centric leader represents an effective leadership model that prioritizes environmental preservation and sustainable growth while considering the organization's financial objectives (Araujo et al., 2022; Biswas et al., 2022). The eco-conscious leader represents a significant transformation in management, as this leadership style advocates for sustainability alongside profit-driven strategies by implementing innovative technologies to mitigate environmental impacts and encourage employees to demonstrate environmentally friendly behaviors (Alabdali et al., 2024). Eco-centric leadership fosters a culture of sustainability that aligns with green digital transformation, wherein leaders serve as role models for workers who subsequently adopt analogous practices. Eco-centric leaders educate employees about environmental implications through digital transformation efforts, hence enhancing their propensity to exhibit sustainable behaviors. Keeping in view the argument, it is proposed:

H3: Eco-centric leadership positively influence green digital transformation.

H4: Green digital transformation positively influences green employee green behaviors.

H5: Green digital transformation mediates the positive influence of eco-centric leadership and employee green behaviors.

Eco-centric leaders prioritize enhancing the alignment between human activities and natural processes (Al-Amin et al., 2021). This leadership style prioritizes ecological issues and environmental responsibilities (Faraz et al., 2024). In the realm of sustainability, sustainable development, organizational results, and environmentally friendly behaviors, eco-centric leadership is a focal point of research (Biswas et al., 2022). Eco-conscious leaders foster a culture of shared value in which sustainability is significant, serving as a model for employees to learn and thrive in their pursuits. Other leadership styles emphasize performance and productivity, but eco-centric leaders provide a platform for engaged, sustainable, and thriving workers (Uddin et al., 2021). This leadership style instills a sense of purpose in employees by fostering a supportive atmosphere that promotes learning and development, ensuring people feel appreciated and respected (Patwary et al., 2022). Employees with elevated vitality and learning levels typically demonstrate resilience towards sustainable development (Goh et al., 2022). The incorporation of sustainable practices and technology into the firm not only alleviates environmental issues but also enhances employee education and well-being. The implementation of green digital technologies

and solutions minimizes resource wasting by optimizing workflows and enhancing cooperation, resulting in increased employee satisfaction and efficiency. When employees recognize their company's commitment to sustainability, it enhances their feeling of belonging and purpose, so elevating their motivation and morale. Prior research demonstrated that the implementation of digital and sustainable practices enhances employee learning and engagement, since their values correspond with those of the firm (Alabdali et al., 2024). This design fosters a culture of digital transformation, creativity, and proactive decision-making, enabling workers to excel at work as they feel empowered and supported while contributing to the organization's success and environmental stewardship. In addition to resolving environmental problems, green digital transformation fosters a rewarding and vibrant workplace atmosphere. Therefore, it is posited:

H6: Green digital transformation positively influences thriving at work.

H7: Green digital transformation mediates the positive influence of eco-centric leadership and thriving at work.

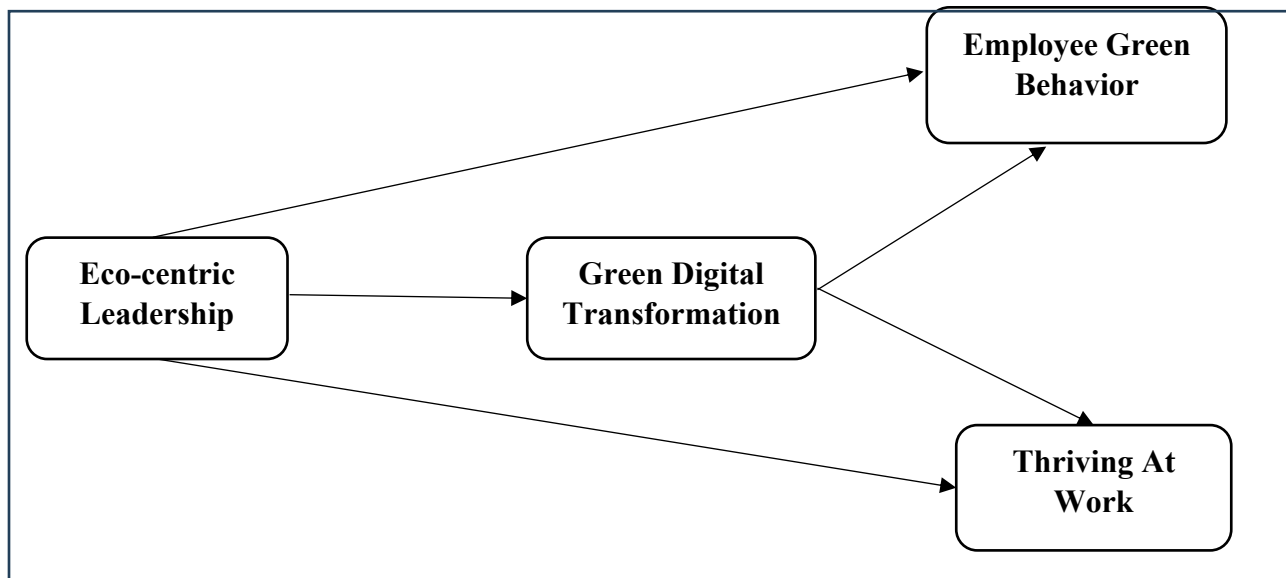


Figure 1: Research Modal

3. Methodology

3.1 Research Design, Procedures, and Sample

The study aimed to investigate the influence of eco-centric leadership on employee green habits and thriving at work, mediated by green digital transformation. The study employed a quantitative methodology, applied a cross-sectional research design, and adopted a deductive research strategy. The focus of this study was the banking industry of Pakistan, namely individual individuals employed in banks. The banks are chosen because to their substantial role in the financial sector, comprising 74% of its assets and accounting for almost 55% of Gross Domestic Product (SBP, 2018). The banking industry of Pakistan is chosen because of its substantial economic influence, large workforce, and increasing emphasis on sustainability. Banks are not directly engaged in environmental impact like heavy industries; yet, they face significant conservation concerns through their operations and policies. Furthermore, the heightened focus of the SBP on green efforts is fostering a regulatory framework conducive to sustainable activities (Khan et al., 2024). Moreover, digital transformation within the banking sector provides a tangible framework for examining green digital transformation and its effects on favorable outcomes in the

banking environment. Banking industry employees are chosen for their critical position in banks and their significant intellectual acumen about firm operations and regulations. The personnel are regarded as the executors of environment-related actions. The data for this research were acquired using a multi-stage stratified proportional snowball sampling method. The four major provinces of Pakistan were picked based on the number of branches in each province. Initially, four strata were established across the provinces utilizing stratified sampling. Subsequently, additional strata were created based on the cities within each province. From each stratum, samples were extracted employing a proportionate sampling technique, selecting four cities from each province with a higher number of operational branches. Data was subsequently collected from each stratum utilizing the non-probability approach of snowball sampling. From May 2024 to September 2024, 500 surveys were disseminated to bank personnel, of which 422 were completed and returned. To mitigate the risk of common method bias (CMB), the privacy and confidentiality of participant replies were safeguarded. The data obtained from the respondents was maintained in confidentiality. Herman's single-factor analysis indicated that no singular factor appeared, with the highest variation explained by a single component being below 50%, hence demonstrating the absence of common method bias in the data. The problem of social desirability bias was alleviated by assuring respondents of their secrecy and anonymity. The data obtained from the respondents were analyzed utilizing SPSS and AMOS.

3.2 Measures

The items of all the scales of the variables was taken from previous research studies and measured using 5 point Likert Scale in which 1 was strongly disagree and 5 was strongly agree. Eco-centric leadership was measured using the scale of Chen & Chang (2013), which was recently refined by Uddin et al. (2021), having six items. To measure green digital transformation the scale of Aral & Weill (2007) recently adapted by Alabdali et al. (2024) was used that have three items. For measuring thriving at work, ten items scale of Porath et al. (2012) including two dimensions naming learning and vitality was used and each dimension have 5 items. Employee green behavior was measured using the scale of Bissing-Olson et al. (2013) consisting of six items.

4. Analysis and Results

4.1 Demographic Statistics

The demographic analysis presents the data about the demographics of the research study including age, gender, marital status, organization, experience, and education. Table 1 shows the information collected from the respondents using survey questionnaire.

Table 1: Demographics of the Study

Items			
Gender	Male	332	78.7
	Female	90	21.3
	Total	422	100.0
Age	Less than 20	11	2.6
	21 to 30	153	36.3
	31 to 40	160	37.9
	41 to 50	75	17.8
	51 to 60	19	4.5
	More than 60	4	.9

	Total	422	100.0
Organization	Public	242	57.3
	Private	180	42.7
	Total	422	100.0
	1-5 year	114	27.0
Experience	6-10 year	154	36.5
	11-15 year	98	23.2
	above 16	56	13.3
	Total	422	100.0

4.2 Data Normality Analysis

In the below table 2 the normal distribution of data is showed. The threshold value to determine skewness of the data developed by Bulmer (1979) should range among +1 and -1. Moreover, according to MacGillivray & Balanda (1988) skewness are falling within the range of the +1 and -1 and the value of kurtosis are also ranging between +3 and -3, Therefore it is concluded that the data is normally distributed and can be used for further analysis.

Table 2: Data Skewness, Mean and Kurtosis

Variables	Mean	St. Deviation	Skewness	Kurtosis
EL	4.0581	.64860	-.878	.351
GDT	3.9763	.76127	-.816	.279
EGB	3.9814	.64656	-.994	.875
TAW	3.7707	.62824	-.421	-.483

Note: EL= Eco-centric Leadership, GDT= Green Digital Transformation, EGB= Employee Green Behavior, TAW=Thriving at Work

4.3 Reliability Analysis

The reliability analysis is important to assess the reliability of the scale and its items used in the survey questionnaire in order to collect data from the participants of the research study (Taherdoost, 2016). The test is crucial so that the items having low reliability can be excluded from the analysis. The acceptance criteria to determine reliability is that the value of Cronbach's alpha should be higher than 0.7. The value of Cronbach's alpha 0.7 is considered to be good, value above than 0.8 is better, and 0.9 is best (Ruane, 2005). Table 3 is showing that the Cronbach's value of all the scales are surpassing the threshold value of 0.7, indicating good reliability of the instrument whereas the overall reliability is above 0.9 which is considered to be best.

Table 3: Reliability Analysis

Variable	Cronbach alpha	No of items
EL	0.756	06
GDT	0.700	03
EGB	0.773	06
TAW	0.753	10
Overall Reliability	0.903	23

4.4 Validity Analysis

The table 4 presents the results of discriminant validity using the Fornell-Larcker criterion, where the diagonal values (bold) represent the square root of the Average Variance Extracted (AVE) of each construct, and the off-diagonal values represent the correlations between constructs (Hilkenmeier et al., 2020). For discriminant validity to be established, the square root of AVE for each construct must be greater than its correlations with other constructs. In this table, the square root of AVE values are EL = .736, GDT = .696, EGB = .680, and TAW = .700, all of which are higher than their respective inter-construct correlations. For instance, EL shows a stronger AVE square root value (.736) compared to its correlations with GDT (.636), EGB (.625), and TAW (.612). Similarly, GDT has .696 on the diagonal, which exceeds its correlations with EGB (.628) and TAW (.630). In the same way, EGB (.680) is higher than its correlations with other constructs, and TAW (.700) also surpasses its inter-construct correlations. These results confirm that each construct is empirically distinct, and the discriminant validity of the measurement model is satisfactorily established

Table 4: Fornell-Larcker Criterion

	EL	GDT	EGB	TAW
EL	.736**			
GDT	.636**	.696**		
EGB	.625**	.628**	.680**	
TAW	.612**	.630**	.656**	.700**

4.5 Correlation Analysis

The cut off value of correlation matrix is that it should range between 0 and 1 and the level of significance should be = $p < .001$, $p < .005$ (Hair et al., 2014). The value 1 indicate that the association among independent and dependent variable is strong while value of 0 depict that there is no correlation among the variables (Kafle, 2019). Table 5 is showing that the correlation among variables is highly strong and significant at 1% significance level.

Table 5: Correlation Analysis

	EL	GDT	EGB	TAW
EL	1			
GDT	.636**	1		
EGB	.625**	.628**	1	
TAW	.612**	.630**	.656**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4.6 Structural Equation Model (SEM)

Structural equation model (SEM) determine the relationship among the variables of study by explaining assumptions and information (Meyers et al., 2016). SEM is used for confirmative and primary model that facilitate to analyze inferential factors. Regression, path evaluation, and factor evaluation are also included in SEM and it is the combination of factor analysis (CFA) (Kline, 2023). In the present study the model was tested using AMOS 26. CFA (Confirmative Factor Analysis) was applied in the prevailing study and the values of each individual factor was prepared using AMOS 26. Once CFA is used then the model is developed to ascertain suitability

and fitness of the model. For model fitness CFI value should fall in the range of 0 to 1. Table 6 is showing that the value of CFI is 0.910 which is indicating that the model is good fit according to the criteria of (Hu & Bentler, 1999). They further illuminated that the value of RMSEA should be less than 0.08 which demonstrate that the fitness of the model. Table 6 display that the value of RMSEA is 0.054, representing that the model is good fit and acceptable (Hu & Bentler, 1999). The model is good fit when the value of GFI and AGFI is above 0.90. In table 6 the value 0.900 and 0.901 highlighting that the model is fit. The two item of the TAW deleted because of low factor loading.

Table 6: Fitness Summary

Model	Hypothesized	Thresholds
CMIN/DF	3.000	< 3
RMR	0.067	Closer to 0
GFI	0.900	≥ 0.9
AGFI	0.901	≥ 0.8
CFI	0.910	≥ 0.9
RMSEA	0.054	<0.08

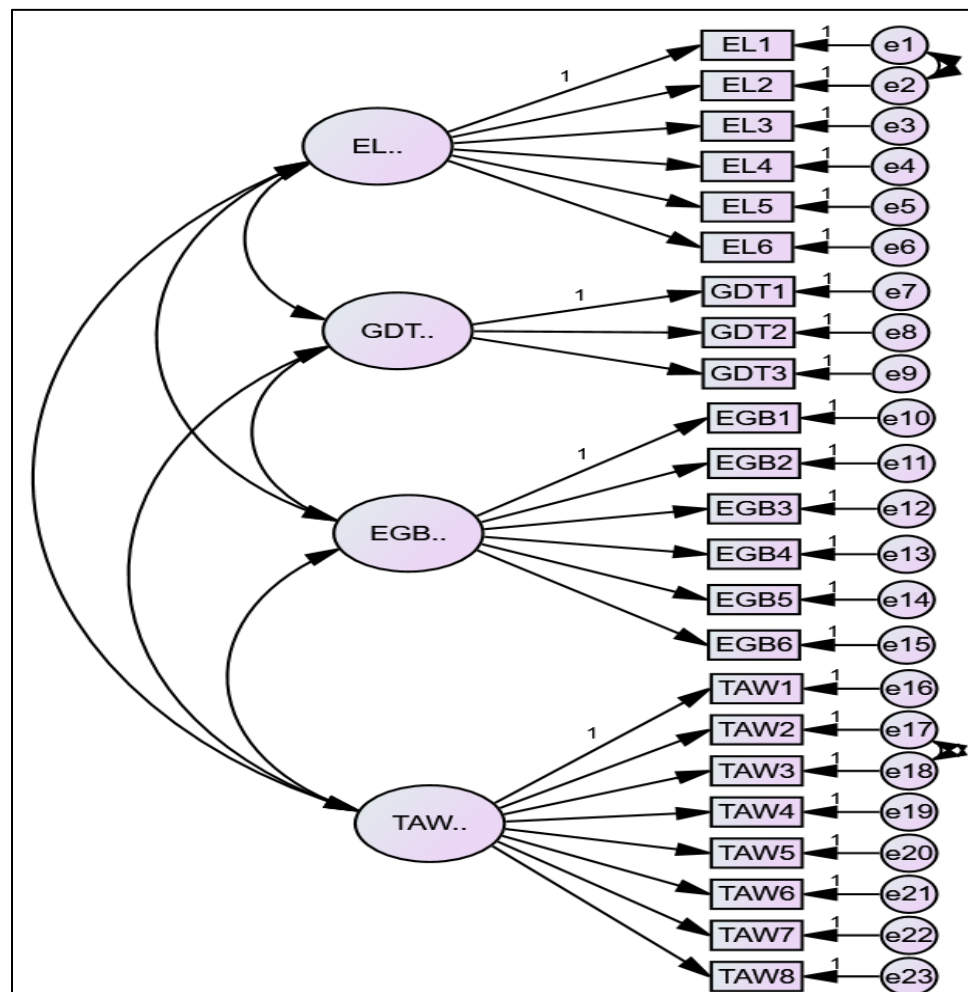


Figure 2: Structural Equation Model

4.7 Direct Relation

The proposed model presents direct influence of one variable on another. Particularly, the study hypothesizes that eco-centric leadership (EL) influences employee green behavior (EGB) and thriving at work (TAW). To examine these relationships, beta coefficients, standard error, and p-values were assessed (Table 7). The results demonstrate that eco-centric leaders, by serving as role models, inspire employees to adopt behaviors aligned with their leaders' eco-conscious values. This alignment fosters environmentally conscious attitudes and behaviors among employees. Eco-conscious leaders prioritize environmental sustainability, implementing practices such as green digital transformation (GDT) to facilitate both digital and green transitions within the organization. This transformation not only aligns organizational processes with environmental goals but also encourages employees to engage in eco-friendly behaviors. Additionally, the study underscores the role of EL in fostering TAW. Eco-centric leaders actively listen to employees, promote equity, and provide recognition, thereby enhancing employees' learning and vitality. This supportive leadership style instills a sense of purpose in employees, enabling them to thrive in their roles. Furthermore, GDT integrates green and digital dimensions into organizational practices, addressing environmental challenges while simultaneously improving employee well-being.

Table 7: Direct Hypotheses

Hypotheses	Paths	B Value	Standard Error	P value
H1	EL -> EGB	7.205	12.959	***
H2	EL -> TAW	9.457	17.014	***
H3	EL -> GDT	8.712	19.446	***
H4	GDT-> EGB	6.581	14.345	***
H6	GDT -> TAW	9.368	15.818	***

4.8 Mediation Analysis

The proposed model introduces a mediation mechanism that estimates the indirect effect of one variable on another within the study framework. Specifically, the study posits that eco-centric leadership (EL) influences employee green behavior (EGB) and thriving at work (TAW) through the mediating role of GDT. For examining these relationships, beta coefficients and p-values were evaluated (Table 8 and 9), revealing significant pathways that confirm GDT as a critical mediator linking EL with EGB and TAW. The findings validate that EL serve as influential individual to stimulate employees to approve conducts aligned with environmentally friendly values of their leaders. This configuration nurtures ecologically conscious approaches and actions among employees. Furthermore, the mediation analysis highlights that GDT significantly enhances the positive impact of EL on EGB. Leaders with eco-centric approach prioritize conservational sustainability, instigating practices such as GDT to expedite both digital and green evolutions within the business. This transformation bring into line processes of the organization with ecological goals, also encouraging personnel to engage in eco-friendly conducts. Moreover, the study accentuates the role of EL in nurturing TAW. Leaders with eco-centric outlook vigorously listen to workforces, uphold equity, and offer appreciation, thus augmenting learning and vitality of the employees. This understanding style of leadership infuses a sense of determination in personnel, allowing them to flourish in their roles. Likewise, GDT incorporates green and digital dimensions into the practices of the organization, addressing ecological challenges whereas instantaneously enlightening well-being of the employee. These findings

affirm the pivotal role of eco-centric leadership in shaping sustainable organizational practices and promoting both environmental and employee well-being through the mediating influence of GDT.

Table 8: Mediation Analysis (Path EL-GDT-EGB)

Hypothesis	Paths	D β W/O Med.	D β with Med.	I β	Med. Type
H5	EL->GDT->EGB	$\beta = .432^{***}$	$\beta = .224^{***}$,	$\beta = .213^{***}$	Partial Mediation
		$p = .001$	$p = .001$	$p = .001$	

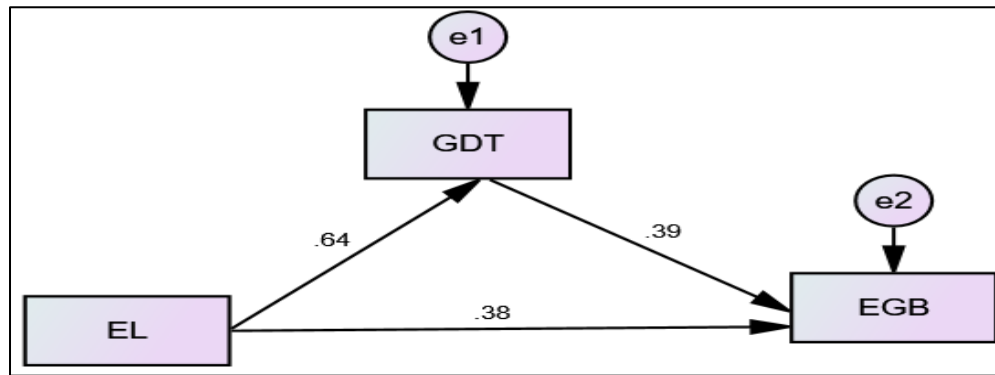


Figure 3: Mediation (EL->GDT->EGB)

Table 9: Mediation Analysis (Path EL-GDT-TAW)

Hypothesis	Paths	D β W/O Med.	D β with Med.	I β	Med. Type
H7	EL->GDT-> TAW	$\beta = .512^{***}$	$\beta = .314^{***}$,	$\beta = .222^{***}$	Partial Mediation
		$p = .001$	$p = .001$	$p = .001$	

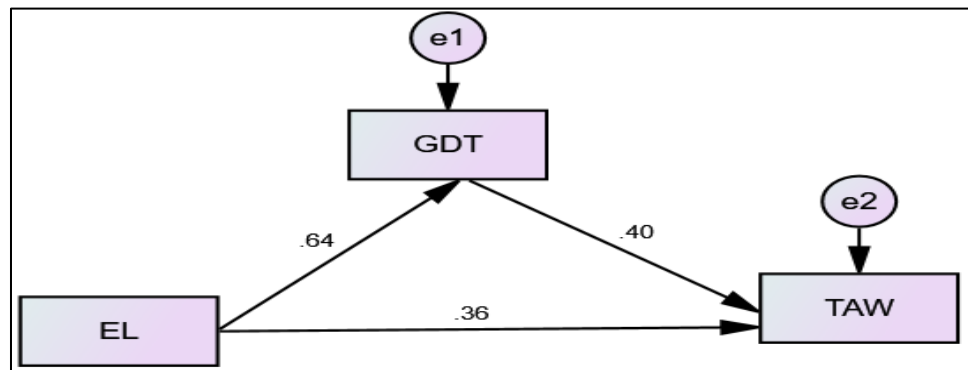


Figure 4: Mediation (EL->GDT->TAW)

5. Discussion and Conclusion

The growing emphasis on sustainability has garnered significant attention from researchers, academicians, and practitioners within the fields of business and management (Islam, 2025). Organizations are increasingly expected to adopt and institutionalize ecological and socially

responsible practices, ensuring that their operations, leadership, and managerial decisions align with sustainable, environmentally conscious, and socially acceptable standards (Sanders & Wood, 2024). This study seeks to investigate the antecedents of employee ecological behaviors and thriving at work. Specifically, it inspects how eco-centric leadership fosters environmentally responsible behaviors among employees and thriving at work, with green digital transformation serving as a mediating mechanism grounded in social learning theory.

The findings reveal that eco-centric leadership exerts a positive influence on employee green behaviors (i.e. H1). These results align with prior research indicating that employees' ecological behaviors are shaped by leadership styles characterized by eco-consciousness, such as ethical leadership, green transformational leadership, servant leadership, responsible leadership, and inclusive green leadership (Chen & Wu, 2022; Zhang et al., 2022; Aboramadan et al., 2022; Ahmad et al., 2021) also aligned with social learning theory (Bandura, 1977). Previous studies have further demonstrated that eco-centric leaders significantly impact the environmental attitudes and conduct of their workforce (Biswas et al., 2022). Leaders who prioritize sustainability and environmental protection foster an organizational culture that is congruent with conservation goals, thereby promoting ecological behaviors among employees. The values, beliefs, ethical standards, and commitment of eco-centric leaders towards sustainable development resonate with employees, motivating them to integrate environmentally friendly practices into both their formal responsibilities and discretionary tasks. Such leaders act as catalysts for cultivating a green organizational culture by articulating environmental objectives and exemplifying green behavior.

The study also identifies a positive relationship between eco-centric leadership and employee thriving at work (i.e. H2). Consistent with previous research, the findings suggest that eco-centric leaders nurture a sense of purpose among employees by fostering a supportive and inclusive workplace environment. This approach enables employees to feel valued and recognize the significance of their contributions to organizational success (Babalola et al., 2022; Patwary et al., 2022; Afsar et al., 2020) also results are unswerving with social learning theory (Bandura, 1977). Eco-centric leadership emphasizes active listening, fairness, and employee recognition, while facilitating subordinate development and enhancing learning and vitality (Alabdali et al., 2024; Araujo et al., 2022). By fostering learning and vitality, employees demonstrate resilience to environmental changes, greater satisfaction, and stronger organizational commitment (Suryani et al., 2023; Goh et al., 2022; Jiang et al., 2020; Kleine et al., 2019).

Additionally, this study posits that green digital transformation mediates the relationship between eco-centric leadership and employee green behavior (i.e. H3, H4, and H5). Existing literature highlights that technological advancements facilitate employees' access to information on green practices, environmental regulations, and sustainability initiatives, thereby enhancing their capacity to make informed decisions and engage in environmentally responsible behaviors (Mehmood et al., 2022; Valerio-Urena & Rogers, 2019; D'Amato et al., 2019). Zhao & Huang (2022) argue that eco-conscious leadership is particularly effective when sustainability objectives and digital innovation converge, integrating environmental and technological initiatives. Eco-centric leaders exemplify a leadership paradigm that prioritizes environmental stewardship and sustainable growth while balancing the pursuit of organizational financial goals (Araujo et al., 2022; Biswas et al., 2022) and findings of study are also constant with social learning theory (Bandura, 1977, 1986).

Furthermore, the study hypothesizes that green digital transformation mediates the relationship between eco-centric leadership and employee thriving at work (i.e. H6 and H7). Eco-centric leaders cultivate a shared value culture where sustainability is paramount, serving as role

models who facilitate employee learning and thriving. While other leadership styles often emphasize productivity and performance, eco-centric leadership fosters an environment conducive to employee engagement, well-being, and sustainable development (Uddin et al., 2021) and outcomes of investigation are also consistent with social learning theory (Bandura, 1977, 1986). The integration of sustainable practices and digital technologies not only mitigates environmental challenges but also enhances employee knowledge, satisfaction, and overall well-being. Green digital solutions optimize workflows, reduce resource waste, and improve collaboration, thereby boosting employee efficiency and organizational performance. To the best of the researcher's knowledge, this study represents the first attempt to empirically examine the direct impact of eco-centric leadership on employee green behaviors and thriving at work, with green digital transformation functioning as a mediating variable.

5.1 Theoretical Implications

The present study offers significant theoretical contributions to the literature on counterproductive organizational activities, particularly within the context of eco-conscious leadership. This research specifically investigates the influence of eco-centric leadership on employees' ecological behaviors, addressing a gap in the existing literature that predominantly explores the impact of other leadership styles on employee environmental conduct (Saleem et al., 2020), often neglecting the role of eco-centric leaders. The findings underscore that green digital transformation mediates the relationship between eco-centric leadership, employee green behaviors, and thriving at work. This mediation process motivates employees to exert additional efforts toward environmental conservation and sustainability. The study further enriches social exchange theory by demonstrating that leaders who are dedicated to environmental protection can cultivate ecological practices and policies, facilitating the achievement of organizational environmental objectives. Additionally, eco-centric leaders serve as role models, inspiring employees to address environmental challenges and mitigate the adverse environmental impacts of organizational activities. Eco-centric leadership, in this context, functions as an interpretive lens through which employees perceive organizational commitment to environmental sustainability, thereby fostering green behaviors. Drawing upon social exchange theory, the study posits that resources provided by eco-centric leaders—such as opportunities for acquiring environmental skills and knowledge, along with measures to enhance employee well-being—contribute to employee thriving in the workplace. Moreover, the study's findings make a valuable contribution to the expanding body of knowledge on sustainability by emphasizing the pivotal role of leadership in advancing sustainability initiatives. This research highlights how eco-centric leaders not only drive environmental goals but also create organizational environments that nurture employee engagement and ecological responsibility.

5.2 Managerial Implications

The present study offers valuable managerial and practical implications, providing insights for organizations and managers seeking to cultivate an ecological culture across their activities and operations to ensure sustainability and environmental responsibility. The findings highlight the critical role of leadership in facilitating the achievement of organizational environmental objectives (Wang et al., 2023; Haque, 2023). Consequently, organizational leaders and managers are encouraged to prioritize the identification, development, and promotion of eco-conscious leaders within the organizational hierarchy. To effectively drive sustainability initiatives, leaders must be selected, trained, and nurtured to not only demonstrate a commitment to environmental protection but also to embody ecological values through their actions, beliefs, and behaviors. By adopting an eco-centric leadership approach, managers can more effectively align organizational

goals with sustainability imperatives. Leadership development programs should integrate mechanisms to identify, recognize, and support eco-centric leaders, fostering their growth and reinforcing their influence within the organization. A key managerial focus should be on fostering a supportive organizational culture that facilitates and endorses conservation initiatives. This can be achieved by ensuring that organizational policies, practices, and strategic goals reflect the principles and values of eco-centric leadership (Biswas et al., 2022). The study underscores actionable steps that organizations can undertake to instill and maintain an ecological ethos, reinforcing the pivotal role of leadership in shaping employees' eco-friendly behaviors. By actively engaging and empowering eco-centric leaders, organizations can embed environmental values across all levels of operation, fostering a culture that prioritizes sustainability and ecological stewardship. This proactive approach positions organizations to more effectively address environmental challenges while enhancing employee commitment to sustainable practices.

5.3 Limitations and Future Directions

Despite the significant theoretical and practical contributions of this study, certain limitations present opportunities for future research. The study was conducted within the context of Pakistan, a developing country, which constrains the generalizability of the findings. To enhance the external validity and applicability of the results, future research should consider replicating this study in other emerging economies. Additionally, incorporating cross-cultural perspectives could provide a broader understanding of eco-centric leadership and its influence on employee ecological behaviors, thereby strengthening the generalizability of the findings. A further limitation of this study is its cross-sectional design, which may introduce biases despite efforts to address common method bias. To mitigate this limitation, future research could adopt a longitudinal design to establish causal relationships more effectively and observe how eco-centric leadership influences employee behaviors over time. Moreover, the evolving discourse on leadership highlights the need to explore diverse leadership styles that promote employee engagement in sustainability and ecological initiatives. Future studies could adopt a mixed-methods approach, employing triangulation through qualitative and quantitative methodologies. Conducting in-depth interviews with senior managers, leaders, and employees would offer richer insights into the dynamics of eco-centric leadership and its role in fostering sustainable organizational practices. By addressing these limitations, future research can contribute to a more comprehensive understanding of eco-centric leadership and further advance the body of knowledge in sustainability and organizational behavior.

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