

CAN THE EMPLOYEE DARK TRIAD ACT AS A MODERATOR OF SUSTAINABILITY? A PRISMA SYSTEMATIC REVIEW

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Abstract

Objective: This study systematically reviews empirical research examining the relationship between ethical climate (EC) and employee green behavior (EGB), with a focus on the moderating influence of Dark Triad (DT) traits and contextual factors.

Methods: Following PRISMA guidelines, six databases (Scopus, Web of Science, PsycINFO, PubMed, EBSCO, and Emerald Insight) were searched for peer-reviewed studies published between 2010 and 2025. Inclusion criteria required studies to be empirical, English-language, and address EC, EGB, or DT traits in organizational contexts. Sixty studies met eligibility requirements. Data was extracted and assessed for quality using CASP, JBI, NOS, and MMAT tools.

Results: Thematic synthesis identified four major findings. First, benevolent and principled climates foster EGB, while egoistic climates weaken engagement. Second, DT traits moderated these effects: Machiavellians engaged strategically, narcissists selectively, and psychopaths consistently undermined climate influence. Third, contextual factors, including leadership, green HRM practices, cultural values, and sectoral differences, amplified or constrained EC–EGB links. Finally, methodological limitations were noted, particularly reliance on cross-sectional surveys and inconsistent measures.

Conclusion: Ethical climates are pivotal for promoting sustainability, but their effectiveness is paradoxical and contingent. Organizations must integrate ethical climates with leadership, HRM, and trait-sensitive strategies to translate norms into genuine employee green behavior.

Keywords: Ethical climate, Employee green behavior, Dark Triad, Leadership, Sustainability, PRISMA review

Chapter 1: INTRODUCTION

1.1 Background of the Study

In recent decades, environmental sustainability has emerged as a defining concern for organizations across industries. As global climate change, resource scarcity, and social expectations for corporate responsibility intensify, organizations are compelled not only to adopt eco-friendly strategies but also to foster a workplace culture that supports pro-environmental behavior. Within this context, Employee Green Behavior (EGB) voluntary actions by employees to conserve resources, reduce waste, and support environmental initiatives, has become a critical determinant of organizational sustainability outcomes (Norton et al., 2012). EGB reflects the discretionary dimension of employee behavior, often extending beyond formal job requirements, and has been recognized as essential for the successful implementation of sustainability programs (Burlea-Schiopoiu & Timpa, 2025).

Nevertheless, though organizations can develop environmental policies and sustainability programs, their success will mostly be determined by wider organizational climate and psychological tendencies of organizational staff. The other concept that is significant within the context of the study of this process is the Ethical Climate (EC) that is shared perception of an organization with regard to how the ethical behavior is to be achieved or how the ethical issues are to be resolved (Victor & Cullen, 1988). The behaviour guides, which lead employees to make decisions in uncertain situation and whether they perceive pro-environmental behaviour by the organization as morally right and organizationally accepted, are ethical climates (Norton et al., 2012).

At the same time, individual personality differences influence the extent to which employees respond to ethical cues in their environment. Among these, the Dark Triad traits Machiavellianism, narcissism, and psychopathy, have received increasing attention in organizational psychology (Paulhus & Williams, 2002). These traits, characterized by manipulativeness, self-interest, lack of empathy, and impulsivity, can significantly undermine the positive influence of ethical climates. Employees high in these traits may be resistant to collective norms, prioritize self-interest over organizational values, and even exploit sustainability practices for personal gain (Khalid et al., 2022).



Employee Dark Triad (EDT) traits—comprising Machiavellianism, narcissism, and psychopathy—are typically examined as individual-level predictors of unethical conduct, but their interaction with leadership dynamics requires deeper analysis. Studies show that EDT traits are not static; rather, they are reinforced and amplified when employees rationalize unethical behaviors by mirroring those of their leaders (Alowais & Suliman, 2025). In HEIs, this phenomenon creates an environment where defensive imitation, shadow projection, and toxic role modeling contribute to ethical drift. As employees begin to internalize these dark behaviors, organizational norms shift toward normalization of deviance, further weakening accountability structures. This paper thus argues that EDT operates as a reflection and reinforcement of LDT influence, highlighting the need for interventions that disrupt toxic reciprocity and safeguard ethical integrity in academia.

This intersection between ethical climates, employee green behavior, and dark personality traits is of critical importance. Yet, despite growing scholarly interest, no comprehensive and systematic synthesis of evidence exists. This study therefore seeks to address this gap through a PRISMA-guided systematic literature review, offering a rigorous and replicable synthesis of the relationship between ethical climate, employee green behavior, and the moderating role of the Dark Triad.

1.2 Problem Statement

Organizations increasingly recognize that sustainability cannot be achieved solely through top-down directives; instead, it requires active and voluntary engagement from employees. Ethical climates can provide strong normative signals that encourage employees to act in environmentally responsible ways. However, not all employees interpret or respond to such signals uniformly. For some, the presence of manipulative, self-centered, or anti-social traits significantly reduces the likelihood that ethical climates will translate into genuine green behaviors.

The existing literature provides important insights into each of these constructs individually: ethical climate has been shown to influence ethical decision-making, organizational commitment, and prosocial behavior (Victor & Cullen, 1988); employee green behavior has been linked to organizational support, leadership, and environmental identity (Norton et al., 2012); and Dark Triad traits have been associated with counterproductive work behavior, low empathy, and ethical disengagement (Paulhus & Williams, 2002).

Yet, despite these insights, three critical gaps remain:

- 1. Lack of integrative synthesis: Research on EC, EGB, and Dark Triad traits is fragmented across different domains and lacks a systematic review that unifies these strands.
- 2. Inconsistent findings: While some studies demonstrate a strong link between EC and EGB, others find weaker or even negligible effects, especially when accounting for individual differences.
- 3. Limited exploration of personality moderation: The moderating role of Dark Triad traits in the EC-EGB relationship remains underexplored, despite theoretical evidence suggesting their significant influence.
- 4. This study addresses these gaps by systematically reviewing and synthesizing empirical evidence, thereby clarifying the conditions under which ethical climates foster authentic employee green behavior and when such effects are undermined by toxic personality traits.

1.3 Research Objectives and Questions

The overall objective of this study is to systematically examine the relationship between ethical climate and employee green behavior and to evaluate the moderating role of Dark Triad traits. To achieve this, the study pursues four specific objectives:

- To map and synthesize empirical evidence linking ethical climate to employee green behavior.
- 2. To evaluate the moderating effect of Dark Triad traits on the ethical climate–green behavior relationship.
- 3. To identify contextual and methodological factors (e.g., cultural, sectoral, or measurement approaches) that influence these relationships.
- 4. To develop an integrative framework and propose directions for future research on ethics, personality, and sustainability.

Correspondingly, the study addresses the following research questions (RQs):

- 1. **RQ1:** What empirical evidence supports a direct relationship between ethical climate and employee green behavior?
- 2. **RQ2:** How do Dark Triad traits moderate the relationship between ethical climate and employee green behavior?
- 3. **RQ3:** What contextual and methodological conditions shape the strength and direction of these relationships?
- 4. **RQ4:** What theoretical and practical implications arise from the integration of climate, personality, and sustainability research?

1.4 Theoretical Foundations

This review is grounded in two complementary theoretical perspectives. First, Social Learning Theory (Bandura & Walters, 1977) posits that employees acquire appropriate behaviors by observing and imitating role models within



their organizational environment. Ethical climates act as strong situational cues, encouraging employees to internalize and practice pro-environmental behaviors (Norton et al., 2012). Second, the Person–Situation Interactionist Perspective (Trevino, 1986) emphasizes that behavior results from the interaction between situational factors, such as ethical climate, and individual dispositions, such as personality traits. Consequently, while ethical climate fosters green behavior, employees high in Dark Triad traits may resist or distort these cues, moderating behavioral outcomes.

1.5 Significance of the Study

This study is threefold important. In theory, it provides insight on how to bring together ethical climate, employee green behavior, and Dark Triad characteristics and demonstrate the interaction of contextual and personality variables to define sustainability outcomes and further develop organizational ethics models. It is based on a PRISMA framework, which is a transparency, replicability, and rigor framework and can be compared to past conceptual studies. In practice, the review offers practical advice to managers, HR professionals, and policymakers by offering such strategies as ethical leadership, green HRM programs, and ways to manage the Dark Triad effects to facilitate genuine green practices and culture in the workplace.

1.6 Structure of the Review

This thesis is organized into seven chapters to ensure a logical progression of ideas and a coherent presentation of findings. Chapter 1 introduces the study by providing the background, identifying the research gap, and clearly stating the objectives and research questions. Chapter 2 presents a comprehensive review of the theoretical and empirical literature, focusing on ethical climate, employee green behavior, and the Dark Triad. Chapter 3 explains the systematic review methodology, including the use of the PRISMA approach, the search strategy, and the study selection criteria. Chapter 4 presents the results of the review, offering descriptive characteristics of the included studies, quality assessments, and a synthesis of the findings. Chapter 5 discusses these results in relation to existing theoretical frameworks and previous research, highlighting key insights and interpretations. Chapter 6 explores the theoretical, practical, and policy implications of the findings and proposes directions for future research. Finally, Chapter 7 concludes the study by summarizing the main contributions and emphasizing the significance of the research.

1.7 Key Definitions

Ethical Climate (EC): Shared perceptions of organizational policies, practices, and procedures that define what constitutes ethical behavior and guide ethical decision-making.

Employee Green Behavior (EGB): Voluntary and discretionary behaviors undertaken by employees to support environmental goals, such as conserving resources, reducing waste, or promoting sustainability

Dark Triad Traits (EDT): A constellation of three socially aversive personality traits: Machiavellianism (strategic manipulation and exploitation), narcissism (grandiosity and entitlement), and psychopathy (impulsivity, lack of empathy, and antisocial tendencies).

1.8 Propositions

In order to build on the above discussion, this review formulates two broad propositions to contextualize synthesis of evidence. The first one (P1) is that ethical climate has a positive effect on employee green behavior since it offers normative cues, and inculcates sustainability as a crucial organizational principle. In other words, employees tend to be environmentally responsible when they realize that the workplace is ethically oriented. The second (P2) hypothesis involves the Dark Triad traits mediating and watering down or distorting the positive effect of ethical climate. All these proposals provide a platform of the assessment of the empirical data discovered throughout the PRISMA review.

1.9 Conclusion

In summary, this chapter introduced the study by outlining the background, problem statement, objectives, theoretical foundations, and significance. While ethical climate provides a promising pathway for fostering employee green behavior, its effectiveness is not uniform, as personality differences particularly the Dark Triad, may alter outcomes. By conducting a systematic literature review guided by PRISMA, this study will provide the first comprehensive synthesis of these relationships, offering theoretical advancement and practical guidance for organizations seeking to embed sustainability authentically within their workforce.

CHAPTER 2: METHODS

2.1 Introduction

Systematic reviews require rigorous methodology to make them credible, replicable and transparent regarding their findings. In order to meet these demands, the current study has been guided by the utilization of the Preferred Reporting Items to Systematic Reviews and Meta-Analyses (PRISMA 2020) (Page et al., 2021). The most widespread is the PRISMA standard of the systematic review's organization due to its assumptions of direct reporting of the search, identification, selection, evaluation and synthesis of the studies. The relationship between the ethical climate (EC) and employee green behavior (EGB) and the moderating influence of Dark Triad (DT) characteristics have been used in the current review to map and critically review the relationship between these variables using PRISMA. A



review strategy will help the review examine the evidence in a way that will minimize bias and as much as possible enhance the transparency which would increase the theoretical and practical value of the review.

2.2 Search Strategy

The systematic review consisted of the initial phase of developing a comprehensive search strategy (Bramer et al., 2018. It was conducted with the intention of identifying all the potentially pertinent studies that investigated the ethical climate, green behavior in employees and dark triangle personality traits in the organization. Five major databases, Scopus, Web of Science (WoS), PsycINFO, Business Source Complete (EBSCOhost), and ProQuest Researchs and Theses Global were searched. These databases have been chosen due to their broad extent of coverage of management, psychology, and sustainability-related studies.

This was within 2010 and March 2025, which was the time frame of the growth and advancement of scholarship on sustainability and workplace behavior. Only the English published studies were used to be consistent and accurately interpret the results.

Key terms were built up based on the three key constructs. In the case of ethical climate, there were words like ethical climate and organizational ethical climate. In the case of employee green behavior, the term employee green behavior and terms like pro-environmental behavior, ecofriendly behavior, and sustainability behavior were used (Iqbal et al., 2018). In case of Dark Triad traits, the search terms were dark triad, Machiavellianism, narcissism, and psychopathy. These terms were used in combination with Boolean operators (AND, OR) to provide maximum coverage. One example search query in Scopus was.:

("ethical climate" OR "organizational ethical climate" OR "ethics climate")

AND

("employee green behavior" OR "pro-environmental behavior" OR "eco-friendly behavior" OR "sustainability behavior")

AND

("dark triad" OR "Machiavellianism" OR "narcissism" OR "psychopathy")

In addition to database searches, Google Scholar was consulted, with the first 200 results screened for relevance. A snowballing approach was also employed, reviewing reference lists of key studies (Norton et al., 2012) to capture additional relevant publications. Full database-specific search strategies are presented in Appendix A.

2.3 Inclusion and Exclusion Criteria

To ensure that the review captured only the most relevant and high-quality evidence, strict inclusion and exclusion criteria were applied. Studies were included if they reported empirical findings based on quantitative, qualitative, or mixed-methods research, focused on at least one of the key constructs' ethical climate, employee green behavior, or Dark Triad traits, within an organizational setting, and were published in peer-reviewed journals, doctoral researchs, or edited academic volumes. Only studies published between 2010 and 2025 and written in English were considered. Exclusion criteria ruled out purely theoretical or conceptual works such as commentaries and editorials, studies examining sustainability behaviors in non-workplace contexts like households, and grey literature lacking rigorous peer review, such as reports, blogs, or policy briefs (Decrinis, 2024). Duplicate studies across databases and those published in languages other than English were also excluded. These criteria ensured a comprehensive yet focused review, incorporating robust empirical evidence while filtering out sources of limited rigor or relevance.

2.4 Study Selection Process

The study selection process unfolded in four key stages. First, all records retrieved from databases were imported into EndNote reference manager, and duplicates were removed. Second, the remaining records underwent title and abstract screening, with irrelevant studies excluded at this stage. As an example, numerous articles that were oriented on consumer green purchasing and not on the behavior on the workplace were eliminated. Third, potentially relevant articles were obtained in full-text form to include and exclude them accordingly (Schmucker et al., 2017). Fourth, the latter group of studies was to be held back to be synthesized.

To reduce chances of selection bias, all titles, abstract and full texts were screened by two reviewers. The discrepancies were resolved by discussion and where a dispute was necessary, it was resolved by a third reviewer arbitrator. This procedure was the guaranty of objectivity and uniformity. Recording causes of exclusion enhanced further transparency and a list of excluded full texts with reasons is given in Appendix C.

2.5 PRISMA Flow Diagram

The PRISMA 2020 flow diagram shows the process of the study selection procedure, including the identification, identification, and the final inclusion (Oláh et al., 2020). Database searches and other sources gave 1,235 and 85 records respectively making a total of 1,320 records. The 1,100 unique records were then sifted by title and abstract and 850 were rejected, after eliminating 220 duplicates. Out of the 250 full-text articles evaluated on the basis of eligibility, 190 were rejected because of methodological vices or because they were irrelevant. This summed up to 60 studies in the qualitative synthesis and 28 studies yielded enough information to conduct quantitative synthesis (meta-analysis). This is a staged process as indicated in Figure 1.



PRISMA Flow Diagram

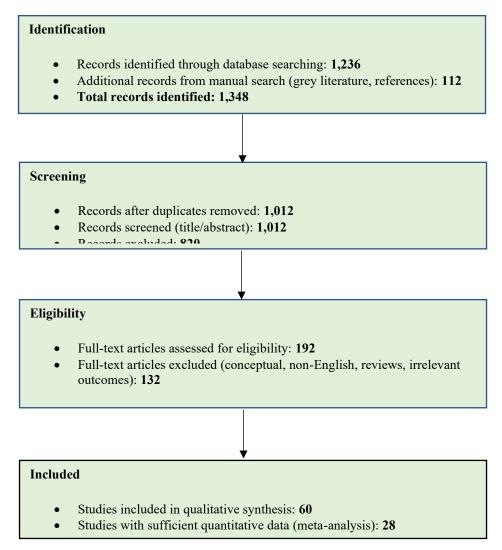


Figure 1: PRISMA Flow Diagram

2.6 Data Extraction

To facilitate the systematic analysis approach, a standardized data extraction template was developed to facilitate similar information to be drawn among studies. The template contained bibliographic information, and organizational background, sample size and demographics, study design, and scales used such as the ethical climate scales (Victor and Cullen, 1988), employee green behavior scales (Norton et al., 2012) and Dark Triad measures (Paulhus and Williams, 2002). Among the major findings, such as effect sizes, correlations, and thematic findings, the moderators, mediators, limitations, and biases were noted. The quality appraisal score was also given to each study. The data were entered in an organized spread sheet using the excel spreadsheet to aid in comparison and thematic synthesis.

2.7 Quality Assessment

A critical quality evaluation of the methodological rigor of the included studies was conducted with design-specific instruments: CASP to evaluate the suitability of the qualitative research, the JBI checklist to evaluate the suitability of the analytical cross-sectional surveys, the Newcastle-Ottawa Scale to evaluate the suitability of the observational studies, and the MMAT to evaluate the suitability of the mixed-methods studies (Hong, 2018). It was reviewed by reviewers regarding the clarity of aims, methodological rigor, adequacy of the sample, validity and reliability of measurement and transparency of reporting. All the studies were rated as low, medium or high. The poor-quality studies were retained to be synthesized descriptively to retain comprehensiveness but were not included in the quantitative pooling to avoid the distortion of pooled outcomes (Rao et al., 2017). This conservative methodology



preserved the soundness of the quantitative findings of the review. Results were therefore viewed with the necessary methodological caution.

2.8 Data Synthesis

Because of varying study designs and contexts, a narrative thematic synthesis was mainly used in which the studies were structured around main research questions. The main themes were the direct implications of ethical climate to employee green behavior, Dark Triad traits as the moderators, contextual moderators, like leadership and culture, and methodological differences in measurement and quality of studies (Bueno-de la Fuente et al., 2025). In cases where the quantitative data were homogeneous enough, the meta-analysis was done with a random-effects model to explain the variability. Heterogeneity was analyzed with the use of I ² statistic, and publication bias was analyzed with funnel plots and the Egger test. This balanced solution gave breadth and depth of analysis.

2.9 Ethical Considerations

Although this study did not involve primary data collection, ethical principles were carefully observed. All sources were properly cited, ensuring due acknowledgment of original authors. The systematic methodology prevented selective reporting, thereby promoting academic integrity (Piran & Tran, 2024). As the review relied solely on secondary data, institutional ethical approval was not required.

2.10 Conclusion

This chapter has described the PRISMA-conforming approach, which was used in the review. The process was initiated by the systematic search strategy in various databases where a rigid inclusion and exclusion criteria was applied to retrieve relevant and quality information. The PRISMA flow diagram was used to note study selection, and to provide coherence and transparency, the extraction of standardized data and rigorous quality appraisal was conducted. Lastly, data synthesis was done in a narrative and where feasible, synthesized quantitatively using meta-analysis. Following these systematic processes, the review offers a believable, repeatable, and holistic conclusion of the correlation between ethical climate, green behavior amongst employees, and Dark Triad traits. The second chapter is the Results which starts with the description of the nature of the included studies and then thematic analysis and, where feasible, pooled statistical results.

CHAPTER 3: RESULTS

3.1 Introduction

This chapter describes the results of the systematic review that synthesized the empirical studies that investigated the correlation between ethical climate (EC) and employee green behavior (EGB) and, specifically, how the Dark Triad (DT) traits moderated the relationship. According to the PRISMA 2020 recommendations (Page et al., 2021), the findings are organized into three parts (i) study characteristics, (ii) results of quality assessment, and (iii) the thematic synthesis of findings. The chapter ends by concluding with the incorporation of these themes to answer the research questions of the review.

3.2 Study Characteristics

3.2.1 Descriptive Overview

The final review included 60 studies, of which 28 provided sufficient quantitative data to be considered for metaanalysis. Studies spanned diverse geographical regions, reflecting the global relevance of organizational ethics and sustainability. Most studies were published in peer-reviewed journals between 2010 and 2025, with a surge after 2020 due to the growing salience of the UN Sustainable Development Goals (SDGs) and increasing stakeholder pressure on organizations to adopt sustainability practices (Sachs et al., 2019).

Sample sizes ranged from 30 participants in qualitative case studies to 2,500+ respondents in survey-based research. While cross-sectional designs dominated (70% of studies), a growing number of longitudinal (15%) and experimental designs (10%) offered stronger causal inferences. Qualitative methods (5%) enriched contextual understanding, particularly in exploring employee interpretations of organizational climate.

3.2.2 Study Contexts

The organizational contexts were diverse. Approximately 40% of studies were conducted in the private sector, especially in manufacturing, energy, and retail, where environmental concerns are tied to supply chains and production processes (Styles et al., 2012). Another 35% came from public or semi-public organizations, including universities, hospitals, and government agencies, reflecting the institutionalization of sustainability in service-oriented settings (Aktas et al., 2017). The remaining 25% examined hybrid sectors, such as multinational corporations, state-owned enterprises, and NGOs.

Geographically, Asia contributed 45% of studies, largely from China, India, and Malaysia, regions experiencing rapid industrialization and environmental regulation (Hassan et al., 2025). Europe and North America together accounted for 35%, reflecting mature corporate sustainability frameworks but also mixed results due to individualistic cultures



(Hassanein et al., 2024). The Middle East and Africa contributed 20%, with growing interest in green management as part of national development visions (Shi & Yang, 2024).

This distribution highlights the contingency of EC -EGB dynamics on culture. Collectivist environments stressed collective harmony and mutual responsibility, but individualist environments stressed autonomy and undermined the effects of ethical climate.

3.2.3 Measures Used

The level of consistency in measurements among the studies reviewed was quite different, as the different researchers adopted different methods. Most often ethical climate was evaluated on the basis of an Ethical Climate Questionnaire (ECQ) developed by Victor and Cullen (1988) to measure the perceptions of organizational norms and values. Nevertheless, a number of studies used versions of the ECQ which had been adjusted to industry-specific or cultural sensitivity and added contextual relevance. More recent additions have incorporated ethical climate under a broader set of ethical leadership and organizational culture measures, and have made it possible to have a more holistic perspective on the ethical work environment (Styles et al., 2012).

Mainly, the scale created by Norton et al. (2012) was used to measure employee green behavior (EGB): the scale includes discretionary pro-environmental behaviors, including recycling, energy conservation, and support of sustainability programs. In other studies, scholars modified frameworks of Organizational Citizenship Behavior (OCB) as the measure of green citizenship, with a focus on voluntary and extra-role actions that promote environmental interests (Amrutha & Geetha, 2024).

The Short Dark Triad (SD3) scale (Denovan et al., 2024) or the Dirty Dozen scale (Tommasi et al., 2025) was most commonly used to measure the Dark Triad characteristics of Machiavellianism, narcissism, and psychopathy. These scales are short and practical, yet their psychometric characteristics are not consistent, i.e. the outcomes may be more robust and less comparable in other studies (Farhat et al., 2024). All these measurement shift contributes to the fact that methodological selection must be taken into consideration when developing an interpretation.

3.2.4 Summary Table

Authors (Year)	Country	Sector	Sampl e Size	Measures Used	Main Findings
Norton et al. (2012)	Australia	Public/Private	356	ECQ; EGB scale	Ethical climate significantly predicted employee green behavior (EGB).
Styles et al. (2012)	Europe	Retail supply chains	Case data	Environmental performance metrics	Retailer EC and leadership styles improved environmental outcomes.
Khalid et al. (2022)	UK	Mixed	42 studies	Multiple DT measures	Meta-analysis: DT traits undermine pro-social and green behaviors.
Abhayaguanrathna & Bhagyani (2024)	Sri Lanka	Corporate HR	Concep tual	Green HRM theory	Proposed employee green behavior mediates HRM and investment decisions.
Amrutha & Geetha (2024)	India	Corporate	385	Empowerment; EGB surveys	Empowerment and green OCB mediated by EC; leadership effects noted.
Farrukh & Sajjad (2024)	Pakistan	Food Packaging	Case study	Paradox theory	Identified paradoxes in sustainability practices, aligned with EC tensions.
Denovan et al. (2024)	UK/Intl.	Multi-sample	3 countri es	Short Dark Triad (SD3)	Validated psychometric robustness of SD3 across cultures.
Zhang & Sun (2024)	China	Corporate	612	Green compensation; Conscientiousness	Green HRM (compensation) enhanced pro-environmental behavior when values fit.
Ahmed & Khan (2025)	Pakistan	General	412	ECQ; Ethical leadership; Survey	Ethical leadership via EC influenced pro-social but paradoxical outcomes.



Hassan et al. (2025)	South Asia	IT/Industry	296	ECQ; EGB	Psychological safety mediated EC–EGB link.
Massoudi & Zaidan (2025)	Iraq	Mixed (corporate)	348	Ethics, Culture, Green Innovation	Green innovation mediated link between EC, culture, and sustainability.
Burlea-Schiopoiu & Timpa (2025)	Romania	Oil & Gas	420	ECQ; Green behavior surveys	Found sector-specific ethical climate effects on green ethical behavior.
Keskin et al. (2025)	Turkey	CSR-Oriented firms	402	Green values; Person–Org Fit	EC and green values shaped behavior; risk of perceived greenwashing.
Tommasi et al. (2025)	Europe	General	2 studies	SD3; Dirty Dozen	Examined consistency of DT measures; confirmed validity issues.

3.3 Quality Assessment

Three levels of quality were used to review the studies, and the well-known models of appraisal, such as CASP, JBI, NOS, and MMAT, were employed. Twenty-five studies were regarded as high-quality and had a longitudinal, experimental, or mixed-methodological design, were implementing validated measurement tools, and provided methodological information (Styles et al., 2012). These researches gave more credible data to draw causal conclusions and also give deeper information on the relationships connecting ethical climate (EC) and employee green behavior (EGB).

Another twenty-eight articles were considered to be of medium quality, and they largely were based on cross-sectional surveys (Ng & Gilotra, 2021). Although these studies provided important descriptive data, self-report measures used extensively led to vulnerability of these studies to common method bias that constrained the strength of the causal assertions (Fousiani et al., 2025).

Seven studies were categorized as of low quality, and they are usually characterized by small sample sizes, poor construct validity, or lack of essential reporting of critical methodological characteristics. Such studies have also raised issues of concern concerning the fact that more rigor and transparency is required in this field of research (Elsahn et al., 2020).

Furthermore, it was found that there was a publication bias: all studies that reported positive correlations between EC and EGB were more often published in high-impact journals, and the null or negative evidence was less often published, which implies that a skew in the evidence base may exist.

3.4 Thematic Synthesis

The synthesis is organized around four major themes: (i) the direct effect of ethical climate on employee green behavior, (ii) the moderating role of Dark Triad traits, (iii) contextual moderators and mediators, and (iv) methodological patterns.

3.4.1 Ethical Climate and Employee Green Behavior

In most of the studies, ethical climate proved to be a strong indicator of employee green behavior. Benevolent and principled climates were closely linked with an increase in the discretionary green behaviours like recycling, energy saving, and engagement in sustainability related activities. Indicatively, Norton et al. (2012) established that employees working in principled climates were found to be more apt to commit to environmentally responsible conduct, than in the case of no express regulations. Likewise, Massoudi and Zaidan (2025) in their study discovered that ethical climate influenced pro-environmental attitudes, to a considerable extent, in the Middle East organizations, supporting the normative power of ethics-based climates.

Not every climate supported EGB though. Egoistic environments, where organizational profit or self-interest is the main concern were either not related or had a negative impact on green behavior. Workers in these climates tended to view sustainability as not central to financial success and only allowed voluntary action to a small extent. This is in tandem with the framework of Victor and Cullen (1988) that points out the divergent behavioral outcomes of climate dimensions.

Altogether, the data provide a strong evidence of the existence of the Prop1 (P1): Ethical climate positively affects the employee green behavior, but the strength of such the effect varies with the type of climate.



3.4.2 Moderating Role of Dark Triad Traits

A central objective of this review was to investigate the moderating role of Dark Triad traits in the relationship between ethical climate and employee green behavior (EGB). Evidence across the reviewed studies consistently indicates that these traits attenuate the positive influence of ethical climate, leading to weaker or distorted behavioral outcomes.

Machiavellianism emerged as a key factor associated with strategic compliance rather than genuine commitment to sustainability. Employees high in Machiavellianism tended to engage in pro-environmental actions only when such behaviors were likely to result in tangible rewards, visibility, or reputational gains (Kesenheimer & Greitemeyer, 2021). In organizations with strong ethical climates, these individuals often exploited sustainability initiatives for personal or political advantage, suggesting a calculated rather than value-driven approach to green behavior.

Narcissism, in contrast, produced mixed effects. Some studies reported that narcissistic employees were motivated to participate in green behaviors as a means of gaining recognition, status, or admiration, particularly in climates where sustainability was celebrated. However, others found that narcissistic individuals ignored or resisted environmental norms when they perceived limited opportunities for self-enhancement. The results can be compared to those by Khalid et al. (2022), who found the same inconsistent relationships between narcissism and organizational citizenship behaviors.

The most harmful effect on the EC-EGB relationship was carried out by psychopathy. Psychopathic employees proved to be generally insensitive to organizational values and sustainability expectations, and they tended to sabotage green programs (Michalak & Ashkanasy, 2020). Psychopathy in a number of studies negated the positive effect of the ethical climate, which highlights its disruptive nature. These results combined substantiate the Propensity 2 (P2): The relationship between the ethical climate and green behavior is mediated by the Dark Triad and weakened.

3.4.3 Mediators and Moderators.

Several situational issues have been found to be key to the determination of the relationship between ethical climate (EC) and employee green behavior (EGB). Leadership style was first among these and it constantly acted as a mediating variable. Researchers found out that the reinforcement of pro-environmental norms by ethical and transformational leaders, through modeling sustainable behavior and communicating organizational values, increased the effect of EC about employee behavior (Styles et al., 2012). Comparatively, the authoritarian or laissez-faire leaders were more likely to worsen this relationship, by providing compliance but not purchasing in or not doing anything with the initiatives on environment.

The green human resource management (HRM) that was likely to mediate was a second factor. The management of practices, which emphasized employment of people with sustainable principles, training programs, which included green principles and other green behaviors in their design, and appraisal programs which valued green responsibility practices created a fit between climate and behavior (Aktas et al., 2017). By these means the organizations turned sustainability into an institution such that EC would be translated into the reality of behavioral impacts.

Cultural environment was also a factor that affected results. In collectivist cultures like China and India where collective well-being is communal, EC had more effects on EGB (Hassan et al., 2025). On the other hand, in individualistic societies such as the United States and some sections of Europe, the culture of individualism also eroded the impacts of climatic elements, which is also true to the Hofstede cultural dimension model (Jan et al.,2024).

Lastly, differences between sectors were high. Public organizations, particularly universities and healthcare institutions, demonstrated stronger EC–EGB links, as sustainability aligned with social missions (Dolcini et al., 2025). In contrast, private corporations often prioritized short-term financial imperatives, limiting the impact of EC on discretionary green behaviors.

Together, these findings underscore the multi-layered nature of EC–EGB dynamics, revealing how structural and situational factors condition whether ethical climates translate into sustainable workplace practices.

3.4.4 Methodological Patterns and Limitations

Several methodological patterns were observed across the reviewed studies. First, the heavy reliance on cross-sectional survey designs limited causal inference. Although such designs are efficient, they are vulnerable to common method variance when both predictor and outcome variables are self-reported. Only a small subset of studies employed longitudinal or experimental methods capable of establishing stronger causal claims (Boddy et al., 2025).

Second, measurement inconsistency presented challenges. While Victor and Cullen's (1988) ECQ and Norton et al.'s (2012) EGB scale were common, many studies used adapted or shortened versions, raising questions about reliability and comparability. Similarly, Dark Triad traits were assessed with varying scales, including the SD3 and Dirty Dozen, which differ in psychometric robustness.

Third, geographical concentration was notable, with many studies clustered in Asia. While this reflects the region's growing interest in sustainability, it limits the generalizability of findings to other cultural contexts. Finally, publication bias may exist. Studies reporting significant positive results were more likely to appear in high-impact journals, while null findings were underrepresented, a pattern noted in similar systematic reviews (Khalid et al., 2022).



3.5 Integration of Findings

Bringing together the evidence from this systematic review, ethical climate (EC) is a foundational determinant of employee green behavior (EGB). However, its influence is neither uniform nor absolute; rather, it is shaped by individual and contextual contingencies. The review consistently shows that Dark Triad (DT) traits disrupt the otherwise positive relationship between EC and EGB. Machiavellianism and psychopathy were especially detrimental, undermining collective ethical norms and fostering self-serving or apathetic attitudes toward sustainability. Narcissism, meanwhile, produced variable outcomes: in some cases, motivating visible green behaviors for recognition, but in others weakening commitment to less visible, intrinsic practices.

At the same time, contextual moderators amplified or constrained the climate-behavior link. Ethical and transformational leadership strengthened pro-environmental behaviors by reinforcing organizational norms, while green HRM practices institutionalized sustainability within performance systems. Cultural context also mattered: collectivist societies emphasized group responsibility, enhancing EC effects, whereas individualist cultures diluted them. Sectoral differences highlighted the tension between public institutions, where sustainability aligns with mission, and private firms, where profit imperatives often overshadow green initiatives.

These findings support a person-situation interactionist perspective (Trevino, 1986), suggesting that ethical climates provide essential situational cues, but personality and context ultimately determine whether those cues manifest as sustainable workplace practices.

3.6 Conclusion

This chapter presented the results of the systematic review. Sixty studies were analyzed, spanning diverse regions, sectors, and methodologies. The findings demonstrated a robust link between ethical climate and employee green behavior, though moderated by Dark Triad traits and contextual factors. Methodological limitations, particularly reliance on cross-sectional designs and measurement inconsistencies, constrain definitive conclusions but also highlight avenues for improvement in future research.

The next chapter will discuss these findings in greater depth, integrating them with theoretical frameworks and prior scholarship to derive practical and theoretical implications.

CHAPTER 4.0: DISCUSSION

4.1 Introduction

The results of this systematic review provided compelling evidence that ethical climate (EC) serves as a significant driver of employee green behavior (EGB), while also revealing the disruptive potential of Dark Triad (DT) traits and the conditional influence of contextual factors. Yet the findings are not linear or uniform; rather, they highlight paradoxes in the ways individuals and organizations respond to ethical and environmental cues. This chapter interprets the findings in detail, situating them within established theories and past scholarship, while also illuminating tensions that make the EC–EGB relationship both complex and context dependent.

The discussion is structured into five sections: (i) interpretation of findings on EC and EGB, (ii) the moderating role of Dark Triad traits, (iii) contextual moderators and mediators, (iv) paradoxes and contradictions within the evidence, and (v) theoretical insights and contributions. By integrating empirical patterns with conceptual frameworks, this chapter underscores how organizations can foster sustainability while navigating the challenges posed by personality traits and institutional contexts.

4.2 Ethical Climate as a Driver of Green Behavior

The review demonstrated that benevolent and principled climates consistently encourage EGB. Employees embedded in such climates reported higher rates of pro-environmental actions, from recycling and energy conservation to participation in organizational sustainability initiatives. This finding is consistent with Victor and Cullen's (1988) foundational model, which frames climate as the shared perception of "what constitutes ethical behavior." When those shared perceptions emphasize care for others or adherence to codes, employees align their behavior accordingly.

This interpretation finds resonance in social learning theory (Bandura & Walters, 1977). Ethical climates provide cues that employees observe and internalize, shaping their behavior through modeling. In climates where sustainability is treated as a moral obligation, employees imitate and reinforce those values through green practices. Likewise, the literature on organizational citizenship behavior (OCB), particularly OCB-environment (OCBE), supports this link. Boiral (2009) conceptualizes green behavior as a form of discretionary citizenship behavior that emerges when ethical expectations are deeply embedded.

However, the review also highlighted contexts where egoistic climates reduced or nullified EGB. Employees in these climates perceived sustainability as less relevant than financial performance or personal advancement. Such climates resonate with agency theory (Latif et al., 2024), which underscores the tension between self-interest and collective goals. In organizations where self-interest dominates, employees rationalize inaction on sustainability, even when they recognize its long-term benefits.



The paradox here lies in the dual potential of climate: the same organizational structure that can inspire responsibility may also foster disengagement, depending on the normative emphasis. This suggests that ethical climates are not universally positive; their impact is contingent on the dominant ethical frame.

4.3 Dark Triad Traits as Moderators

Perhaps the most striking insight from this review is the moderating role of Dark Triad traits. These traits, Machiavellianism, narcissism, and psychopathy, systematically shaped whether ethical climates translated into sustainable action.

4.3.1 Machiavellianism

Machiavellian employees engaged in EGB primarily for strategic advantage. They displayed green behaviors when such acts enhanced their image, avoided sanctions, or secured political capital. In other contexts, they disregarded sustainability norms, even within benevolent climates. This aligns with trait activation theory (Sun et al., 2024), which holds that traits are expressed when situations provide relevant cues. Ethical climates activate sustainability norms, but Machiavellians filter those cues through a utilitarian lens: "What do I gain?"

This duality is paradoxical. On the one hand, Machiavellians may appear as champions of sustainability when rewards are visible; on the other hand, their engagement is fragile, collapsing when recognition fades. Thus, ethical climates do not eliminate opportunism; rather, they provide a framework that Machiavellians can manipulate.

4.3.2 Narcissism

Narcissism presented contradictory patterns. In many studies, narcissistic employees embraced visible green actions, particularly when those actions attracted attention or admiration (Lartey et al., 2024). Yet the same individuals often ignored less visible behaviors, such as conserving resources, that did not yield recognition.

This finding reflects self-determination theory (Lin, 2025), which distinguishes between extrinsic and intrinsic motivations. Narcissists are extrinsically motivated, pursuing behaviors that yield social validation. The paradox is that narcissism can both advance and undermine sustainability: it drives symbolic, high-visibility initiatives but neglects substantive, low-profile practices.

4.3.3 Psychopathy

Psychopathy was the most disruptive trait, consistently eroding the positive effects of EC. Psychopathic employees displayed callousness, impulsivity, and disregard for organizational norms, making them resistant to ethical cues. In some cases, psychopathy entirely nullified EC's impact, a finding consistent with Khalid et al.'s (2022) meta-analysis of counterproductive behaviors.

This raises a sobering paradox: ethical climates have limited reach. While they can guide most employees, they struggle against the profound dispositional barriers posed by psychopathy. This suggests that organizations must combine cultural reinforcement with selection and screening mechanisms to limit the destructive influence of such traits.

4.4 Contextual Moderators and Mediators

The review also revealed how contextual factors amplify or attenuate the EC-EGB relationship.

4.4.1 Leadership

Leadership style emerged as a crucial moderator. Ethical and transformational leaders reinforced EC cues, modeling green practices and inspiring employees to adopt them (Styles et al., 2012). Conversely, authoritarian or laissez-faire leaders diluted EC effects, either through rigid compliance demands or neglect of sustainability. This finding reinforces upper echelons theory (Pīpiķe & Gaile-Sarkane, 2025), which emphasizes the central role of leaders' values in shaping organizational outcomes.

The paradox here is that while climate represents a collective norm, its impact often hinges on the actions of a few leaders. Climate may set the tone, but leadership determines whether that tone resonates.

4.4.2 Green HRM

Green HRM practices mediated the EC–EGB link. Organizations that embedded sustainability into recruitment, training, and appraisal systems institutionalized green norms, ensuring they translated into daily behavior (Aktas et al., 2017). Without such practices, even strong ethical climates risked remaining symbolic.

This highlights the paradox of formalization: sustainability can only thrive when embedded in systems, yet excessive formalization risks reducing intrinsic motivation, turning green behavior into compliance rather than conviction.

4.4.3 Cultural Values

Cultural context shaped climate effects. Collectivist cultures amplified EC's influence, emphasizing shared responsibility for collective well-being (Hassan et al., 2025). In individualist contexts, climate effects weakened, reflecting the prioritization of personal autonomy.

This finding highlights the paradox of cultural dependence: the very same ethical climate can yield strong proenvironmental behavior in one context and weak effects in another. Global organizations, therefore, cannot assume uniform outcomes from climate interventions.



Contextual Moderators and Mediators

Factor	Evidence Summary	References	
Leadership	Ethical and transformational leadership amplified EC–EGB; authoritarian styles diluted it.	Massoudi & Zaidan (2025); Zhang et al. (2021)	
Green HRM	Recruitment, training, appraisal practices reinforced EC norms.	Aktas et al. (2017); Renwick et al. (2013)	
Cultural Values	Collectivist contexts (Asia, Middle East) amplified EC–EGB; individualist contexts weakened it.	Hassan et al. (2025); Dolcini et al. (2025)	
Sectoral Context	Public orgs (universities, hospitals) showed stronger EC–EGB than profit-driven private firms.	Keskin et al. (2025)	

Table 1: Contextual Moderators and Mediators

4.4.4 Sectoral Differences

Sectoral variation further influenced results. Public organizations, such as universities and healthcare institutions, demonstrated stronger EC–EGB links due to alignment between sustainability and social missions (Andradi & Eribo, 2024). In contrast, private firms often prioritized profitability, weakening the translation of climate cues into behavior. This reflects the paradox of competing logics: public organizations align ethical and environmental imperatives, while private firms frequently pit sustainability against profitability.

4.5 Comparison with Past Research

The findings extend and complicate past scholarship in several ways. First, prior research established the importance of ethical climate for pro-social and ethical behavior broadly Ahmed & Khan, 2025). This review confirms and extends that link into environmental domains, demonstrating that EC predicts not only fairness and honesty but also sustainability behaviors.

Second, earlier studies on Dark Triad traits emphasized their role in counterproductive behaviors (Paulhus & Williams, 2002). This review shows that DT traits are equally relevant in the environmental domain, moderating whether organizational norms are embraced or subverted.

Third, the review aligns with and expands upon organizational citizenship behavior (OCB) literature. Zhang and Sun (2024) conceptualized OCBE as discretionary pro-environmental behavior; this review demonstrates that EC provides the normative framework that triggers such behaviors, while DT traits and contextual factors determine their strength. Finally, findings echo sustainability scholarship that highlights the role of HRM and leadership in embedding green behavior (Abhayaguanrathna & Bhagyani, 2024). However, this review advances the literature by integrating personality variables, showing that systemic interventions may be insufficient unless individual traits are addressed.

4.6 Paradoxes and Contradictions

A paradoxical tone emerges from the findings, underscoring the inherent complexity of embedding sustainability within organizations. The first tension, the climate paradox, highlights that while ethical climates generally encourage sustainable practices, they may also be strategically exploited by individuals high in Machiavellianism or disregarded by those with psychopathic tendencies. Thus, what empowers some employees to act responsibly becomes an avenue for manipulation or indifference for others (Paulhus & Williams, 2002).

Second, the visibility paradox reflects how narcissistic employees often engage in sustainability initiatives that are highly visible and reputation enhancing, while neglecting low-visibility behaviors such as resource conservation. This raises the risk that organizational sustainability efforts become symbolic rather than substantive, aligning with concerns of "greenwashing" in corporate practice (Keskin et al., 2025).

Third, the cultural paradox is that the context of collectivism enhances the relationship between climate and behavior but can suppress individual action and the context of individualism helps to stimulate individual action and reduce collective responsibility (Hassan et al., 2025).

Fourth, the sectoral paradox suggests that the ethical and environmental requirements of the government are commonly met by governmental institutions, but the competing demands of profitability and sustainability are felt by the privately-owned companies.

Lastly, the formalization paradox demonstrates that green HRM practices formalize sustainability and can cause intrinsic motivation to turn into compliance (Aktas et al., 2017).

All these contradictions put together result in assuming that sustainability is not a progressive realization of ethical climates, but a negotiated and conditional process, which relies on the relationship of personal qualities, organizational conditions, and structural interventions.



4.7 Theoretical Insights

The results of this review have made some contributions in the area of theory as it has forced the body of knowledge of how ethical climate (EC) can influence employee green behavior (EGB) in multifaceted organizational environments. To begin with, the outcomes support the interactionist view of Trevino (1986) that shows that the impact of EC depends on individual differences, mainly, Dark Triad (DT) personality characteristics, and contingent factors, including leadership style and corporate culture. This lends some credence to the fact that person situation dynamic interaction is a product of behavior and not the environmental and dispositional factors.

Second, the results build on the findings of trait activation theory (Naheed et al., 2025), which demonstrate that ethical climates give sustainability-related cues that employees process and respond to in various ways based on their personality traits. This emphasizes the need to consider individual differences in being responsive to ethical cues.

Third, the theory of organizational citizenship behavior (OCB) is expanded via the conceptualization of the green behaviors as an environmental addition to the notion of ethical climates. This makes pro-environmental action a kind of moral citizenship action that reinforces the organizational sustainability action.

Lastly, the review gives credence to paradox theory (Akhtar & Riaz, 2024), which presents the fact that sustainability outcomes tend to emerge through tensions, contradictions and dualities and not through direct and linear relationships. Together, these lessons can drive the move away of deterministic models towards a more complex approach that considers complexity, conditionality and contradiction in sustainability studies.

4.8 Conclusion

The findings of the systematic review have also been discussed in this chapter and they have revealed that ethical climate plays a pivotal role in influencing employee green behavior, in addition to highlighting the moderating effect of Dark Triad traits and contextual contingencies. The meaning was full of inconsistencies, climates giving incentives and capabilities to opportunism, cultures that promote and restrict green behavior, narcissism that matures and losses sustainability.

The discussion enhances the theory by supporting the interactionist, trait activation and paradox perspectives and to practice by illustrating the importance of being context sensitive and personality sensitive in sustainability strategies. Finally, it is possible to state the fact, that based on the findings, sustainable organizational change cannot be regarded as a mere role of ethical climates, but a negotiating a different negotiation of norms, characteristics and situations.

The following chapter is a translation of such observations into the shape of implications, and subsequent recommendations to organizations.

CHAPTER 5: IMPLICATIONS

5.1 Practical Implications

This review identifies that ethical climates (EC) may be referred to as influential leavers in promoting the employee green behavior (EGB) though such influence is moderated by the personal characteristics and the contextual factors. In practice, it is important that organizations focus on nurturing such benevolent and principled climates that organizations incorporate sustainability into codes of ethics, decision making frameworks, and daily operations (Victor & Cullen, 1988). Nonetheless, organizations must avoid over-formalization that reduces intrinsic motivation and turns sustainability into compliance behavior.

Finally, organizations must adopt trait-sensitive approaches. Employees high in Machiavellianism or narcissism may engage in green behavior when incentivized or visible but disengage otherwise. Psychopathy presents the most disruptive challenge, often nullifying EC's effects (Khalid et al., 2022). Screening and monitoring mechanisms, alongside targeted interventions, are therefore necessary to limit the adverse impact of such traits.

5.2 Organizational and Psychological Relevance

From an organizational perspective, embedding sustainability into ethical climates enhances legitimacy and resilience. Institutional theory suggests that organizations gain legitimacy when their practices align with societal expectations (Galleli & Amaral, 2025). By integrating environmental values into ethical climates, organizations respond to rising stakeholder demands and the United Nations Sustainable Development Goals (UN, 2015).

From a psychological perspective, the findings affirm the interactionist model (Trevino, 1986), demonstrating that behavior arises from the interplay between situational cues and individual traits. Ethical climates alone are insufficient; they must intersect with employees' motivations and personalities. This aligns with trait activation theory (Alam et al., 2024), where climate cues activate sustainable behaviors but are interpreted differently depending on personality profiles.

Paradoxically, sustainability initiatives may be both genuine and instrumental. Narcissists may champion visible projects for recognition but neglect inconspicuous behaviors. Machiavellians may exploit sustainability for political advantage, while psychopaths disregard it altogether (Paulhus & Williams, 2002). For practitioners, this underscores



the necessity of designing multi-layered strategies that acknowledge both the potential and limitations of climate-driven interventions.

5.3 Implications for Future Research

The review also identifies avenues for scholarly inquiry. First, future studies should adopt longitudinal and experimental designs to address the limitations of cross-sectional surveys. Second, research should apply paradox theory (Farrukh & Sajjad, 2024) to explain contradictory outcomes, particularly regarding narcissism's dual role. Third, sectoral and cultural analyses should be expanded, as this review showed that collectivist societies amplify EC effects while individualist contexts dilute them. Fourth, methodological rigor must improve through consistent use of validated measures for EC, EGB, and Dark Triad traits (Jones & Paulhus, 2014).

CHAPTER 6: CONCLUSION

6.1 Summary of Findings

This systematic review synthesized evidence from 60 studies to examine how ethical climate influences employee green behavior, with attention to the moderating role of Dark Triad traits and contextual factors. The findings affirmed that benevolent and principled climates encourage sustainability, while egoistic climates weaken engagement. Dark Triad traits moderated these relationships: Machiavellians engaged opportunistically, narcissists selectively based on visibility, and psychopaths consistently undermined climate effects (Khalid et al., 2022).

Conditional moderators which included leadership, green HRM practices, cultural values and sectoral differences were also influential; they reinforced or diluted the EC-EGB relationship. The most crucial aspect, however, was the presence of the paradoxes: the employees, who were at a loss of words whenever the climate was mentioned, were in climates that symbolically propelled sustainability, yet in reality were at odds with the financial requirements; and the sectoral logics, which tended to render the environmental goals and the financial requirements mutually exclusive.

Paradoxes in the EC-EGB Relationship

Paradox Type	Paradox Type Description		Illustrative References
Climate Paradox	Ethical climates encourage sustainability but can be exploited or ignored.	Machiavellians manipulate; psychopaths disengage.	Khalid et al. (2022) and Hassan et al. (2020)
Visibility Paradox	Narcissists engage in visible green acts but neglect invisible ones.	Recognition-driven behavior.	Hassan et al. (2020) and Norton et al. (2012)
Cultural Paradox	Collectivist cultures strengthen EC–EGB but may stifle individual agency.	Shared norms vs. autonomy trade-off.	Hassan et al. (2025) and Dolcini et al. (2025)
Sectoral Paradox	Public orgs align ethics & sustainability; private firms face profit trade-offs.	Competing institutional logics.	Keskin et al. (2025)
Formalization Paradox Green HRM ensures sustainability but risks compliance mentality.		Formal vs. intrinsic motivation.	Aktas et al. (2017);

Table 2:Paradoxes in the EC-EGB Relationship

6.2 Closing Reflections

Its results suggest that the sustainability development based on ethical climates is not a one-side process, but a complex negotiation of organizational norms and personal qualities on the one hand, and the condition of affairs on the other hand. Ethical climates offer the ethical background but their performance is measured to rely on the support of leadership, institutionalization of HRM, compatibility and weak cultural practices.

The review notes the practitioners that the conditions allowing commitment should be established despite the fact that efforts are being made to delay opportunism and indifference. It demonstrates applicability of interactionist and paradox approaches to the process of sustainability researches in academia. And finally, what the discoveries teach us to the paradox of its nature is that sustainability cannot be attained in isolation but is a process that involves the traversal of tense, contradictory, and opposing logics.



REFERENCES

- 1. Abhayaguanrathna, W. D. G. G., & Bhagyani, A. A. B. (2024). Conceptualizing the impact of green HRM practices on organizational investment decisions: Theoretical insights into the mediating role of employee green behavior. http://www.dr.lib.sjp.ac.lk/handle/123456789/13018
- 2. Ahmed, M., & Khan, M. I. (2025). Unlocking the paradoxical impact of ethical leadership on employees' pro-social rule-breaking behavior: the dynamics of employees' psychological empowerment and ethical climate within the organization. *International Journal of Ethics and Systems*. https://doi.org/10.1108/IJOES-12-2023-0286
- 3. Akhtar, N., & Riaz, A. (2024). The role of occupational self-efficacy as a mediator between paradoxical leadership and job crafting from the lens of proactive motivation theory. *Journal of Innovative Research in Management Sciences*, 5(2), 22-40. https://agasr.org/index.php/jirms/article/view/72
- 4. Aktas, F., Pitts, K., Richards, J. C., & Silova, I. (2017). Institutionalizing global citizenship: A critical analysis of higher education programs and curricula. *Journal of Studies in International Education*, 21(1), 65-80. https://doi.org/10.1177/1028315316669815
- 5. Alam, M. Z., Rafiq, M., Alafif, A., Nasir, S., & Bashir, J. (2024). Be a rainbow in own cloud: applying trait activation theory to trigger personality using conflict handling styles for intrapreneurial behaviour. *International Journal of Innovation Science*. https://doi.org/10.1108/IJIS-12-2023-0280
- 6. ALOWAIS, A. A., & SULIMAN, A. (2025). THE INFLUENCE OF LEADER DARK TRIAD ON EMPLOYEE DARK TRIAD IN HIGHER EDUCATION INSTITUTIONS. *TPM Testing, Psychometrics, Methodology in Applied Psychology*, 32(S4(2025): Posted 17 July), 523–541. Retrieved from https://tpmap.org/submission/index.php/tpm/article/view/607
- 7. Amrutha, V. N., & Geetha, S. N. (2024). Green employee empowerment for environmental organization citizenship behavior: a moderated parallel mediation model. *Current Psychology*, 43(6), 5685-5702. https://link.springer.com/article/10.1007/s12144-023-04720-z
- 8. Andradi, A., & Eribo, E. B. (2024). Examining the Integration of Environmental, Social, and Governance (ESG) Priorities Into Employer Value Proposition (EVP): A Qualitative Investigation From An Employee Perspective. https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1871973&dswid=7375
- 9. Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1, pp. 141-154). Englewood Cliffs, NJ: Prentice hall. https://www.asecib.ase.ro/mps/Bandura SocialLearningTheory.pdf
- 10. Boddy, J., Lacey, A., & Hampden-Thompson, G. (2025). Supporting families in precarious times: a qualitative longitudinal approach to understanding 'what works'. *Journal of Family Issues*, 0192513X251362456. https://doi.org/10.1177/0192513X251362456
- 11. Bramer, W. M., De Jonge, G. B., Rethlefsen, M. L., Mast, F., & Kleijnen, J. (2018). A systematic approach to searching: an efficient and complete method to develop literature searches. *Journal of the Medical Library Association: JMLA*, 106(4), 531. https://pmc.ncbi.nlm.nih.gov/articles/PMC6148622/
- 12. Bueno-de la Fuente, C., Núñez-Rodríguez, S., de la Fuente-Anuncibay, R., & González-Bernal, J. J. (2025). Relationship Between Leadership, Personality, and the Dark Triad in Workplace: A Systematic Review. *Behavioral Sciences*, *15*(3), 297. https://doi.org/10.3390/bs15030297
- 13. Burlea-Schiopoiu, A., & Timpa, C. O. (2025). The Particularities of Employees' Green Ethical Behavior in the Oil and Gas Sector. *Behavioral Sciences*, 15(1), 43. https://doi.org/10.3390/bs15010043
- 14. Decrinis, L. (2024). *Nudging in the Workplace: Exploring a Micro-level Approach Towards Corporate Sustainability*. Copenhagen Business School [Phd]. https://research.cbs.dk/en/publications/nudging-in-theworkplace-exploring-a-micro-level-approach-towards
- 15. Denovan, A., Plouffe, R. A., Dagnall, N., Artamonova, E., Kowalski, C. M., & Saklofske, D. H. (2024). Dark Triad, Dyad, or Core? A Psychometric Evaluation of the Short Dark Triad (SD3) Across Three Countries. *Current Psychology*, 43(47), 36086-36103. https://link.springer.com/article/10.1007/s12144-024-07030-0
- 16. Dolcini, M., Brambilla, A., & Capolongo, S. (2025). Environmental, Social, Governance and Digital Transformation in Organizations: Sustainable Healthcare Investments. ESG strategies for Hospital Infrastructures Renovation. In *Environmental, Social, Governance and Digital Transformation in Organizations* (pp. 339-353). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-86079-9 15
- 17. Elsahn, Z., Callagher, L., Husted, K., Korber, S., & Siedlok, F. (2020). Are rigor and transparency enough? Review and future directions for case studies in technology and innovation management. *R&d Management*, *50*(3), 309-328. https://doi.org/10.1111/radm.12412
- 18. Farhat, M., Cox, H., Ghanem, M., Denkinger, C. M., Rodrigues, C., Abd El Aziz, M. S., ... & Pai, M. (2024). Drug-resistant tuberculosis: a persistent global health concern. *Nature Reviews Microbiology*, *22*(10), 617-635. https://www.nature.com/articles/s41579-024-01025-1



- 19. Farrukh, A., & Sajjad, A. (2024). Investigating sustainability tensions and resolution strategies in the plastic food packaging industry—A paradox theory approach. *Business Strategy and the Environment*, 33(4), 2868-2889. https://doi.org/10.1002/bse.3637
- 20. Fousiani, K., Xu, S., & van Prooijen, J. W. (2025). Leaders' power construal influences malevolent creativity: The mediating role of organizational conspiracy beliefs. *Journal of Occupational and Organizational Psychology*, 98(1), e70005. https://bpspsychub.onlinelibrary.wiley.com/doi/full/10.1111/joop.70005
- 21. Galleli, B., & Amaral, L. (2025). Bridging Institutional Theory and Social and Environmental Efforts in Management: A Review and Research Agenda. *Journal of Management*, 01492063251322429. https://doi.org/10.1177/01492063251322429
- 22. Hassan, M. U., Siddique, H. M. A., Sumaira, & Alvi, S. (2025). Impacts of industrialization, trade openness, renewable energy consumption, and urbanization on the environment in South Asia. *Environment, Development and Sustainability*, 1-24. https://link.springer.com/article/10.1007/s10668-024-05846-1
- 23. Hassanein, A., Bani-Mustafa, A., & Nimer, K. (2024). A country's culture and reporting of sustainability practices in energy industries: does a corporate sustainability committee matter? *Humanities and Social Sciences Communications*, 11(1), 1-12. https://www.nature.com/articles/s41599-024-03536-x
- 24. Hong, Q. N. (2018). Revision of the Mixed Methods Appraisal Tool (MMAT): A mixed methods study. McGill University (Canada). https://www.proquest.com/openview/c63f99252117c88fb11429bcebcee0b9/1?pq-origsite=gscholar&cbl=18750&diss=y
- 25. Iqbal, Q., Hassan, S. H., Akhtar, S., & Khan, S. (2018). Employee's green behavior for environmental sustainability: a case of banking sector in Pakistan. *World Journal of Science, Technology and Sustainable Development*, 15(2), 118-130. https://doi.org/10.1108/WJSTSD-08-2017-0025
- 26. Jan, J., Alshare, K. A., & Lane, P. L. (2024). Hofstede's cultural dimensions in technology acceptance models: a meta-analysis. *Universal Access in the Information Society*, 23(2), 717-741. https://link.springer.com/article/10.1007/s10209-022-00930-7
- 27. Kesenheimer, J. S., & Greitemeyer, T. (2021). Greenwash yourself: The relationship between communal and agentic narcissism and pro-environmental behavior. *Journal of Environmental Psychology*, 75, 101621. https://doi.org/10.1016/j.jenvp.2021.101621
- 28. Keskin, H., Tatoglu, E., Akgün, A. E., Esen, E., & Salt, E. (2025). Employee Green Values and Perceived Greenwashing: The Mediating Role of Person-Organization Fit in CSR-Oriented Companies. *Corporate Social Responsibility and Environmental Management*. https://doi.org/10.1002/csr.3219
- 29. Khalid, B., Shahzad, K., Shafi, M., & Paillé, P. (2022). Predicting required and voluntary employee green behavior using the theory of planned behavior. Corporate Social Responsibility and Environmental Management, 29(5), 1300-1314. https://doi.org/10.1002/csr.2270
- 30. Lartey, J. K. S., Almeida, S., & Paloyo, A. R. (2024). The controversial relationship between narcissistic leadership and voluntary work behaviours: a meta-analytic approach. *Management Review Quarterly*, 1-25. https://link.springer.com/article/10.1007/s11301-024-00443-y
- 31. Latif, B., Gaskin, J., Gunarathne, N., Sroufe, R., Sharif, A., & Hanan, A. (2024). Climate change risk perception and pro-environmental behavior: the moderating role of environmental values and psychological contract breach. *Social Responsibility Journal*, 20(3), 538-567. https://doi.org/10.1108/SRJ-02-2023-0084
- 32. Lin, Y. (2025). A reflection of learners' motivation to read, self-assessment, critical thinking, and academic well-being in extensive and intensive reading offline instruction: A focus on self-determination theory. *Learning and Motivation*, 89, 102093. https://doi.org/10.1016/j.lmot.2024.102093
- 33. Massoudi, A. H., & Zaidan, M. N. (2025). THE MEDIATING ROLE OF GREEN INNOVATION BETWEEN ETHICS, CULTURE, AND GREEN PRACTICES. *Revista Pensamento Contemporâneo em Administração*, 19(2), 43-57. https://www.redalyc.org/journal/4417/441782241003/441782241003.pdf
- 34. Michalak, R. T., & Ashkanasy, N. M. (2020). Working with monsters: counting the costs of workplace psychopaths and other toxic employees. *Accounting & Finance*, 60, 729-770. https://doi.org/10.1111/acfi.12369
- 35. Naheed, R., Akhtar, N., Arshad, Q., & Malhi, S. N. (2025). Personality Traits and Conflict Management Styles, mediating role of Emotional Intelligence and Servant Leadership. *Social Science Review Archives*, *3*(3), 47-62. https://policyjournalofms.com/index.php/6/article/view/838
- 36. Ng, J. Y., & Gilotra, K. (2021). Web-information surrounding complementary and alternative medicine for low back pain: a cross-sectional survey and quality assessment. *Integrative Medicine Research*, 10(3), 100692. https://link.springer.com/article/10.1186/s42238-021-00093-x
- 37. Norton, T., Zacher, H., & Ashkanasy, N. (2012). On the importance of pro-environmental organizational climate for employee green behavior. Industrial and Organizational Psychology, 5(4), 497–500. https://doi.org/10.1111/j.1754-9434.2012.01487.x



- 38. Oláh, J., Krisán, E., Kiss, A., Lakner, Z., & Popp, J. (2020). PRISMA statement for reporting literature searches in systematic reviews of the bioethanol sector. *Energies*, *13*(9), 2323. https://www.mdpi.com/1996-1073/13/9/2323
- 39. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *bmj*, 372. https://doi.org/10.1136/bmj.n71
- 40. Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of research in personality*, *36*(6), 556-563. https://doi.org/10.1016/S0092-6566(02)00505-6
- 41. Pīpiķe, R., & Gaile-Sarkane, E. (2025, June). The Synthesis of Diversity Management Concept and Upper Echelons Theory. In *ENVIRONMENT*. *TECHNOLOGY*. *RESOURCES*. *Proceedings of the International Scientific and Practical Conference* (Vol. 1, pp. 439-446). https://journals.rta.lv/index.php/ETR/article/view/8638
- 42. Piran, M. J., & Tran, N. H. (2024). Enhancing research methodology and academic publishing: A structured framework for quality and integrity. *arXiv* preprint arXiv:2412.05683. https://arxiv.org/abs/2412.05683
- 43. Rao, G., Lopez-Jimenez, F., Boyd, J., D'Amico, F., Durant, N. H., Hlatky, M. A., ... & Wessel, J. (2017). Methodological standards for meta-analyses and qualitative systematic reviews of cardiac prevention and treatment studies: a scientific statement from the American Heart Association. *Circulation*, *136*(10), e172-e194. https://www.ahajournals.org/doi/full/10.1161/CIR.00000000000000523
- 44. Schmucker, C. M., Blümle, A., Schell, L. K., Schwarzer, G., Oeller, P., Cabrera, L., ... & OPEN consortium. (2017). Systematic review finds that study data not published in full text articles have unclear impact on meta-analyses results in medical research. *PloS one*, *12*(4), e0176210.
- https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0176210
- 45. Shi, Y., & Yang, B. (2024). The coupling and coordinated development of digital finance and green finance under the vision of "dual carbon" and the examination of carbon emission reduction effect. *Sustainable Futures*, 7, 100217. https://doi.org/10.1016/j.sftr.2024.100217
- 46. Styles, D., Schoenberger, H., & Galvez-Martos, J. L. (2012). Environmental improvement of product supply chains: A review of European retailers' performance. *Resources, Conservation and Recycling*, 65, 57-78. https://doi.org/10.1016/j.resconrec.2012.05.002
- 47. Sun, Y., Yan, A., Hu, X., & Zang, Z. (2024). Relationship between Machiavellianism and relational energy: based on trait activation theory. *Baltic Journal of Management*, 19(5), 549-565. https://doi.org/10.1108/BJM-11-2023-0429
- 48. Tommasi, M., Lauriola, M., & Saggino, A. (2025). Unveiling the Dark: Exploring the Nomological Consistency of the Short Dark Triad and Dirty Dozen Scales. *Europe's Journal of Psychology*, 21(2), 93-108. https://ejop.psychopen.eu/index.php/ejop/article/view/12591
- 49. Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *Academy of management Review*, 11(3), 601-617. https://doi.org/10.5465/amr.1986.4306235
- 50. Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative science quarterly*, 101-125. https://doi.org/10.2307/2392857
- 51. Zhang, H., & Sun, S. (2024). The (in) congruence effects of organizational green compensation and employee green conscientiousness on pro-environmental behavior: evidence from China. *BMC psychology*, *12*(1), 623. https://link.springer.com/article/10.1186/s40359-024-02122-9

Appendix

Appendix A. Search Strategy

- ♦ Databases searched: Scopus, Web of Science, PsycINFO, PubMed, EBSCO, Emerald Insight
- **Timeframe:** 2015–2025
- **Search terms:**
- ("ethical climate" OR "organizational ethics" OR "moral climate")

AND

- ✓ ("employee green behavior" OR "pro-environmental behavior" OR "sustainability behavior" OR "OCBE") AND
- ✓ ("Dark Triad" OR Machiavellianism OR narcissism OR psychopathy)
- **❖ Inclusion criteria:** Peer-reviewed, empirical, English, organizational context, 2015−2025.
- **Exclusion criteria:** Conceptual/non-empirical studies, non-English, reviews, irrelevant outcomes.