Review

Leadership towards Sustainability: A Review of Sustainable, Sustainability, and Environmental Leadership

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Abstract: Leadership and sustainability have been researched and examined concurrently. There is considerable knowledge regarding sustainable, sustainability, and environmental leadership as separate areas of research and as effective leadership styles that facilitate the achievement of sustainability outcomes. While these research streams have developed alongside each other, there is limited knowledge about the similarities and differences between each of these three leadership approaches. To resolve this problem, the purpose of this paper is to review and compare key leadership themes from each sustainable, sustainability, and environmental leadership approach by: (a) identifying key leadership findings, (b) highlighting areas of similarity and difference, and (c) developing an integrated framework of leadership behaviors used to influence and direct organizations towards improved organizational performance with a view to understanding leadership towards sustainability. This comprehensive review is structured around a framework of three theoretical approaches: sustainable, sustainability, and environmental leadership, due to their currency in the literature and relationship to achieving sustainability goals. This review is needed to integrate the fragmented literature, build on and organize current knowledge, and develop a unified framework that combines findings on leadership practices and behaviors in terms of the types of leadership required for achieving sustainability performance. As such, this paper seeks to make a significant contribution to the scholarly literature by unifying existing frameworks and clarifying points of similarity and differentiation under the umbrella of 'leadership towards sustainability'. Hence, this paper seeks to be among the first to appraise and connect these three leadership approaches, thus filling a gap in the literature.

Keywords: sustainable leadership; sustainability leadership; environmental leadership; sustainability; leadership

1. Introduction

Organizations are facing environmental, social, and financial challenges, and leaders need to respond to and manage these differing priorities to enhance and create value in their firms. Accordingly, the concepts of leadership and sustainability have been studied extensively over the last 30 years. This literature is wide-ranging, with discussions on sustainable, sustainability, and environmental leadership linking a variety of interconnected leader behaviors, practices, and skills that achieve sustainability outcomes. However, an examination of the leadership literature reveals a lack of agreement and understanding of the types of leadership necessary for positive sustainability [1–4]. In more recent years, scholars have attempted to resolve this problem. Hallinger and Suriyankietkaew (2018) [5] conducted a large-scale systematic review of sustainable leadership, thus providing frameworks for scholars to facilitate research direction. Knight and Paterson (2018) [6] empirically investigated sustainability leadership and identified ten critical and ten prominent behaviors of sustainability leaders in five competency groupings. Their research refined a behavioral competency model that sustainability leaders require to respond effectively to sustainability challenges [6]. Boeske and Murray (2022) [7] take a step towards integrating and identifying the types of leadership required to achieve positive sustainability and develop an integrated framework of intellectual capital and sustainability leadership

practices. This review synthesized the existing sustainability leadership literature and identified and clarified leadership constructs [7]. Eustachio, Caldana, and Leal Filho (2023) [8] (p. 7) conducted a bibliometric analysis of sustainability leadership to extend previous research and provided a definition of sustainability leadership: 'as the person who motivates and includes followers in order to overcome sustainability barriers, addressing challenges, that meet the needs of the present without compromising future generations'. Althnayan, Alarifi, Bajaba, and Alsabban (2022) [9] researched social learning theory and stakeholder theory to study the relationship between environmental transformational leadership and sustainable performance. They found that environmental transformational leadership positively predicts environmental organizational citizenship behavior, leading to improved organizational sustainability performance [9]. By taking an altogether different approach, this paper aims to identify and compare the similarities and differences between sustainable, sustainability, and environmental leadership, specifically to address areas of overlap in the current literature. There is a shortage of research exploring the relationships between sustainable, sustainability, and environmental leadership, and as such, this paper will seek to understand these three leadership approaches that contribute to the implementation of sustainability initiatives and influence sustainability practices, thus filling a gap in the current literature.

Research on organizations implementing sustainability into their organizations has highlighted multiple benefits [10–12]. Not only are cost savings recognized [13–15], other benefits such as increased productivity [16], improved financial performance [17–20], increased employee morale [21,22]; improved organizational commitment [23]; increased efficiencies and reduced environmental impact [11,18,24]; and improved public image [23,25] among others, have been accomplished. The foundation for implementing sustainability practices depends on leadership [21]. Organizational change, improved performance, and growth depend on how leaders implement innovative strategies and processes [26–28]. Therefore, leadership is a critical factor that contributes to organizational success by setting direction and achieving organizational goals, creating a vision, and mobilizing resources. Thus, leaders require a variety of behaviors, competencies, and skills to achieve organizational success [29], particularly when implementing sustainability strategies.

Sustainability problems require leaders to direct, plan, manage, implement revised strategies, collaborate with employees, and mobilize resources to deliver desired sustainability objectives. As such, leadership is crucial in guiding employees and all stakeholders towards achieving the organization's sustainability goals (inclusive of social, and environmental concerns) [30]. Leaders enable and inspire change, encourage novelty and innovation, and assist organizational members to make sense of their environment [28,31]. Leaders use symbolic narratives/stories [32] to emphasize key values and build support for new strategies and policies with stakeholders [33–36]. Leaders directly influence employees and organizational systems such as formal policies and procedures that determine the structure and culture of an organization [37–40]. Collectively, leaders help to realize organizational goals, create efficiencies, and pursue growth opportunities [20,37]. Eide et al. (2020, p. 2) [26] identify that top managers who are personally motivated and value sustainability will include integrated sustainability strategies in their firms. Moreover, innovation and change are driven by top management/leaders [41], that help to facilitate an organizational climate where firms can be a positive force for social change [42]. Consequently, understanding the types of leadership necessary for positive sustainability presents significant value for economies.

This review is necessary because sustainability issues impact all organizations, and leaders have a responsibility to become more aware of how to address these problems [15,43]. While these different and separate studies of sustainable, sustainability, and environmental leadership have improved knowledge about how leaders contribute to and facilitate achievement towards sustainability goals, these terms are often used interchangeably without consideration of conceptual overlap. This review provides a new way of thinking about these leadership approaches by offering a comprehensive framework and a more focused interpretation of the leadership required to influence sustainability outcomes. To the best of

the author's knowledge, this is the first comprehensive review that combines sustainable, sustainability, and environmental leadership, as well as offering insights into how all three approaches to leadership contribute to sustainability in organizations.

This paper is structured as follows. First, an overview of the theoretical framework is discussed. Second, a description and definition of both leadership and sustainability are provided. Third, the review is organized around the three leadership approaches of (i) sustainable, (ii) sustainability, and (iii) environmental leadership, which identify similar and unique (different) findings from each leadership construct. Fourth, a discussion of the main key leadership findings from each leadership approach is made along with the main contributions of the paper. Finally, the limitations and conclusion of this review are discussed.

2. Framework

Sustainability practices present both risks and opportunities, and organizations will need clear and direct leadership to define how business is to be conducted to improve operational processes. This review revealed a growing body of knowledge about the three separate leadership approaches, namely sustainable leadership, sustainability leadership, and environmental leadership, and aims to integrate results from numerous studies that have categorized leadership behaviors. A combination of review, conceptual, and empirical papers were used to inform this paper. I have classified the articles as they pertain to leaders (managers/CEOs) of small, medium, and large firms that described leadership behaviors that enhanced and facilitated the implementation of sustainability initiatives, goals, and objectives. The level of analysis relates to individual leaders. The paper is organized around the integrative 'leadership towards sustainability' framework (see Figure 1), which illustrates the leadership behaviors required to influence individuals, teams, and work units towards achieving sustainability goals. The framework will be further discussed below. The articles discussed in this paper are representative of the key leadership findings in this domain. The world is facing great opportunities and change, and hence, leaders need to learn how to lead effectively and understand the behaviors and practices required so that sustainability outcomes can be achieved. The case for better understanding which types of leadership behaviors and practices promote sustainable enterprises is a strong one, and this review aims to synthesize and progress research by integrating similar and unique key leadership findings.
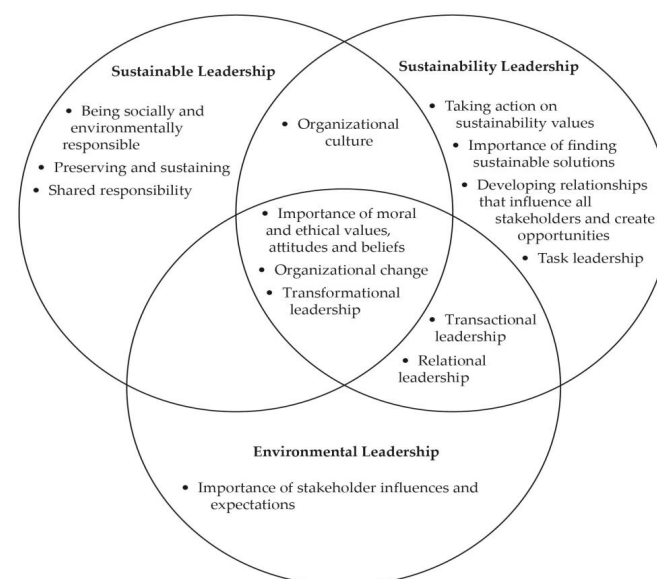

Figure 1. Leadership towards sustainability: a framework that compares similarities and differences among sustainable, sustainability, and environmental leadership. Source: own development.

3. Determining the Concepts of Leadership and Sustainability

3.1. Leadership

Researchers have developed many different definitions of leadership, and despite these differences, they share common elements. These elements are described as follows: (i) leadership is a group phenomenon as it involves both leaders and followers; (ii) leadership involves interpersonal influence to achieve organizational goals [44]; and (iii) leadership is goal-directed and action-oriented [44–46]. Various studies have defined the personality/attributes, style, and nature of leadership, developing various models from different perspectives, each with their own insights as well as limitations [40,47–49]. Collectively, these leadership theories provide a rich understanding of what is a complex concept.

Leadership is a dynamic 'process of influence' towards the achievement of goals and objectives [46,50]. Leaders provide inspiration, create opportunities, possess strong personal values, coach, and motivate. Leaders play a central role in guiding employees or group members towards goal achievement [36,46,51,52]. Leaders use appropriate interpersonal behaviors and styles to facilitate and guide individuals and groups toward task accomplishment (step-by-step programs of change), as well as encourage trust and commitment to promote adaptive short- and long-term change [50,53–55]. Leadership is essential to promote innovation and instill accountability towards sustainability goals [56]. There are many definitions of leadership, and this paper will concentrate on leadership behavioral processes and practices. As such, the focus will be on what leaders *do* rather than who they *are*! Hence, within the context of this review, 'leadership' will be defined as a process of influencing the activities of internal and external stakeholders who challenge the status quo, develop a clear vision, develop a forward plan (including organizational goals), make decisions, engage staff (collaboratively), and consider both short-term and long-term objectives [2,8,45,46,57,58].

3.2. Sustainability

The terms corporate social responsibility, corporate sustainability, sustainable development, sustainable productivity, and sustainability have been used interchangeably throughout the past seventy years, and each of these terms has different meanings [9,59,60]. In considering these different terms and definitions, 'sustainability' is the best term for the purpose of this paper. Quinn and Dalton (2009) [61] (p. 21) describe 'sustainability' as an organization's commitment to activities that demonstrate the inclusion of social and environmental concerns in daily business operations. Burawat (2019) [62] (p. 1018) concurs and argues that corporate sustainability encompasses environmental, social, and economic performance. Iqbal, Ahmad, and Halim (2020) [63] agree and argue that sustainability has a close association with corporate social responsibility, and this effective integration of ecological, environmental, and social performance provides a competitive advantage to firms. Sustainability has also been described as each of us becoming aware of choices that influence the intricate balance of the earth's social, ecological, and economic systems [2,64]. Sustainability research examines how organizations are encouraged to be more mindful of their long-term roles in the world's ecology and communities, with an emphasis on conserving and protecting natural resources [2,61,65]. As mentioned above, the term 'sustainability' will be used in this paper and will be defined as an 'organization's ability to meet existing business and stakeholder needs while maintaining and enhancing the natural and human resources needed for the future' [9,66,67]. This includes the triple bottom line concepts of social, environmental, and financial dimensions (balanced accordingly), which aim to improve resource efficiency and conserve energy consumption, as well as the adoption of organizational processes to meet sustainability goals [67–70]. For further information regarding these concepts, refer to discussions by [9,59,60,71,72]. There are significant sustainability challenges confronting leaders, and as such, a comprehensive review of the sustainable, sustainability, and environmental leadership literature is required.

4. Sustainable, Sustainability, and Environmental Leadership

This section aims to draw together a narrative of theoretical and empirical research that provides the foundation for this paper. Extant research suggests that sustainable, sustainability, and environmental leadership have emerged as 'topics in their own right in recent years' [73]. However, it is argued that these three leadership approaches are not separate schools of leadership, but a blend of leadership behaviors, styles, and practices drawn from previous leadership studies that have been applied within a definitive context [73]. As such, this paper will explore sustainable, sustainability, and environmental leadership to inform and underpin the contribution and purpose of this paper to clarify the processes and behaviors of leadership that contribute to the implementation of sustainability initiatives.

4.1. Sustainable Leadership

The emergence of sustainable leadership frameworks and concepts is variable and inconsistent. The extant literature reveals that there is no comprehensive definition of sustainable leadership; however, this review identified the following key findings: (1) being socially and environmentally responsible; (2) preserving and sustaining organizations; (3) shared responsibility; (4) the importance of moral and ethical behaviors; (5) the need for continuous improvement (organizational change); and (6) the importance of organizational culture in achieving sustainability outcomes (see Figure 1).

The first key leadership finding emphasizes the notion of being socially and environmentally responsible [5,65], by protecting the environment, including conservation, which honors the past in creating the future [3], as well as focusing on people and developing human-centered work practices such as valuing people, retaining employees, and so on [30,65]. Consideration of the triple bottom line perspective of caring for people, the planet, and profits that create value that is sustainable knowledge is emphasized [70]. The importance of developing business objectives to reduce the ecological footprint, energy inefficiency, and waste, thus having a social and environmental consciousness, is made [74]. According to McCann and Sweet (2014) [70] (p. 374), organizations are part of the natural world, and sustainable leaders create knowledge that combines concern for both the environment and society.

The second key leadership finding focuses on preserving and sustaining to create lasting and meaningful organizations whereby attention is given to both short- and long-term goals [3,5,74–78]. McCann and Holt (2011) [78] (p. 11) found that employees viewed employers as responsible for acting in a sustainable way and confirmed that they were concerned with the longevity of their companies. Hargreaves and Fink (2006) [3] argue that sustainable leadership is about planning and preparing for school leadership succession, while Davies (2007) [75] suggest that success should be sustainable and accessible to all. Avery and Bergsteiner (2011) [65] and Tideman et al. (2013) [74] concur that sustainable leadership is about taking a 'long-term' perspective in addition to ideas of customer value, quality products and services, and skilled and loyal employees. In their study, Suriyankietkaew et al. (2022) [77] (p. 5762) revealed that sustainable leaders adopt a strong long-term orientation, going beyond short-term profits with a focus on inclusive, sustainable growth for all. Kantabutra and Avery (2013) [72] (p. 40) agree and add that organizations need to balance both short- and long-term goals with being concerned for the organization now and into the future.

A third key leadership finding identifies sustainable leadership as a shared responsibility [3,65], concentrating on including various stakeholders. Tideman et al. (2013) [74] (pp. 24–25) recognize the importance of interconnectedness in relation to engaging and building effective relationships. In addition to this, Hargreaves and Fink (2006) [3] propose that both distributed and transformational leadership are most effective in promoting sustainability within the education sector. The elements of transformational leadership, whereby all employees are involved, elevated, encouraged, inspired, motivated, and contribute towards a shared responsibility, are most effective in promoting sustainability in firms [79]. However, Tideman et al. (2013) [74] (pp. 26–27) argue that sustainable leadership

is broader than transformational leadership—both in scope and depth—and identify the importance of leadership mindsets needed to empower organizations towards sustainable value. Nisha et al. (2022) [76] argue that sustainable leadership promotes continuous improvement by focusing on a shared leadership approach. Burawat (2019) [62] (p. 1031) acknowledges the importance of creating communities and cooperation among stakeholders to develop value in the long term. Liao (2022) [80] argues for leader behaviors that meet the needs of stakeholders, thus creating long-term value for all. Avery and Bergsteiner (2011) [65] identified twenty-three leadership practices (a 'honeybee' philosophy), emphasized the inclusion of stakeholders, and recommended a social and sharing approach when implementing sustainability objectives.

A fourth key leadership finding features the importance of moral and ethical behaviors. Hargreaves and Fink (2006) [3] argue that sustainable leadership is founded on moral considerations and Svensson and Wood (2007) [81] (p. 260) extend this by suggesting that leaders need to be ethical and meaningful to bring about positive change. Suriyankietkaew et al. (2022) [77] (p. 5762) confirm that ethics guide people's values and allow them to 'do the right things' thus leading to pro-environmental behaviors with a focus on social and environmental responsibilities. Kantabutra and Avery (2013) [72] (p. 42) found that being ethical is a core principle of sustainable 'honeybee' enterprises (which is a sophisticated stakeholder, social, and sharing approach). They point out that ethical behavior is difficult to define and confirm that acting 'ethically' is difficult for managers operating on short-term principles [72]. However, they argue that ethical behaviors (such as being transparent and 'doing the right thing') can protect the organization and enhance organizational sustainability in a number of ways [65,72]. Hallinger and Suriyankietkaew (2018) [5] (p. 3) argue that values underlie conceptions of sustainable leadership, and examples of values include moderation, prudence, mutual respect, the value of individuals, excellence, innovation, quality, and ethical behavior. Nisha et al. (2022) [76] provide a different set of values, and examples include judiciousness, development, common regard, consideration of people, and behaving morally. Hu, Chang, Lee, Yen, and Ting (2023) [82] suggest that sustainable leadership shapes the behaviors and values of the top management team towards the development of sustainable values. Hence, the importance of moral and ethical behaviors and values is a significant aspect of implementing sustainability in all firms.

A fifth key leadership finding highlights the need for continuous improvement (organizational change) to remain competitive [63,76]. Here, Svennson and Wood (2007) [81] accept that sustainable leadership is a continual and iterative process that is highly dynamic and innovative as creative ways are needed to solve problems. Tideman et al. (2013) [74] (p. 25) support this idea and argue that creativity and innovation are required to empower organizations towards sustainable value. Avery and Bergsteiner (2011) [65] support this notion and maintain that leaders should foster systemic innovation. Nisha et al. (2022) [76] suggest that strong leadership is required to sustain competitive advantage and achieve long-term accomplishments by focusing on the importance of contemporary thinking and data sharing to achieve sustainability goals. Dominguez-Escrig and Mallen-Broch (2023) [56] (p. 321) take a slightly different approach and argue that 'stewardship leader behavior' fosters experimentation, risk-taking, and interaction with the external environment, thus promoting innovation through learning to resolve sustainability problems. This research on continuous improvement and organizational change has improved our understanding of the leadership components that promote sustainability in organizations.

Leaders play a crucial role in building, maintaining, and determining an organization's culture [39]. This is the sixth key leadership finding. The values and norms of business leaders determine the culture of their organizations, and as such, organizational culture may be defined as the underlying set of key values, beliefs, understandings, and norms shared by employees in a firm [39]. Kantabutra and Avery (2013) [72] (p. 48) posit that organizational culture revolves around a set of commonly held values and shared beliefs. In their study of sustainable leadership 'honeybee' practices at a leading Asian industrial conglomerate, they found that the organizational culture revolved around its shared val-

ues and vision [72]. To embed the culture, the Chief Executive Officer (CEO) personally communicates with new employees to share the company's vision (clearly articulated), core values, corporate philosophy, and code of conduct (Kantabutra and Avery, 2013) [72] (p. 48). Sustainable organizations strive to preserve the core values and ideas that bind the members together, and values and beliefs are widely shared and provide the rules for employee behavior, which also helps employees identify desirable sustainability behaviors [72,74]. Hallinger and Suriuankietkaew (2018) [5] emphasize that sustainable leaders shape organizational culture, focus on continuous improvement, possess an innovation capacity, and implement systemic change in their firms. Within the context of sustainable leadership, organizational culture may be defined as the process whereby the corporation and its individual members embrace a concern for the natural environment in such a way that it becomes an integral component of the organization's core values, which are inclusive of social responsibilities [74,76,81]. As purported by Schein (2010) [39], leadership and culture are mutually exclusive, as organizational culture guides the beliefs, values, and behaviors of organizational members.

The key findings identified above illustrate sustainable leadership behaviors and practices that enhance business performance and contribute to positive business outcomes [65,77]. As highlighted in this section, sustainable leadership is not linked to any specific group of leadership behaviors, styles, or practices. Rather, the literature on sustainable leadership can be viewed as applying a broad range of sustainable practices whereby leaders are recognized as the main drivers of change and innovation and where sustainable leadership is required at all levels of a firm [83,84]. Taken together, the discussion leads to Proposition 1 (below). A review of the key findings from the sustainability leadership literature is discussed next.

Proposition 1. *Sustainable leaders incorporate a combination of six key leadership findings (1. being socially and environmentally responsible, 2. preserving and sustaining organizations, 3. shared responsibility, 4. importance of moral and ethical behaviors, 5. the need for continuous improvement (organizational change), and 6. the importance of organizational culture) when implementing and embedding sustainability objectives in their firms.*

4.2. Sustainability Leadership

Sustainability leadership reaffirms the importance of existing knowledge to expand our understanding of leadership and what it means to lead and implement sustainable outcomes. This section will examine the key findings from the sustainability leadership literature that best promote sustainability practices. The key findings ascertained include the following: (1) taking action on sustainability values (including task and transactional leadership); (2) the importance of finding sustainable solutions demonstrating values, ethics, and care; (3) developing relationships that influence all stakeholders and creating opportunities to generate solutions (including relational and transformational leadership); (4) leading organizational change; and (5) organizational culture (see Figure 1).

The first key leadership finding of sustainability leadership is taking action on sustainability values [6,57,85–87], and economic imperatives make this a necessary objective. Organizations must achieve solutions that are both sustainable and economically profitable [61]. Several authors explore the notion of task-oriented leadership as being critical when implementing sustainability processes in their organizations [88]. Aspects of task leadership competencies include planning for contingencies, communicating, mobilizing action in the direction of established goals, and coordinating and monitoring activities [50,89,90]. Features of task leadership are highlighted in Quinn and Dalton's (2009) [61] (p. 24) qualitative study of senior leaders who adopted principles, strategies, policies, and practices of sustainability. Their findings led to the development of a framework of leadership called 'Tasks of Leadership' which include: (i) setting direction, (ii) creating alignment, and (iii) maintaining commitment [61]. They espouse that leaders need to reform, restructure, and redesign their organizations if the goals of sustainability are to be achieved (Quinn and

Dalton, 2009) [61] (pp. 22–24). Epstein, Buhovac, and Yuthas (2010) [91] support this notion; however, they stress that to improve the implementation of sustainability strategies, key performance measures should be identified. Together, they also identify the significance of performance evaluations, incentive systems, and organizational design in motivating employee behaviors towards implementing corporate sustainability (Esptein et al. 2010) [91] (p. 46). Strand (2014) [36] concurs and reinforces the importance of supporting structures in addition to key performance indicators being established. Benn, Dunphy, and Griffiths (2014) [92] highlight that transactional leadership is necessary when complying with legislative requirements. Knight and Paterson (2018) [6] (p. 569) also support the notion that sustainability leaders are results-driven and have the ability 'to make things happen'. In this context, sustainability leaders plan for and develop business goals and objectives that support the implementation of sustainability initiatives in their firms.

Sustainability leaders, as discussed in this section, recognize the significance of the sustainability challenges facing organizations and acknowledge the importance of finding sustainable solutions that demonstrate values, ethics, and care. This is the second key leadership finding. The importance of ethics, values, and finding innovative solutions to solve sustainability problems is highlighted in this section [6,57,86,92,93]. Ferdig (2007) [2] (p. 26) implies that people need to lead their organizations and account for their impact on the earth, society, and the health of global and local communities. Quinn and Dalton (2009) [61] (p. 21) suggest that businesses are being called upon to take responsibility for their organization's impact on the natural environment. Crews (2010) [1] and Strand (2014) [36] expand this further, arguing that sustainability is not a management fad but a rebalancing of economic objectives with environmental pressures and changing societal expectations. Metcalf and Benn (2013) [4] (p. 370) acknowledge that organizations operate in a dynamic environmental, economic, and social system. Burns et al. (2015) [86] and Wang, Van Wart, and Lebredo (2014) [94] emphasize that leaders must work towards finding answers to address problems of climate change and social inequity. Knight and Paterson (2018) [6] concur and add that generating ideas, being willing to challenge established views, and embracing change with optimism are essential competencies of sustainability leaders. Nicholson and Kurucz (2019) [93] (pp. 25, 39) suggest that a moral theory of 'ethics of care' can highlight the ethical dimensions of relational leadership for sustainability. Galpin and Whittington (2012) [87] (p. 42) claim that values provide a source of motivation and are key components in ensuring that the sustainability agenda is embedded. As outlined above, sustainability leadership features the importance of values, ethical viewpoints, and embedding sustainability values to find solutions so that sustainability goals are realized.

Several researchers promote the importance of developing relationships that influence all stakeholders and creating opportunities to generate solutions [1,7,73,86,95]. This is the third key leadership finding. These types of sustainability leaders correlate with relational (and transformational) leadership theories [6,50,54,89,96], to include: a strong vision and strategic perspective, inspiration, innovation and creativity, intellectual stimulation, risk-taking, and strong personal values [2,97,98]. Burns et al., (2015) [86] suggest that leadership for sustainability is related to transformational and relational models of leadership that are inclusive, collaborative, and reflective. Ferdig (2007) [2] (p. 31) proposes that sustainability leaders create opportunities for people to work collaboratively together and generate their own answers to address sustainability challenges specific to their context, modifying and adapting these responses to changing circumstances. Visser and Courtice (2011) [73] emphasize that inclusive, visionary, creative, and self-sacrificing leadership styles collectively summarize the characteristics of sustainability leaders. Jayashree, Barachi, and Hamza (2022) [95] (p. 17) provide evidence of the importance of a multistakeholder approach whereby various entities operate cohesively. Other aspects of relational and transformational leadership, such as the ability to share environmental values that inspire and motivate employees to think about sustainability issues in new and innovative ways (Robertson and Carleton, 2018) [21] (p. 199), are associated with an increase in individual, team, and organizational performance [99,100]. Benn et al., (2014) [92] suggest that it is necessary to

encourage new ways of thinking to solve problems creatively and adapt to new challenges. Leaders need to be able to influence, mentor, and coach team members along with key stakeholders to build effective teams [92]. The notion that relational [and transformational] leaders challenge the status quo implies that higher creativity and innovation will lead to increased organizational performance [6,93,100]. Hence, this new area of sustainability leadership affirms the importance of relational and transformational leadership theory types in expanding scholarly understanding of leadership and what it means to lead sustainably [2,65,92].

Incorporating sustainability initiatives and strategies involves change and improvement towards achieving revised organizational goals. Hence, the fourth key leadership finding, leading organizational change, includes using appropriate business strategies, developing a new strategic vision, and implementing revised policies and procedures to transform organizations [92]. Visser and Courtice (2011) [73] argue that sustainability leaders are compelled to make a difference to bring about profound change. Organizational change that inspires employees to think and work differently, assess regulatory requirements, set guiding principles, and respond to opportunities to promote a more sustainable future is needed [2]. If the goals of sustainability are to be achieved, leaders must challenge the status quo, gather and interpret information, create, and provide meaning, and develop a personal mindset towards achieving sustainability outcomes [58]. In essence, leaders play a key role in shaping innovative initiatives that positively impact growth and profitability, thus providing a business case for change towards sustainability [101]. Knight and Paterson (2018) [6] (pp. 569–570) put forth that leaders need to be willing to challenge established views, seize opportunities, and embrace change with optimism. Metcalf and Benn (2013) [4] discuss the importance of engaging groups (including employees) in dynamic, adaptive organizational change. Benn et al. (2014) [92] argue that key competencies of sustainability leaders include managing change and complexity with the ability to implement, monitor, and evaluate change processes accordingly. Burns et al. (2015) [86] concur and document the importance of inclusiveness, collaboration, establishing a common purpose, and embedding sustainability values to guide organizations towards improving operational processes.

The fifth key leadership finding relates to organizational culture in connection with the achievement of sustainability goals, as noted by scholars [86,92,95,102]. Several authors point to the value of building a sustainability culture that emphasizes norms for innovation, openness, initiative, and risk-taking [1,91]. Epstein et al., (2010) [91] acknowledge that organizational culture can assist in creating an innovative and continuous improvement culture, a 'soft' system that plays an important role in educating employees about why a company should engage in sustainability efforts and 'sensitizing' them to the basic assumptions, values, norms, symbols, and myths of leading sustainably (Epstein et al. 2010) [91] (pp. 46–47). Crews (2010) [1] also maintains the importance of organizational culture and suggests that companies might reduce resistance to implementing sustainability objectives if the sustainability initiatives are understood as being part of the culture or a desired cultural change towards sustainability. An organizational culture that supports sustainability ideas and contributes to the values of the firm will facilitate behavioral change among employees [1]. Sustainability leaders play an important role in developing an organization's culture that is embedded in values of sustainability (Benn et al., 2014) [92] (pp. 205–206). Jayashree et al. (2022) [95] (p. 19) concur and add that modeling inclusive behavior by leaders and having a clear purpose are important aspects driving sustainability agendas. Organizational culture is defined as the underlying set of key values, beliefs, understandings, expectations, attitudes, and norms shared by employees in a firm [103], and helps leaders enlist cooperation, compliance, and commitment from employees [91,102]. Isensee et al. (2020) [103] (p. 12) emphasize the role of organizational culture as a crucial foundational process that is integral to achieving sustainability outcomes.

The key findings identified above highlight various sustainability leadership behaviors such as: (i) taking action on sustainability values, (ii) the importance of finding sustain-

able solutions, (iii) developing relationships that influence all stakeholders and creating opportunities to generate solutions, and (iv) elements of task leadership that are required to achieve sustainability in their organizations. These four key findings are unique (different) compared with the sustainable leadership literature discussed previously. However, there were four similar key leadership findings from this sustainability leadership section, such as (a) the importance of moral and ethical values, attitudes, and beliefs; (b) organizational change; (c) transformational leadership; and (d) organizational culture, that have also been identified as key findings from the previous section on sustainable leadership. Hence, while four unique (different) leadership behaviors have been associated with sustainability leadership, there is a clear overlap between some of the similar key leadership findings from sustainable leadership. Taken together, five key leadership findings comprise the required behaviors of sustainability leaders, leading to Proposition 2 (below). A review of environmental leadership is discussed next.

Proposition 2. *Five key leadership findings, including: (i) acting on sustainability values; (ii) identifying the importance of finding sustainable solutions demonstrating values, ethics, and care; (iii) developing relationships by using transformational and relational leadership approaches to generate solutions; (iv) leading organizational change; and (v) creating an organizational culture, are integral to sustainability leadership when promoting and supporting sustainability initiatives.*

4.3. Environmental Leadership

Environmental leadership has been examined for over thirty years. This section will examine findings from the environmental leadership literature that best promote sustainability practices. These key leadership findings include: (1) values, beliefs, and attitudes; (2) guiding organizations towards change (organizational change); (3) transformational leadership; and (4) the importance of stakeholder influences and expectations (see Figure 1).

Environmental concerns are both scientifically and socially complex [16,41], and require a deep assessment of the values, beliefs, and attitudes held by organizations with leaders who know how to manage and lead. This is the first key leadership finding. Environmental leadership depends on practices that care for and protect the natural environment, reduce waste from which cost savings can be made, and market safe products and services, all of which go beyond prescribed legislative requirements [41]. Robinson and Clegg (1998) [22] take this further and argue that reducing or preventing pollution is also an important aspect of environmental leadership. Boiral et al. (2009) [16] concur and suggest that environmental leaders are more aware of eco-centric values, which aim to increase employee awareness of environmental concerns. Several studies acknowledge the importance of moral norms [41], the notion of personal values and how these contribute to the welfare of others and the environment [104], and the importance of organizational members morally committing to an environmentally sustainable planet [105]. Niu, Wang, and Xiao (2018) [106] found in their study of environmental leaders in the public sector that intrinsic normative motivators such as moral obligations and value-driven intents have a significant impact on environmental leadership behaviors. Flannery and May (1994) [41] developed a model called the Environmental Leadership Model (ELM), which outlines the factors influencing top managers. These factors include the importance of: (a) moral norms and values, (b) environmental attitudes, (c) stakeholder influences, and (d) perceived behavioral control in driving environmental strategies (Flannery and May, 1994) [41] (pp. 205, 218). In a more recent study, Aftab, Abid, Sarwar, and Veneziani (2022) [107], found that environmental ethics and green innovation were key drivers of economic, environmental, and social performance in manufacturing firms in Pakistan. Thus, leaders promoting concern for the environment were also fulfilling their ethical and social responsibilities by following environmentally-centered ethical practices (Aftab et al., 2022) [107] (p. 11). Building on these concepts, environmental leaders are proactive as opposed to reactive [41], and take steps to mobilize employees around long-term ecological goals [16,104].

Environmental leadership is not about keeping things the same; it involves change and development using business strategies, strategic vision, and appropriate leadership to implement and guide organizations towards change. This is the second key leadership finding. Flannery and May (1994) [41] highlight the important role that top-level managers perform during the change process. Robinson and Clegg (1998) [22] suggest that elements of an environmental management system should include continuous improvement. Egri and Herman (2000) [104] argue that environmental leaders need to be open to change and be more change- and service-oriented towards their clients. Leading environmental change involves new ways of collaboration within and outside the firm, guiding, empowering, and being reflective and proactive [104]. Taylor (2008) [98] adds that the pace of change, including during a time of crisis, is also important when managing a change process. Boiral et al. (2009) [16] argue that environmental commitment is linked to leaders/managers and that change towards environmental sustainability is generally a top-down approach. Niu et al., (2018) [106] discuss the importance of change-oriented transformational leadership behaviors as relevant to pro-environmental initiatives. Aftab et al., (2022) [107] (p. 12) stress the significance of developing environmental strategies that reinforce commitment to environmental ethics to achieve sustainable productivity. As organizations move towards implementing environmentally sustainable outcomes in their firms, it is a priority to understand the leadership behaviors and practices that facilitate this change process. Smith and Sarros (2004) [108] (p. 165) point out that environmental issues will become more important as people fight for fewer resources. Overall, the current research acknowledges the importance of environmental leadership and discusses opportunities to lead change towards an environmentally sustainable future.

Research on transformational leadership for environmental sustainability abounds. This is the third key leadership finding. Portugal and Yukl (1994) [37] identified transformational leadership behaviors as relevant for environmental leaders. They developed a two-dimensional leadership framework involving two levels of influence: individual (single person or small group) and organizational (policies, procedures, structure, and organizational culture) and two types of influence: internal (setting objectives and strategies, motivating and maintaining relationships) and external (maintaining a network with people outside the organization) [37]. Portugal and Yukl (1994) [37] argue that transformational leadership behaviors such as visioning, sense-making, and symbolic action involving the shared efforts of all individuals at all levels will succeed in achieving specified environmental goals [37]. Teamwork, including suggestions and ideas from all employees, can be highly motivating when devising an environmental strategy [22]. In another study, Egri and Herman (2000) [104] examined the importance of both transformational and transactional leadership in achieving sustainability in organizations. Taylor (2008) [98,109] and Smith and Sarros (2004) [108] confirm and agree that transformational leadership behaviors such as intellectual stimulation and the ability to mentor, coach, motivate, and inspire team members to think about environmental issues in different ways while establishing close relationships will lead to desired sustainability outcomes. Robertson and Barling (2013) [105] take this one step further by conceptualizing environmentally specific transformational leadership (ETFL), which encourages team members to engage in pro-environmental behaviors. They argue that both ETFL and general transformational leadership styles are linked to organizational environmental sustainability [105]. An empirical study by Althnayan et al. (2022) [9] discovered that environmental transformational leadership significantly predicts environmental organizational citizenship behavior and organizational sustainability performance in the petrochemical industry in Saudi Arabia. They argue that employees look to their leaders as role models and are inspired by their behaviors and actions that help establish a vision that allows them to participate in sustainable activities (Althnayan et al., 2022) [9] (p. 8779). Niu et al. (2018) [106] point out that change oriented transformational leadership behaviors are fundamental to achieving pro-environmental initiatives. Peng, Chen, Zou, and Nie (2021) [110] (p. 1880) found that environmentally specific transformational leadership was a critical facilitator of pro-environmental behaviors of team members, thus

reinforcing the importance of teams and their collective effort when achieving sustainability goals. A somewhat different finding by Smith and Sarros (2004) [108] (p. 164) found that intellectual stimulation was not widely used by forty-nine senior business leaders when compared with three environmental political leaders. However, other aspects of relational and transformational leadership, such as the ability to coach and mentor employees [108], and share environmental values that inspire and motivate employees to think about sustainability issues in new and innovative ways (Robertson and Carleton, 2018) [21] (p. 199), are associated with an increase in individual, team, and organizational performance [99,100,110]. The key leadership findings presented here reinforce the relevance of transformational leadership, thus offering an extension of existing leadership theories that provide expanded perspectives on leadership for environmental change [104]. In addition to the leadership styles of top management, the importance of stakeholders will be considered next.

Environmental leadership research highlights the fourth key leadership finding, which is the importance of stakeholder influences and expectations [16,41], including teamwork [22], and networking [37,98]. Robinson and Clegg (1998) [22] (p. 6) contend that the foremost environmental pressure on businesses in the United Kingdom is exerted by government and that all businesses must comply with legislation and regulations. Flannery and May (1994) [41] (p. 207) take a broader view of stakeholders, arguing that 'all interest groups, parties, actors, claimants, and institutions' are affected by the organization's actions. Building on this, Portugal and Yukl (1994) [37] (p. 273) draw attention to leadership activities that are external to the firm and responsible for dealing with environmental issues, thus reinforcing the importance of creating and maintaining networks to gather, analyze, identify threats and opportunities, and negotiate agreements as central to the organization's environmental mission. Hence, effective environmental leadership is a dynamic process of influence that includes the involvement of both internal and external stakeholders.

Environmental leadership is about a diversity of leadership practices that reflect the diversity of social objectives (Case, Evans, Fabinyi, Cohen, Hicks, Prideaux, and Mills, 2015) [111] (p. 414). It is about principles of social, economic, and ecological sustainability. Environmental leadership is not necessarily about responding to a crisis but responding to multiple socio-political, cultural, or environmental interests [111]. As discussed above, environmental leadership recognizes the importance of stakeholders—especially with regards to their influences and expectations. This is a unique (different) key leadership finding. Environmental leadership shares three similar key leadership findings with both sustainable and sustainability leadership approaches, and these include: (a) the importance of moral and ethical values, attitudes, and beliefs; (b) organizational change; and (c) elements of transformational leadership. Interestingly, environmental leadership also shares both transactional and relational leadership elements with sustainability leadership. Hence, there is not one leadership style or set of behaviors required of environmental leaders, as there are a variety of complex environmental issues to solve that require specific leadership skills and practices. Taken together, the discussion leads to Proposition 3 (below).

Proposition 3. *Identifying values, beliefs, and attitudes and guiding organizations towards change by using transformational leadership that acknowledges the importance of stakeholder influences and expectations enhances environmental leaders realization of sustainable productivity.*

5. Discussion

Knowledge about how leaders manage and lead their businesses is required if sustainability outcomes are to be achieved. While existing theories and frameworks on sustainable, sustainability, and environmental leadership have been studied separately, this review has revealed areas of similarity across these leadership constructs that have clear overlap as well as distinguishing the leadership behaviors and practices that are unique (different) to each leadership approach (see Figure 1). There were three key leadership findings that were found to be similar in all three leadership approaches. First, the importance of moral

and ethical behaviors that demonstrate a leader's values, attitudes, and beliefs towards sustainability was emphasized (see Figure 1). This would be expected as a leader's moral and ethical values influence and guide followers toward sustainability goals. Leaders implementing sustainability strategies have a different perspective about how their business should operate compared with other leaders, as they actively pursue strategies to respect and honor the natural environment [26,61], as well as building trust with their employees and stakeholders to improve performance [30]. Examples of moral and ethical values include improving resource efficiency, meeting existing business and stakeholder needs while maintaining and enhancing the natural environment, caring for and protecting the environment, considering the welfare of others, and 'doing the right thing' [6,77]. Aftab et al. (2022) [107] (p. 12) argue that leaders should promote pro-environmental ethics by enacting environmental behavior codes and beliefs in their firms. However, not all leaders share the same values or have the same way of managing environmental or sustainability issues (Boiral et al., 2009) [16] (p. 479). Nevertheless, leaders need to be ethical and meaningful to bring about positive sustainability change, and economic requirements render incorporating sustainability values into the day-to-day operations of their businesses a priority [61].

The second key leadership finding discussed in all three leadership approaches is the ability to implement organizational change (including revising the organizational vision, updating policies and procedures, involving all employees in making decisions, and so on) [4,92], to transform their firms towards achieving sustainability goals (see Figure 1). This key finding is predicted. Leaders must be able to engender change to progress towards sustainability objectives and competitive business practices [58]. Leaders are committed to and consciously embrace new ways of seeing, thinking, and interacting that result in and improve environmental sustainability outcomes [61], and as such, leaders need to be able to seize opportunities and incorporate change within their firms [6].

Transformational leadership was identified as the third key leadership finding and was anticipated (see Figure 1), as leaders are required to inspire and motivate employees as well as develop and implement strategies that will have a positive influence on their organization and the environment [26,37,105]. Elements of transformational leadership include providing a strong vision and sense of mission to generate awareness, thus instilling pride and gaining respect and trust; communicating high expectations; inspiring innovation and creativity when solving sustainability problems and coaching and advising employees individually [2,89]. Leaders must be skilled in engaging others in the process of creating a vision and making it a reality through the development and implementation of actions to support the goals inherent in the organizational vision (Ferdig, 2007) [2] (p. 30). Taylor (2008) [109] highlights the significance of transformational leadership styles to promote sustainable operational practices in urban water management organizations. Eide et al., (2020) [26] found in their study of manufacturing firms in Norway that intellectual stimulation increased the creativity of employees and inspired them to review existing challenges in more creative ways. Accordingly, leaders are encouraged to take a transformational leadership approach when inspiring and motivating employees to think about sustainability issues in new and resourceful ways [21].

In addition to the three areas of similarity discussed above, other similarities exist (see Figure 1). Both sustainable and sustainability leadership share the relevance of organizational culture when implementing sustainability initiatives in their firms. Sustainability and environmental leadership, for instance, share both transactional and relational leadership approaches when leading their firms towards sustainability goals. There are also unique (different) key leadership findings in all three leadership approaches. Sustainable leadership, for example, features being socially and environmentally responsible, including aspects of preservation and sustaining organizations; and acknowledging the importance of shared responsibilities. Unique sustainability leadership key findings include acting on sustainability values; finding sustainable solutions; developing relationships that influence all stakeholders; and elements of task leadership. Environmental leadership focuses on the

importance of stakeholder influences and expectations to enhance the implementation and achievement of environmental initiatives. So, how do leaders implement sustainability in their firms? Do they act and plan specific goals, mobilize resources, and set the new direction, or do they focus on developing relationships with all stakeholders and the company's organizational culture—or a combination of all the above? It is unlikely that leaders will embody all styles, skills, practices, and behaviors of leadership toward sustainability. These unique differences discussed above may be due to a variety of factors, such as the varying characteristics of each firm, the industry and national culture within which they operate, and their particular phase of the change process towards sustainability objectives. For instance, are organizations at the beginning or middle stages of change, or have they been implementing sustainability initiatives for a number of years. Nevertheless, leaders need to balance a variety of economic, social, and environmental concerns and, as such, will be able to use and adapt these key leadership findings to suit the context of their organization, thus enhancing sustainability practices in their firms [112].

The aim of this review was to resolve the similar and different (unique) findings from the literature to examine which sustainable, sustainability, and environmental leadership approaches are predictive of improved organizational performance with a view to understanding leadership towards sustainability. Based on the extant literature and discussion above, an integrated framework has been developed to combine the findings (see Figure 1) on leadership behaviors and practices in terms of the types of leadership required for sustainability change. The 'leadership towards sustainability' framework includes leadership behaviors and styles that have been developed from theoretical and empirical research and describes recurring themes. The framework organizes the current literature and takes a step towards integrating and understanding leadership behaviors that enhance the implementation of sustainability in firms. This new framework reviews and extends current leadership constructs, thus progressing leadership research in this field. As discussed above, there is much research that seeks to understand how leadership behaviors influence the implementation of sustainability in organizations, and this review uncovered similarities and differences between the three main leadership constructs, thus advancing research and discussion on this topic [80].

6. Limitations and Future Research

This review paper has several limitations. First, while the key findings outlined in the 'leadership towards sustainability' framework will assist managers in implementing or enhancing sustainability initiatives in their firms, they have not been empirically tested. Second, most of the research on leadership and sustainability has focused on top management leaders behaviors and practices for directing and facilitating change towards sustainable goals. However, attention should be given to followers and their role in facilitating change and progressing sustainability ideas for top management consideration. Third, the approach to sustainability in this paper is mainly driven by business imperatives, with a focus on making efficiency gains across economic, social, and environmental issues. It is not about maintaining the integrity and viability of natural ecosystems, nor does it discuss capitalism, consumerism, or organizational expansion. The application of the ISO 14000/14001 [113] standard Environmental Management System has not been considered in this review. Finally, there remain considerable differences about the terms discussed in this review. The aim of this paper is not to limit the discussion or have the final say; conversely, it is about clarifying and building on existing leadership theories to advance understanding of leadership knowledge.

7. Conclusions

This paper reviewed the sustainable, sustainability, and environmental leadership literature and identified areas of overlap and complementarity (see Figure 1). These three leadership approaches were chosen in this paper because of their emerging prominence in the leadership literature and their effectiveness through research. What has been missing in

the literature is a synthesis of leadership behaviors and practices that combine sustainable, sustainability and environmental leadership. This discussion has brought together the literature that has not previously been aligned and, thus, will facilitate a deeper understanding of leadership within a sustainability context. Overall, this review is valuable because it develops a 'leadership towards sustainability' framework in which to study and practice leadership and identifies key leadership findings that promote sustainability and progression towards sustainable goals. Subsequently, this paper attempts to increase knowledge of the leadership behaviors and practices that facilitate the initiation and implementation of sustainability goals within firms.

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