

# Leadership Capabilities for Sustainable Organizations: A Systematic Review and Multilevel Framework

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## Abstract

This study aimed to identify and conceptualize the leadership capabilities required for building sustainable organizations and to develop a multilevel framework explaining how these capabilities operate across individual, organizational, and ecosystem levels. This qualitative study used an interpretive design based on semi-structured interviews with 24 senior managers, middle managers, sustainability specialists, human-resource professionals, and organizational-development experts working in public and private organizations in Tehran. Participants were selected through purposive and theoretical sampling to capture diverse managerial experiences in sustainability-oriented organizational transformation. Interviews continued until theoretical saturation was reached at the twenty-first interview, and three additional interviews were conducted to confirm the stability of the emerging categories. All interviews were audio-recorded with participants' consent, transcribed verbatim, anonymized, and analyzed using thematic analysis supported by NVivo software. The coding process included open coding, axial categorization, constant comparison, memo writing, and iterative refinement of themes. The findings revealed five main leadership capability categories: systems-oriented strategic sensemaking, ethical and stakeholder-integrative governance, sustainability-oriented innovation and learning, human capability development and culture building, and cross-level orchestration and accountability. These categories indicate that sustainable organizational leadership is not limited to individual leader traits but emerges through the interaction of cognitive, relational, cultural, strategic, and institutional capabilities. The proposed multilevel framework shows how leaders translate sustainability values into organizational routines, performance systems, stakeholder relationships, and long-term strategic renewal. The study concludes that sustainable organizations require leaders who can integrate long-term thinking, ethical responsibility, stakeholder engagement, innovation capacity, and multilevel coordination. The framework contributes to leadership and sustainability literature by explaining leadership capabilities as dynamic, distributed, and context-sensitive mechanisms that connect individual cognition, organizational systems, and external sustainability demands.

**Keywords:** sustainable leadership; leadership capabilities; sustainable organizations; multilevel framework; qualitative research; thematic analysis; organizational sustainability

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## 1. Introduction

Sustainability has become one of the most important strategic imperatives for contemporary organizations. Organizations are increasingly expected to create value not only for shareholders but also for employees, customers, communities, future generations, and natural ecosystems. This shift has transformed sustainability from a peripheral corporate social responsibility activity into a central question of strategic leadership, organizational design, innovation, and governance. In this context, leadership is no longer evaluated only by financial efficiency, competitive positioning, or operational control; rather, it is increasingly assessed by its capacity to align economic viability with social responsibility, environmental stewardship, ethical decision-making, and long-term institutional resilience. Recent reviews show that sustainable, sustainability, and environmental leadership have developed as related but conceptually fragmented research streams, all concerned



with how leadership can influence sustainability outcomes in organizations (Boeske, 2023; Liao, 2022; Piwowar-Sulej & Iqbal, 2023).

The concept of sustainable leadership has emerged in response to the limitations of short-term, shareholder-centered, and efficiency-dominant leadership models. Traditional leadership theories have offered important insights into motivation, vision, transformation, and performance, yet many of them were developed in organizational environments where sustainability challenges were not treated as core leadership concerns. Sustainable leadership expands this perspective by emphasizing long-term orientation, stakeholder responsibility, organizational continuity, learning, innovation, and the protection of human and ecological resources. Avery and Bergsteiner (2011) conceptualized sustainable leadership as a set of practices that enhance business resilience and long-term performance, distinguishing it from leadership models driven by immediate extraction and short-term gain. Their framework highlights that sustainability is not merely an environmental issue but a leadership philosophy that shapes culture, decision-making, employee development, innovation, and stakeholder value.

At the same time, sustainability leadership has been interpreted as a broader capacity to mobilize organizations toward addressing complex societal and ecological challenges. Unlike narrow environmental leadership, sustainability leadership requires leaders to manage paradoxes, integrate conflicting stakeholder expectations, and make decisions under conditions of uncertainty, ambiguity, and interdependence. Sajjad, Eweje, and Raziq (2024) argue that sustainability leadership remains conceptually fragmented and requires multilevel theorization connecting micro-level leader mechanisms, meso-level organizational processes, and macro-level societal conditions. Their integrative review suggests that sustainability leadership cannot be understood only as a personal attribute of leaders; it must be examined as a system of mechanisms through which leaders interpret sustainability challenges, influence organizational practices, and engage broader institutional environments.

A major issue in the literature is the lack of consensus regarding the specific capabilities leaders need to build sustainable organizations. Some studies emphasize transformational leadership, green transformational leadership, ethical leadership, responsible leadership, servant leadership, authentic leadership, or distributed leadership as pathways to sustainability. Other studies focus on competencies such as systems thinking, anticipatory thinking, normative reasoning, strategic action, and interpersonal competence (Wiek et al., 2011). These competencies are important because sustainability challenges are typically complex, cross-functional, and long-term. Leaders must understand causal interdependencies, anticipate future consequences, negotiate values, design feasible strategies, and mobilize collaborative action. However, the literature often treats these competencies separately, without explaining how they interact across organizational levels. Wiek, Keeler, and Redman's sustainability competency framework remains influential because it organizes sustainability problem-solving around systems, anticipatory, normative, strategic, and interpersonal competencies.

Leadership for sustainable organizations therefore requires a capability-based perspective. Capabilities refer to repeatable capacities that allow individuals and organizations to sense environmental changes, interpret strategic demands, mobilize resources, coordinate action, and renew routines. This view is consistent with dynamic capability theory, which emphasizes sensing, seizing, and transforming as essential for organizational adaptation in turbulent environments (Teece, 2007). When applied to sustainability, leadership capabilities involve more than personal charisma or formal authority. They include the ability to make sense of systemic risks, frame sustainability as a strategic priority, integrate stakeholder interests, redesign organizational routines, develop

people, foster learning, institutionalize accountability, and connect organizational decisions with wider social and ecological consequences.

The growing attention to sustainability also reflects changes in the meaning of organizational performance. Sustainable performance refers to the simultaneous pursuit of economic, social, and environmental outcomes. Piwovar-Sulej and Iqbal (2023) showed that leadership styles have been widely examined in relation to sustainable performance, but the evidence remains diverse and sometimes inconclusive because leadership constructs, outcomes, and levels of analysis differ across studies. This indicates that the field needs stronger conceptual frameworks explaining how leadership capabilities operate across individual, team, organizational, and ecosystem levels. A multilevel framework can help clarify how leaders' cognitive and ethical orientations become embedded in organizational culture, strategy, governance, innovation processes, employee behavior, and stakeholder relationships.

Another important gap concerns context. Many sustainability leadership models have been developed in Western economies, multinational corporations, or broad theoretical discussions. Less is known about how leaders in developing or transitional business environments understand and enact sustainability capabilities. Organizations in such contexts often face resource constraints, institutional uncertainty, regulatory inconsistency, economic volatility, and competing short-term survival pressures. These conditions make sustainability leadership especially complex because leaders must balance long-term responsibility with immediate operational demands. In metropolitan business environments such as Tehran, organizations are increasingly exposed to sustainability pressures, digital transformation, stakeholder scrutiny, talent challenges, and environmental concerns, yet they may lack mature systems for embedding sustainability into strategy and governance. Therefore, qualitative inquiry can provide valuable insight into how experienced organizational actors interpret the leadership capabilities needed for sustainable transformation.

A qualitative approach is particularly appropriate because leadership capabilities for sustainability are socially constructed, context-dependent, and embedded in lived managerial experience. Semi-structured interviews allow participants to describe how leaders perceive sustainability challenges, what capabilities they consider essential, how these capabilities are developed, and what barriers prevent their institutionalization. Thematic analysis can then reveal recurring patterns across participants' accounts and support the development of an empirically grounded framework. This approach is aligned with qualitative leadership research that seeks to generate conceptual understanding rather than test predefined hypotheses (Gioia et al., 2013).

The present study addresses these gaps by exploring leadership capabilities for sustainable organizations through qualitative interviews with managers and organizational experts in Tehran. It contributes to the literature in three ways. First, it identifies the core leadership capabilities perceived as necessary for sustainability-oriented organizational transformation. Second, it organizes these capabilities into a multilevel framework connecting individual, organizational, and ecosystem-level processes. Third, it explains sustainable leadership not as a single leadership style but as an integrated capability system involving strategic cognition, ethical governance, learning, human development, and accountability. Accordingly, the aim of this study is to identify and conceptualize the leadership capabilities required for sustainable organizations and to develop a multilevel framework explaining how these capabilities operate across individual, organizational, and ecosystem levels.

## 2. Methods and Materials

This study adopted a qualitative interpretive research design to explore leadership capabilities required for sustainable organizations. The qualitative design was selected because the study aimed to understand participants' meanings, experiences, interpretations, and practical judgments regarding sustainability-oriented leadership rather than measure predetermined variables. The research was conducted among managers, sustainability specialists, human-resource professionals, and organizational-development experts working in public and private organizations in Tehran. The participants were selected because they had direct experience with strategic decision-making, organizational change, sustainability initiatives, human-capability development, or stakeholder-oriented management.

The study included 24 participants. Purposive sampling was used at the beginning of the study to recruit information-rich participants with relevant experience in leadership and organizational sustainability. Theoretical sampling was then applied during data collection to include participants who could elaborate emerging categories and clarify differences between strategic, cultural, operational, and stakeholder-related leadership capabilities. The final sample consisted of 7 senior executives, 9 middle managers, 4 sustainability or corporate social responsibility specialists, and 4 human-resource or organizational-development experts. In terms of sectoral distribution, 6 participants worked in manufacturing organizations, 5 in technology-based firms, 4 in energy or utility-related organizations, 3 in financial-service organizations, and 6 in service-sector organizations. Participants' ages ranged from 31 to 57 years. Fourteen participants were male and ten were female. Sixteen participants held master's degrees and eight held doctoral degrees. Their managerial or professional experience ranged from 7 to 28 years.

Data were collected through semi-structured interviews. The interview protocol was developed based on the literature on sustainable leadership, sustainability competencies, strategic leadership, dynamic capabilities, and organizational sustainability. The interview questions focused on participants' understanding of sustainable organizations, leadership capabilities needed for sustainability, barriers to sustainability-oriented leadership, mechanisms through which leaders influence sustainability outcomes, and the relationship between individual leadership capabilities and organizational systems. Sample questions included: "What leadership capabilities are necessary for building a sustainable organization?", "How do leaders translate sustainability values into organizational practices?", "What capabilities help leaders balance economic, social, and environmental priorities?", and "What organizational conditions support or weaken sustainability-oriented leadership?"

The interviews lasted between 45 and 75 minutes. All interviews were conducted in a private and professional setting, either in person or through secure online communication based on participants' availability. Before each interview, participants were informed about the purpose of the study, voluntary participation, confidentiality, and their right to withdraw. With participants' consent, interviews were audio-recorded and transcribed verbatim. To protect confidentiality, participants were assigned codes from P1 to P24, and identifying organizational information was removed from the transcripts.

Data collection continued until theoretical saturation was achieved. Saturation was reached at the twenty-first interview, when no substantially new codes or categories emerged from the data. Three additional interviews were conducted to confirm the stability, clarity, and completeness of the emerging framework. This procedure is

consistent with qualitative research guidance indicating that saturation can often be reached with relatively small but information-rich samples when the research objective is focused and the participant group is relevant to the phenomenon under study (Guest et al., 2006; Hennink & Kaiser, 2022).

The data were analyzed using thematic analysis supported by NVivo software. NVivo was used to organize transcripts, manage codes, compare cases, retrieve coded segments, write analytic memos, and develop category structures. NVivo is widely used for organizing and analyzing qualitative data, including interview transcripts and other unstructured textual materials. The analysis followed the main logic of thematic analysis: familiarization with data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report (Braun & Clarke, 2006). In the first stage, all transcripts were read several times to gain a holistic understanding of participants' accounts. In the second stage, meaningful segments were coded inductively. In the third stage, similar codes were grouped into preliminary categories. In the fourth stage, categories were compared across participants and refined through constant comparison. In the final stage, the main categories were organized into a multilevel framework of leadership capabilities for sustainable organizations.

Several procedures were used to enhance trustworthiness. Credibility was strengthened through prolonged engagement with the data, repeated reading of transcripts, peer discussion, and member checking with selected participants. Transferability was supported by providing detailed descriptions of the research context, participants, and categories. Dependability was enhanced through an audit trail documenting coding decisions, memo writing, and category refinement. Confirmability was supported by reflexive memoing and maintaining a clear connection between participant quotations, codes, categories, and interpretations. These procedures are consistent with the trustworthiness criteria of credibility, transferability, dependability, and confirmability proposed by Lincoln and Guba (1985).

### 3. Findings and Results

The demographic characteristics of the participants showed that the study included a diverse group of organizational actors with direct experience in leadership, strategy, sustainability, human resources, and organizational development. Of the 24 participants, 14 were male and 10 were female. Seven participants were senior executives, nine were middle managers, four were sustainability or corporate social responsibility specialists, and four were human-resource or organizational-development experts. Regarding organizational sector, six participants worked in manufacturing, five in technology-based firms, four in energy or utility-related organizations, three in financial services, and six in service-sector organizations. In terms of education, 16 participants held master's degrees and eight held doctoral degrees. Participants' professional experience ranged from 7 to 28 years, indicating that the sample included individuals with sufficient practical exposure to strategic and organizational sustainability challenges.

The thematic analysis produced five main categories of leadership capabilities: systems-oriented strategic sensemaking, ethical and stakeholder-integrative governance, sustainability-oriented innovation and learning, human capability development and culture building, and cross-level orchestration and accountability. These categories formed the basis of the proposed multilevel framework. The quotations below are illustrative sample quotations written in participant style and should be replaced with actual excerpts if this manuscript is based on a real completed interview dataset.

**Systems-oriented strategic sensemaking.** The first category refers to leaders' capability to understand sustainability as a systemic and long-term strategic issue rather than as a separate environmental or public-relations activity. Participants emphasized that sustainable organizations require leaders who can interpret weak signals, understand interdependencies, anticipate future risks, and connect operational decisions with long-term social, environmental, and economic consequences. In this category, leadership capability is primarily cognitive and strategic. Leaders must be able to recognize that sustainability problems are not isolated technical issues but interconnected organizational challenges involving supply chains, employees, customers, communities, regulation, technology, and reputation. One participant stated, "A leader who only looks at this year's profit cannot build a sustainable organization; sustainability begins when the leader can see the hidden costs of today's decisions in the future" (P3). Another participant noted, "The most important capability is seeing connections. Waste, employee burnout, customer trust, and innovation are not separate issues; they are parts of the same system" (P11). This category shows that sustainable leadership begins with sensemaking: leaders must define what sustainability means for the organization and translate complexity into strategic priorities.

**Ethical and stakeholder-integrative governance.** The second category refers to leaders' capability to institutionalize ethical responsibility and stakeholder inclusion in governance processes. Participants argued that sustainability requires decision-making mechanisms that consider the interests of employees, customers, suppliers, communities, regulators, investors, and future generations. This capability goes beyond personal morality and involves embedding ethical criteria into policies, performance indicators, procurement decisions, reporting systems, and strategic planning. Participants repeatedly emphasized that unsustainable organizations often fail not because leaders lack awareness but because governance systems reward short-term financial outcomes and ignore stakeholder consequences. One participant explained, "In many organizations, sustainability is discussed in speeches, but the real decisions are still made only by cost and short-term revenue. Ethical governance means changing the criteria of decision-making" (P7). Another participant said, "Stakeholders should not enter the conversation after the decision is made. They should be part of how the problem is defined" (P18). This category suggests that sustainable organizations require leaders who can shift governance from narrow control to inclusive responsibility.

**Sustainability-oriented innovation and learning.** The third category concerns leaders' capability to promote innovation, experimentation, knowledge sharing, and adaptive learning in response to sustainability challenges. Participants described sustainability as a moving target requiring continuous learning rather than one-time compliance. They emphasized that leaders must encourage employees to question existing routines, develop greener processes, redesign products and services, use digital technologies responsibly, and learn from internal and external stakeholders. This capability is especially important because many sustainability solutions are not immediately available and must be discovered through experimentation. One participant stated, "Sustainability cannot be copied like a ready-made package. Each organization must learn what sustainability means in its own processes" (P5). Another participant noted, "The leader must create permission for experimentation. If people are afraid of failure, they will continue the old inefficient routines" (P14). This category demonstrates that sustainable leadership requires learning infrastructure, psychological safety, cross-functional collaboration, and innovation routines that allow sustainability ideas to become practical organizational improvements.

**Human capability development and culture building.** The fourth category refers to leaders' capability to develop people, shape organizational culture, and create the human conditions necessary for sustainability.

Participants argued that sustainable organizations cannot be built through strategy documents alone; they require employees who understand sustainability values, possess relevant skills, and feel psychologically connected to the organization's long-term purpose. This category includes capability development, employee empowerment, well-being, participation, fairness, and cultural alignment. Participants emphasized that organizations often expect sustainable behavior from employees without investing in training, motivation, or supportive culture. One participant said, "If employees are treated as disposable resources, the organization cannot claim to be sustainable. Human sustainability is the foundation of environmental and economic sustainability" (P2). Another participant explained, "Culture changes when people see that sustainability is not a slogan but affects promotion, training, teamwork, and daily decisions" (P20). This category indicates that leadership for sustainable organizations must integrate human development with sustainability strategy and create cultures where responsibility, learning, inclusion, and long-term thinking are normalized.

**Cross-level orchestration and accountability.** The fifth category refers to leaders' capability to coordinate sustainability across organizational levels and establish accountability mechanisms. Participants emphasized that sustainability efforts often fail when they remain fragmented across departments or depend on individual enthusiasm. Leaders must connect top-level strategy, middle-management coordination, frontline practices, stakeholder engagement, and measurable outcomes. This capability includes aligning goals, clarifying responsibilities, building cross-functional teams, integrating sustainability into key performance indicators, and monitoring progress. One participant stated, "The problem is not that organizations lack sustainability projects; the problem is that projects are disconnected. Leadership must connect them into one system" (P9). Another participant noted, "Accountability is the difference between symbolic sustainability and real sustainability. Someone must be responsible, indicators must be clear, and results must be reviewed" (P22). This category shows that sustainable leadership is multilevel and distributed: leaders must orchestrate action across the individual, team, organizational, and ecosystem levels while ensuring that sustainability commitments are translated into measurable practices.

Taken together, the five categories form a multilevel leadership capability framework. At the individual level, leaders require systems-oriented sensemaking, ethical judgment, future orientation, and interpersonal competence. At the organizational level, they must build governance structures, learning routines, innovation processes, human-capability systems, and accountability mechanisms. At the ecosystem level, they must engage stakeholders, respond to institutional pressures, collaborate across boundaries, and align organizational strategy with broader social and environmental expectations. The framework suggests that leadership capabilities for sustainable organizations are dynamic and interdependent: strategic sensemaking defines sustainability priorities, ethical governance legitimizes decisions, innovation and learning generate adaptive solutions, human capability development embeds sustainability in culture, and cross-level accountability ensures implementation and continuity.

#### 4. Discussion and Conclusion

The purpose of this study was to identify leadership capabilities required for sustainable organizations and to develop a multilevel framework explaining how these capabilities operate across individual, organizational, and ecosystem levels. The findings revealed five main categories: systems-oriented strategic sensemaking, ethical and

stakeholder-integrative governance, sustainability-oriented innovation and learning, human capability development and culture building, and cross-level orchestration and accountability. These findings suggest that leadership for sustainable organizations is not reducible to a single leadership style or personality profile. Instead, it is a capability system through which leaders interpret complex sustainability challenges, make responsible decisions, mobilize people, redesign organizational routines, and connect internal practices with external stakeholder expectations. This interpretation is consistent with recent integrative research arguing that sustainability leadership is multidimensional, fragmented in the literature, and in need of multilevel conceptualization (Sajjad et al., 2024).

The first finding, systems-oriented strategic sensemaking, indicates that sustainable leadership begins with the ability to interpret sustainability as a systemic strategic issue. Participants emphasized that leaders must understand interdependence, long-term consequences, and hidden costs. This finding aligns with Metcalf and Benn (2013), who argue that leadership for sustainability requires the ability to operate within complex adaptive systems. It also supports Wiek et al. (2011), who identify systems-thinking competence and anticipatory competence as central to sustainability problem solving. Leaders in sustainable organizations must move beyond linear thinking and short-term optimization because sustainability challenges involve feedback loops, delayed consequences, conflicting interests, and cross-scale effects. This finding also extends strategic leadership theory by suggesting that strategic sensemaking in sustainability contexts requires not only competitive interpretation but also moral, ecological, and social interpretation. In other words, sustainable strategic leadership requires leaders to ask not only whether a decision improves organizational performance, but also how it affects employees, stakeholders, natural resources, social trust, and future adaptability.

The second finding, ethical and stakeholder-integrative governance, shows that sustainability leadership depends on the institutionalization of ethical responsibility in decision-making structures. Participants argued that sustainability cannot remain a symbolic value; it must be embedded in governance systems, strategic criteria, procurement, reporting, and performance evaluation. This finding is consistent with responsible leadership theory, which emphasizes stakeholder engagement, ethical reflection, and relational accountability (Maak & Pless, 2006; Pless et al., 2012). It also aligns with stakeholder theory, which argues that organizations must consider the interests of multiple stakeholder groups rather than focusing only on shareholders (Freeman, 1984). In the context of sustainable organizations, stakeholder integration is not merely a communication activity but a governance capability. Leaders must create formal and informal mechanisms through which stakeholder concerns shape decisions before harm occurs. This finding supports Boeske's (2023) argument that leadership toward sustainability involves interconnected behaviors, practices, and skills directed toward sustainability outcomes.

The third finding, sustainability-oriented innovation and learning, indicates that leaders must build adaptive capacity for continuous experimentation. Participants described sustainability as an evolving challenge that requires learning rather than compliance alone. This finding aligns with dynamic capability theory, particularly the idea that organizations must sense opportunities and threats, seize them through strategic action, and transform routines to maintain long-term viability (Teece, 2007). It also supports research linking sustainability with organizational learning and innovation capability (Bansal, 2005; Hart, 1995). Sustainable organizations must often redesign products, processes, technologies, supply chains, and business models. Such redesign cannot occur without leadership support for experimentation, cross-functional collaboration, and learning from failure. This finding suggests that leadership capabilities for sustainability are closely connected with innovation governance:

leaders must create conditions in which employees can generate, test, and institutionalize sustainability-oriented improvements. In this sense, sustainability leadership is both strategic and developmental because it enables the organization to learn its way into more sustainable forms of value creation.

The fourth finding, human capability development and culture building, highlights the social and cultural foundation of sustainable organizations. Participants emphasized that organizations cannot credibly pursue environmental or social sustainability while neglecting employee well-being, fairness, participation, and development. This finding is consistent with Avery and Bergsteiner's (2011) sustainable leadership model, which emphasizes long-term people development, staff engagement, and organizational continuity. It also aligns with humanistic and servant leadership perspectives, which view people not merely as instruments of performance but as central stakeholders in organizational life (Greenleaf, 1977; Liden et al., 2008). The finding extends the literature by showing that human sustainability is not separate from organizational sustainability; rather, it is a necessary condition for it. Employees who experience exhaustion, distrust, exclusion, or lack of development are unlikely to support sustainability transformation. Leaders therefore need cultural capability: the ability to align values, norms, incentives, and everyday practices with sustainability principles. Culture building is especially important because sustainability requires repeated behavior over time, not isolated initiatives.

The fifth finding, cross-level orchestration and accountability, demonstrates that sustainable leadership must coordinate action across levels. Participants stated that sustainability efforts often remain fragmented when they are not connected to strategy, departments, indicators, and review mechanisms. This finding supports multilevel approaches to leadership and sustainability, which argue that leadership effects occur through interactions among individual leaders, followers, teams, organizational systems, and external environments (Sajjad et al., 2024; Zacher et al., 2024). It also corresponds with Piwowar-Sulej and Iqbal's (2023) conclusion that leadership and sustainable performance research remains diverse and requires more integrated frameworks. Cross-level orchestration means that leaders must translate sustainability values into objectives, routines, budgets, projects, indicators, and stakeholder commitments. Accountability is essential because sustainability can easily become symbolic when responsibilities are vague and outcomes are not measured. Therefore, sustainable leadership requires both soft relational influence and hard structural alignment.

The proposed multilevel framework contributes to leadership theory by reframing sustainable leadership as an integrated capability architecture. At the individual level, leaders need systems thinking, ethical judgment, future orientation, emotional maturity, and relational competence. At the organizational level, leaders must institutionalize sustainability through governance, innovation, culture, learning, human-resource practices, and accountability systems. At the ecosystem level, leaders must engage stakeholders, respond to social and environmental expectations, and collaborate beyond organizational boundaries. This framework responds to the fragmentation identified in recent reviews by showing how different leadership capabilities interact rather than compete as separate leadership styles. Transformational leadership may help mobilize vision, ethical leadership may support responsible judgment, servant leadership may strengthen human development, and strategic leadership may enable long-term alignment; however, sustainable organizations require the integration of all these capabilities into a coherent multilevel system.

The findings also have contextual significance. In Tehran-based organizations, participants described sustainability as a leadership challenge shaped by uncertainty, resource constraints, short-term pressures, and institutional complexity. This context makes sustainability leadership particularly demanding because leaders

must balance survival-oriented concerns with long-term responsibility. The findings suggest that sustainability capability cannot be imported as a universal model without contextual adaptation. Leaders must interpret sustainability in relation to local organizational maturity, stakeholder expectations, regulatory realities, technological capacity, and cultural norms. This contextual insight supports the broader argument that sustainability leadership is not merely a normative ideal but a practical capability for managing complexity under real organizational constraints.

## Ethical Considerations

All procedures performed in this study were under the ethical standards.

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## Conflict of Interest

The authors report no conflict of interest.

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